

# ICT Sector Study Bangladesh

Bridging the Gap between Dutch and Bangladeshi ICT sectors



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# **Abbreviations**

**BACCO** Bangladesh Association of Call Center & Outsourcing

**BASIS** Bangladesh Association of Software and Information Services

**BNP** Bangladesh Nationalist Party

BCC Bangladesh Computer Council
BCS Bangladesh Computer Society
BPO Business Process Outsourcing

**CAD** Computer-Aided Drafting

**CBI** (Dutch) Centre for the Promotion of Imports from developing countries

**CSR** Corporate Social Responsibility

**DCCI** Dhaka Chamber of Commerce and Industry

**EKN** Embassy of the Kingdom of the Netherlands in Dhaka

**EU** European Union

**FDI** Foreign Direct Investment

**GDP** Gross Domestic Product

**GIS** Geographic Information Systems

**GoB** Government of Bangladesh

ICT Information Communication Technology

International Trade Center (joint agency of the WTO and the UN)

ITenabled Services

ITO Information Technology Outsourcing

MIGA Multilateral Investment Guarantee Agency

**NBU** Nyenrode Business University

NTFII Netherlands Trust Fund II

**OECD** Organization for Economic Co-operation and Development

**R&D** Research and Development

**RMG** Ready Made Garments

**SME** Small and Medium Enterprise

**TSI** Trade Support Institutions

**UN** United Nations

WTO World Trade Organization

## **Definitions**

**ICT** 

Information Communication Technology (ICT) includes any type of software and software related activities such as ICT services, ICT applications, and software products and embedded software.

**IT enabled Services** 

Information Technology enabled Services (ITeS) are software-related services which can be performed offshore. A distinction can be made between Voice Based ITeS, e.g. customer interaction services, telemarketing and call centers, and Non Voice Based ITeS e.g. data entry, content management, graphic design, digital image processing, editing, page formatting, data warehousing, and mathematical modeling.

Outsourcing

Transferring various operations to outside suppliers rather than completing them internally. Outsourcing can be done in both domestic and foreign markets and always involves a third party.

Offshoring

Transferring various operations of a firm to another country.

Offshoring always involves a foreign location and can be implemented both as a foreign direct investment or via a third party by a contractual agreement.

Offshore outsourcing

Offshore outsourcing is a combination of offshoring and outsourcing. In contrast to local outsourcing operations, offshore outsourcing involves a foreign location.

**Captive offshoring** 

Internal sourcing from a foreign location within a firm's boundaries. Captive offshoring types can be distiguished using magnitude of ownership (wholly owned subsidiary versus joint venture) and mode of ownership (greenfield versus acquisition).

# **Executive Summary**

On behalf of the Embassy of the Kingdom of The Netherlands in Bangladesh, Nyenrode Business Universiteit has conducted studies on four priority sectors in the Bangladeshi economy: food (safety), logistics, water and ICT. In this report the research is focused on answering the question 'What creates the gap between the supply of the Bangladeshi ICT sector and the demand of the Dutch ICT sector and how this gap can be bridged best'.

## The Overview of Bangladesh

Located in South Asia, Bangladesh is an Islamic country with a young and rapidly growing population of 164 million. With more than 30 percent of the citizens living below the poverty line, the country's GDP per capita ranks among the lowest in the world. The economy mainly depends on agriculture and the production of apparel and garments with little development of other industries. However favorable demographic and macro economic trends, high economic growth rates (6.3 percent in 2012) and a relatively liberal investment climate have convinced Goldman Sachs and JP Morgan to identify Bangladesh as one of the most attractive emerging economies.

Bilateral trade between Bangladesh and the Netherlands remains relatively limited. Bangladeshi products (85 percent textile and garments) only count for 0.1 percent of Dutch imports, while 3 percent of Bangladeshi imports come from the Netherlands (32 percent machinery). As the 3<sup>rd</sup> largest investor the Netherlands accounts for 10.3 percent of total FDI inflow in Bangladesh. In addition the Dutch business community continues to expand its interest in the country. In 2013 the Dutch Embassy knew of 102 Dutch companies that are active in Bangladesh.

## The Bangladeshi ICT Sector

Despite having 50 years of history the government has only from 1997 officially recognized the potential of the Bangladeshi ICT industry and its impact on the economy. In collaboration with industry associations (BCS, BCC, BASIS and BACCO) and international trade support institutions the government has taken both short and long term measures (Vision 2012, Digital Bangladesh) to support and enhance development of the domestic sector and increase the export of ICT products and services.

According to the BASIS 2012 survey the ICT industry has consistently grown in recent years at 20 to 30 percent per annum. Over 800 registered ICT companies generated total revenues of approximately \$250 million. More than 75 percent of companies are involved in customized application development and maintenance, 50 percent are dedicated to IT enabled services, and 45

percent offer E-commerce/Web services. The survey also shows that 60 percent of companies solely focus on the domestic market. The International Trade Centre estimates that approximately 200 companies export their products and services to international markets (USA 68 percent, UK 32 percent, and the Netherlands 9 percent). In addition to the registered workforce, thousands of independent freelancers offer their services at online market places and 5.500 students annually graduate from ICT courses at more than 80 public and private universities.

Insights provided by semi structured interviews with 20 industry experts and practitioners indicated that the Bangladesh ICT industry has a great potential:

- Considered strengths are the young, well educated workforce, flexibility to scale up production capacity and cost advantages in general.
- Considered weaknesses are a lack of soft skills, know-how and investment in the sector, as
  well as poor infrastructure, telecommunications connectivity and power shortages. In
  addition the sector suffers from poor international visibility.
- The interviewees widely agree on foreign SMEs being the main target group for exporting companies. There are few Bangladeshi ICT companies with sufficient scale to service large international clients.

#### The Dutch ICT Sector

The Netherlands occupies 7<sup>th</sup> place in the ranking of the world's most advanced economies. The ICT industry generated revenues of €29.7 billion in 2012 with the software segment performing the best. In order to identify current offshoring trends an online survey has been conducted with 103 participating Dutch ICT companies.

- 48 percent of the companies already relocate part of their ICT activities to a foreign country.
- The most popular destinations are India (24 percent), Poland (17 percent) and Thailand (15 percent).
- There is no notable preference for offshore outsourcing, relocating activities via a third party, (59 percent) or captive offshoring, relocating activities via foreign direct investments for example by using an existing subsidiary or a newly founded company, (48 percent).
- Respondents indicated that they find their business partners via Dutch commercial intermediaries (30 percent), professional networks (22 percent), independently (20 percent), and local commercial intermediaries (15 percent).

- The activities most suitable for relocation are customized software development (61 percent), web applications and cloud computing (30 percent), and mobile application development (28 percent).
- Cost savings are the predominant motive for offshoring ICT activities to foreign countries (70 percent) followed by access to specialized knowledge from external parties (41 percent), and access to flexible capacity (39 percent).
- The most common difficulties with offshoring are cultural differences (35 percent), communication/language (33 percent), and the quality of products and services falling below expectations (26 percent).
- Most of the participants were not familiar with Bangladesh as an ICT offshoring location. For those that were familiar the perceived benefits are labor costs (93 percent), other costs (43 percent), and labor productivity (43 percent).
- Perceived disadvantages mentioned by respondents were culture (33 percent), time zone
   (27 percent), and language (23 percent).

## Bridging the Gap between the Bangladeshi and Dutch ICT industries

The research and analysis of the offerings in Bangladesh and the needs of the Dutch ICT sector have identified three areas where there is a fit between the countries: web design, mobile application development, and customized/web application development.

In order to bridge the gap between the Dutch and Bangladeshi ICT sectors and improve the economic ties between the two countries the following recommendations are being made.

Recommendations mainly for the GoB:

- Market Bangladesh as an ICT offshoring destination
- Improve collaboration within the Bangladesh ICT industry
- Improve infrastructure

Recommendations mainly for the private sector (sector organizations as well as companies):

- Focus on unique sales propositions
- Create a quality controlled match-making platform
- Support innovation

# i. About the Project

The Embassy of the Kingdom of the Netherlands (EKN) in Dhaka, Bangladesh, within its scope of economic diplomacy, has partnered with Nyenrode Business University (NBU) in the Netherlands in order to stimulate economic relations between the Netherlands and Bangladesh. The strategic aim of the Embassy is to strengthen bilateral commercial ties in a responsible manner and support the improvement of the Bangladeshi business environment with the spill-over effect of improving the lives of the poor.

The growing pressure on companies to perform on social and environmental criteria and a growing Bangladeshi economy posing a multitude of business opportunities creates opportunities for both business communities in Bangladesh and the Netherlands. The basic assumption is that Dutch businesses, driven by economic opportunities, can contribute to improvement of goods and services and transfer of technical know-how, innovation and technology in Bangladesh. The main aim of the partnership is to broker Dutch and Bangladeshi commercial interests and to support responsible business. Increasing trade and value chain development have a positive effect on economic efficiency. In promoting private investment and economic growth social development is enhanced. Growth helps to lower poverty by increasing employment and real incomes of the poor.

Four priority sectors were identified for the EKN-Nyenrode program: food (safety), water, logistics, and ICT. The latter sector with a specific focus on offshoring activities. As a part of the partnership NBU will conduct studies on these four sectors, organize sector meetings and facilitate trade missions. The overall aim of these activities is to unite Dutch and Bangladeshi commercial interests in the light of existing development cooperation initiatives in Bangladesh. During the project the focus of sustainability will be on employment generation (specifically targeted at women) and introducing clean (and, where applicable, innovative) technology.

# ii. About the Report

This report is written by researchers from NBU with the support of EKN. The official launch of this report took place during an ICT sector meeting at the Nyenrode campus in Breukelen, the Netherlands, on January 16 2014.

The aim of this specific report is to provide insights into areas where the Bangladeshi ICT supply potentially can meet, within the next five years, demand from the Dutch ICT sector. The report identifies business opportunities of potential interest in Bangladesh to the Dutch ICT offshoring business community and elaborates on how to strengthen business between Bangladesh and the Netherlands in this particular field.

In order to answer the research question a literature study, semi structured interviews, and a quantitative survey were conducted.

# iii. About the Embassy of the Kingdom of the Netherlands in Bangladesh

The Dutch government has been a development partner of Bangladesh since its independence in 1971. Bangladesh has been one of the main recipients of bilateral aid from the Netherlands and remains one of the Netherlands' priority countries in the field of development cooperation. The aim of the aid is to help improve living conditions of the poor, particularly in three areas: water, sexual and reproductive health and rights, and food security. Furthermore the Dutch Ministry of Economic Affairs has named Bangladesh as one of the countries with whom economic and trade relations are to be strengthened. The focus of the government of the Netherlands on economic development whilst maintaining the aim of improving basic services, which are the building blocks of a successful economy, is helping to boost investment and improve the business climate across the world.<sup>1</sup>

In Bangladesh the bilateral relationship is gradually transitioning from traditional aid to responsible trade and investment whereby EKN is proactively providing information about business opportunities in targeted sectors and serving as a matchmaker, bringing companies together. As such EKN is proud to have been awarded third prize in the 15th edition of the Fenedex/VNO-NCW Embassy Prize. The award was extended to EKN on behalf of Dutch entrepreneurs in appreciation for its services rendered in the economic field. The Embassy's objective in the area of trade and economic development is to link trade between Bangladesh and the Netherlands to the new development cooperation policy priorities with a clear focus on Corporate Social Responsibility (CSR). To support this goal EKN started a unique partnership with NBU. The past year saw a first contribution to positively impacting the volume of new trade relations, the volume of follow-up investments, employment generated, innovation, and the provision of widespread general economic information.<sup>2</sup>

# iv. About Nyenrode Business University

NBU is the only private university in the Netherlands. It builds on the motto 'for and by business'. In 1946 the university was founded by captains of industry from leading Dutch corporations including KLM, Shell, Unilever, Philips and Akzo. They took the initiative to start an institute where an action-inclined, internationally focused generation of new business leaders would be educated. At the time,

<sup>&</sup>lt;sup>1</sup> More information about the development policy of the Dutch Government can be found online via: www.government.nl/issues/development-cooperation/the-development-policy-of-the-netherlands

<sup>&</sup>lt;sup>2</sup> More information about the Embassy of the Kingdom of the Netherlands in Bangladesh (EKN) can be found online via: http://bangladesh.nlembassy.org/

the main goal was to rebuild the economic position of the Netherlands and Dutch enterprises after the Second World War.<sup>3</sup>

Situated on a 13th century estate in the center of the Netherlands, Nyenrode has a unique atmosphere to work and study. NBU is consistently committed to delivering high quality programs, which is reflected in European and global educational rankings and especially in the satisfaction of its alumni and companies employing 'Nyenrodians'.

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<sup>&</sup>lt;sup>3</sup> More information about Nyenrode Business University (NBU) can be found online via: www.nyenrode.nl

#### 1 Introduction

## 1.1 Scope of the Report

In this report the question *What creates the gap between the supply of the Bangladeshi ICT sector* and the demand of the Dutch ICT sector and how can this gap be bridged best is answered.

The report starts with a section describing the Bangladeshi business environment (section 2). Section 3 elaborates on the ICT sector in Bangladesh and gives insights in what kind of services and products are exported from Bangladesh. Section 4 touches on the needs, in the field of ICT, of the Dutch business community. A survey among Dutch ICT companies gives a detailed understanding of the desires of the Dutch ICT sector. The report ends with recommendations regarding bridging the gap between the supply side (Bangladesh) and the demand side (the Netherlands) in the field of ICT and a conclusion (section 5). Throughout the report, for illustrative purposes, several 'good practices' are given by making use of case studies.

# 1.2 Research Approach

In order to answer the research question a literature study, semi structured interviews and a survey were conducted. NBU has observed that there already is relatively rich quantitative information on the offerings of the ICT sector in Bangladesh. Face to face interviews with Bangladeshi ICT industry participants and experts have been chosen in order to obtain quality input on the supply side of the Bangladeshi ICT export sector. Quantitative research in the form of a survey was conducted to picture the demand from the Dutch ICT offshoring sector. The NBU research team selected this approach as there is a lack of quantitative information on the Dutch demand. The ITC Exporter Directory gives clear guidance on what kind of ICT products and services are offered by ICT companies in Bangladesh.<sup>4</sup> Furthermore the Bangladesh Association of Software and Information Services (BASIS) yearly conducts a survey among its members, a report presenting the outcomes of the survey is publicly available.<sup>5</sup>

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<sup>&</sup>lt;sup>4</sup> The ITC Exporter Directory has been jointly prepared by the International Trade Center (ITC), CBI of the Dutch Ministry of Foreign Affairs, Bangladesh Association of Software and Information Services (BASIS) and the Dhaka Chamber of Commerce and Industry (DCCI). The directory is a deliverable of the Netherlands Trust Fund II Bangladesh and introduces Bangladeshi ICT companies. NTFII (2012), ITC Exporter Directory (2012), <a href="http://www.intracen.org/uploadedFiles/intracenorg/Content/About\_ITC/Where\_are\_we\_working/Multi-country\_programmes/NFT\_II/FINAL%20NTFII%20Bangladesh%20Exporter%20Directory%202012.pdf">http://www.intracen.org/uploadedFiles/intracenorg/Content/About\_ITC/Where\_are\_we\_working/Multi-country\_programmes/NFT\_II/FINAL%20NTFII%20Bangladesh%20Exporter%20Directory%202012.pdf</a>, last visited: 30 December 2013.

<sup>&</sup>lt;sup>5</sup> The Bangladesh Association of Software and Information Services (BASIS) is the national trade body for the Software & IT Enabled Service industry of Bangladesh. The association is established in 1997 and has more than 600 members. It is estimated that over 75% of the Bangladeshi ICT companies has a BASIS membership. Every financial year BASIS conducts a quantitative survey among its members to picture the trends and dynamics in

The literature review is conducted to map out the offshore ICT offshoring opportunities in Bangladesh. Over the years several reports describing the Bangladeshi ICT market are published. To mention a few: 'Business opportunity study within the ICT and telecommunication industry in Bangladesh' as published in 2006 by DANIDA<sup>6</sup>, 'Leveraging ICT for growth and competitiveness in Bangladesh: IT/ITeS industry developments' as published in 2009 by the World Bank<sup>7</sup>, and 'Bangladesh Beckons: an emerging destination for IT/ITeS outsourcing' as published in 2012 by KPMG<sup>8</sup>. Next to these reports various other publications, reports, and (semi) scientific articles were a valuable sources of information.

As the insights gained during the literature study remained insufficient to provide a definitive answer to the research question various semi-structured interviews with industry experts, public officials and practitioners, in the Netherlands as well as in Bangladesh, have been done. The objective of the interviews was to complement the outcomes of the literature study and learn more about the offerings of and the opportunities in the Bangladeshi ICT market. The qualitative data was gathered by means of in depth interviews of 30 to maximum 60 minutes. For this the interviewers used of a checklist (see Appendix 5: Data Matrix). In total twenty professionals representing various types of organizations were interviewed (see Appendix 1: List of Interviewees).

First the offerings, the supply and the export potential of the Bangladeshi ICT sector were pictured by conducting interviews and a literature study. Then a survey among Dutch ICT companies was spread to picture the demand from the Netherlands. The targeted participants in the survey are Dutch SME companies who already showed their interest in Bangladesh as an ICT offshoring destination. 103 companies filled out the questionnaire digitally resulting in a response rate of 13 percent.

## 1.3 Information Communication Technology

In this report the definition of Information Communication Technology (ICT) includes any type of software and software related activities and solutions such as ICT services, ICT applications, and

the sector. BASIS (date unknown), Bangladesh Software and IT Service Industry – recent Trends & Dynamics, < http://www.basis.org.bd/resource/About\_BASIS\_&\_Bangladesh\_Software\_and\_ITS%20\_Industry.pdf>, last visited: 30 December 2013.

<sup>&</sup>lt;sup>6</sup> DANIDA – Ministry of Foreigh Affiars Denmark (2006): Business opportunity study within the IT and telecommunication industry in Bangladesh,

<sup>&</sup>lt;a href="http://www.bangladoot.se/IT%20Delegation%20Visit%20to%20Bd/Business%20Opportunities%20within%20I">http://www.bangladoot.se/IT%20Delegation%20Visit%20to%20Bd/Business%20Opportunities%20within%20I</a> T%20&%20Telecommunication%20Industry%20(Bangladesh).pdf>, last visited: 30 December 2013.

World Bank (June 2009): Leveraging ICT for growth and competitiveness in Bangladesh: IT/ITeS industry developments, <a href="http://documents.worldbank.org/curated/en/2009/06/16279554/leveraging-ict-growth-competitiveness-bangladesh-itites-industry-development">http://documents.worldbank.org/curated/en/2009/06/16279554/leveraging-ict-growth-competitiveness-bangladesh-itites-industry-development</a>, last visited: 30 December 2013.

<sup>&</sup>lt;sup>8</sup> KPMG (January 2012): Bangladesh Beckons: an emerging destination for IT/ITeS outsourcing, <a href="https://www.kpmg.com/BD/en/Documents/UNITC%20KPMG%20Whitepaper.pdf">https://www.kpmg.com/BD/en/Documents/UNITC%20KPMG%20Whitepaper.pdf</a>, last visited: 30 December 2013.

software products and embedded software.<sup>9</sup> Examples of ICT solutions are customized software development, mobile application development, website design and development and the design of graphs and animations. In this report we define Information Technology enabled Services (ITeS) as software-related work services which can be performed offshore.<sup>10</sup> A distinction can be made between Voice Based ITeS, e.g. customer interaction services, telemarketing and call centers, and Non Voice Based ITeS such as data entry, content management, graphic design, digital image processing, editing, page formatting, data warehousing and mathematical modeling.

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<sup>&</sup>lt;sup>9</sup> E. Carmen and P. Tjia (2005), Offshoring Information Technology', Cambridge University Press, preface.

<sup>&</sup>lt;sup>10</sup> Ibid preface XIX.

# Case Study 1: Parkingware

Parkingware has been working on solutions that use advanced car license plate recognition. Since its inception in 2004 the company has focused on developing its technology to a high quality industrial level. Parkingware has a state of the art range of hardware and software products at its disposal. This enables them to provide solutions for paid and unpaid parking access management on a global scale.

Before achieving its current, successful, status Parkingware needed to expand its workforce with extra software developers. Since financial resources were limited and Dutch developers both expensive and difficult to recruit the company decided to explore other options. With help from their contacts at the Friesland House, they became aware of the trade mission to Bangladesh for Dutch ICT firms which was being organized by ITC. Once in Dhaka, company co-founder Gerard Spin visited the ICT fair where he came in contact with several local providers of software development services. After selecting two companies Parkingware started outsourcing several small projects to become acquainted with the quality and service of their potential business partners. Following the trial period in 2011 they were satisfied with the results and started a partnership with one of the firms for outsourcing software development on an ongoing basis.

Company CEO Lillian Veldman indicates that Parkingware is very pleased with the decision to relocate part of their software development to Bangladesh. Besides the considerably lower cost of labor outsourcing their work to a third party also means that Parkingware remains flexible with regards to the additional work load coming from new clients. Companies in Bangladesh can easily expand their workforce with talented graduates from the technical universities in Dhaka. In addition she emphasizes that most of the developers are almost as skilled and trained as their Dutch peers.

Parkingware has not yet experienced any communication problems caused by language barriers or the geographical distance and is satisfied with the delivered services. In order to establish a sustainable long term relationship between two parties companies should start by paying attention to contractual agreements. As a solid foundation for a mutual beneficiary partnership it is vital to clearly identify and specify targets such as the quality of services delivered within a certain timeframe. After the trial period, during which Parkingware became acquainted with their Bangladeshi partner and its professional capabilities, it was relatively easy to achieve clear agreements for a price that satisfies both parties in the long term.

# 2 Bangladesh

This section gives some general information about Bangladesh and its economic situation. Various sources of literature are used to compile this section.

164
Population (in millions)

#### 2.1 Introduction

## 2.1.1 Geography

Situated in the deltas of large rivers in South Asia, Bangladesh is a young democratic country with diverse growth pains. It hosts a rapidly growing population of 164 million within an area approximately four times that of the Netherlands making it one of the most densely populated countries in the world. The geographical location of Bangladesh results in frequent natural disasters such as floods, monsoons, cyclones, and droughts.

848

Income per capita (in US\$)

31.5%

**Poverty Rate** 

#### 2.1.2 Population

Bangladesh has an attractive population demography with nearly two thirds of its total population under the age of 34. The national language is Bangla (also known as Bengali), however English is spoken widely. 90 percent of the population is Muslim, whereas 9 percent is Hindu. Over 70 percent of the total population lives in rural areas.

98.7%

Enrolment Rate in Primary Education

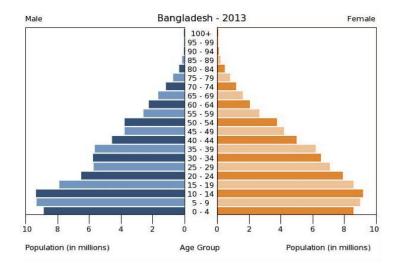


Figure 1: Bangladesh population spread (Source: CIA) 11

<sup>&</sup>lt;sup>11</sup> Central Intelligence Agency (CIA), The World Fact Book, about Bangladesh, <a href="https://www.cia.gov/library/publications/the-world-factbook/geos/bg.html">https://www.cia.gov/library/publications/the-world-factbook/geos/bg.html</a>, last visited: 30 December 2013.

#### 2.1.3 Education

Bangladesh has eighty public and private universities with more than 1.3 million new students every year. Annually there are almost 15,000 graduates in IT-related areas. The World Economic Forum published the Global Competitiveness Report 2013-2014 in which Bangladesh ranks 98, 105, and 112 respectively for Quality of the Higher Education System, Quality of Management Education, and Quality of Science and Math Education. A relatively young and growing population combined with increasing education creates an educated youth pool with the ability to read and write in English in Bangladesh. This is an attractive asset for offshoring services.

#### 2.1.4 Current Political Situation

With the declaration of the date for the 10<sup>th</sup> Parliamentary Election to be held on January 5 2014 by the Chief Election Commissioner on November 25 2013, the political situation is tense in Bangladesh. Continuous hartals (strikes) and blockades are being called that include nationwide violence and clashes between law enforcement agencies and supporters of the ruling and the opposition party. The clashes have, until now, led to an estimated twenty deaths and hundreds of injuries as well as substantial damage to public and private property. The government is determined to push through the elections in spite of a boycott by the opposition in which the Bangladesh Nationalist Party (BNP) and 17 smaller opposition parties are refusing to submit any nomination papers to the election commission. The European Union (EU) has repeatedly called on the leaders of all political parties to agree on a mutually acceptable formula so as to facilitate the holding of elections that fully reflect the wishes of the Bangladeshi people. In a letter, sent recently to the ruling and opposition leaders, United Nations (UN) Secretary General Ban Ki-moon expresses his concerns and urges them to shun all forms of political violence. He has issued statements previously, called Bangladesh's two top leaders, and sent his Assistant Secretary-General for Political Affairs Oscar Fernández-Taranco to Bangladesh twice to promote a dialogue. The UN official arrived for a third mission to Dhaka on December 6 2013 in order to instigate a dialogue for holding an inclusive, non-violent and credible election. He left Dhaka with a few hopeful words about the prospect of deferring the elections. Political instability is expected in the run up to and aftermath of the elections to be held early 2014.

<sup>&</sup>lt;sup>12</sup> Bangladesh Ministry of Education, Education Statistics 2012,

<sup>&</sup>lt;a href="http://www.moedu.gov.bd/index.php?option=com\_content&task=view&id=300&Itemid=301">http://www.moedu.gov.bd/index.php?option=com\_content&task=view&id=300&Itemid=301</a>, last visited: 30 December 2013.

<sup>&</sup>lt;sup>13</sup> Bangladesh Ministry of Finance (June 2013), Towards a Digital Bangladesh – update 2013

<sup>&</sup>lt;a href="http://mof.gov.bd/en/budget/ebook/digital\_journey.pdf">http://mof.gov.bd/en/budget/ebook/digital\_journey.pdf</a>, last visited: 30 December 2013.

<sup>&</sup>lt;sup>14</sup> The World Economic Forum (2013), The Global Competitiveness Report 2013-2014,

<sup>&</sup>lt;a href="http://www3.weforum.org/docs/WEF\_GlobalCompetitivenessReport\_2013-14.pdf">http://www3.weforum.org/docs/WEF\_GlobalCompetitivenessReport\_2013-14.pdf</a>, last visited: 30 December 2013.

## 2.1.5 Diplomatic Relations

Bangladesh is represented as a member of various international trade and business organizations.<sup>15</sup> The most important ones are listed below:

- Member of the Commonwealth of Nations.
- Founding member of the World Trade Organization (WTO).
- Member of the Multilateral Investment Guarantee Agency (MIGA), an arm of the World Bank that insures foreign investors against political risks such as expropriation, inconvertibility and war damage.
- Party to the World Bank Convention on the Settlement of Investment Disputes between states and nationals of other states which enables international arbitration of disputes with foreign investors.
- Member of the World Intellectual Property Organization's permanent committee on development co-operation related to industrial property.
- Member of South Asian Association of Regional Cooperation (SAARC) and its off shoot the South Asian Preferential Trade Agreement (SAPTA).
- Joined BIMSTEC (Bangladesh, India, Myanmar, Sri Lanka, Thailand Economic Cooperation).
- Member of the D-8 (involving Bangladesh, Pakistan, Egypt, Malaysia, Indonesia, Turkey, Nigeria, and Iran).

#### 2.2 Economic Situation

Despite many developments resulting in Bangladesh moving up the value chain it remains poor and overpopulated with 31.5 percent of the total population living below the poverty line. Gross Domestic Product (GDP) per capita on purchasing power parity in 2012 is estimated at US\$ 2,100 compared to the world average of US\$ 12,700 (in the Netherlands: US\$ 42,900). The economy of Bangladesh is growing, expanding by 6.3 percent in 2012. The average growth rate of Bangladeshi GDP between 1994 and 2013 was 5.6 percent despite many obstacles including political instability, widely spread corruption, weak infrastructure, slow implementation of economic reforms, and insufficient power supplies. 18

Goldman Sachs has named Bangladesh as one of the 'Next Eleven' countries having high potential to become the world's largest economies in the 21st century along with the BRICs/BRICS. Next to

<sup>&</sup>lt;sup>15</sup> Netherlands Bangladesh Business Platform, Bangladesh Country Profile

<sup>&</sup>lt;a href="http://www.nbbp.org/?q=CountryProfile">http://www.nbbp.org/?q=CountryProfile</a>, last visited: 30 December 2013.

<sup>&</sup>lt;sup>16</sup> Central Intelligence Agency (CIA), see note 11.

<sup>&</sup>lt;sup>17</sup> The World Bank, GDP Growth Databank, <a href="http://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG">http://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG</a>, last visited: 30 December 2013.

<sup>&</sup>lt;sup>18</sup> Central Intelligence Agency (CIA), see note 11.

Bangladesh the following countries were listed: Egypt, Indonesia, Iran, Mexico, Nigeria, Pakistan, Philippines, Turkey, South Korea, and Vietnam.<sup>19</sup> Based on macro-economic and demographic trends, JP Morgan includes Bangladesh in its 'Frontier Five' most attractive emerging markets.<sup>20</sup> Since 2010, Gartner, a global technology research and advisory company, has placed Bangladesh on its list of 'top 30 countries for offshore services'.<sup>21</sup>

The largest and most labor intensive industry in Bangladesh is agriculture, employing 45 percent of the country's population and amounting to almost a third of its GDP.<sup>22</sup> Bangladesh is also the world's second largest exporter of apparels and readymade garments. Due to the country's low level of development, the economic policy of the government is supported by international donors and oriented towards poverty alleviation by means of considerable subsidies primarily aimed at the agricultural sector. In 2011, Bangladesh received a record 1.1 billion USD of Foreign Direct Investment (FDI).<sup>23</sup>

#### 2.3 Trade and Investment Relations

#### 2.3.1 Investment Climate

Bangladesh has one of the most liberal investment regimes in South Asia. Bilateral investment treaties for the promotion and protection of foreign investment give Bangladesh tariff-free access to the EU and its Generalized System of Preferences (GSP) as well as to Canada, Australia and Japan. There are no distinctions between foreign and domestic private investors regarding investment incentives or export and import policies. The government is eager to attract foreign investment and the country has proven export competitiveness<sup>24</sup> by:

 Allowing 100 percent foreign equity investment with unrestricted exit policy, easy remittance of royalties, and repatriation of profits and incomes creating the most liberal FDI conditions in South Asia.

<sup>&</sup>lt;sup>19</sup> Goldman Sachs (April 2007), Beyond the BRICs: A look at the 'next 11', < http://www.goldmansachs.com/our-thinking/archive/archive-pdfs/brics-book/brics-chap-13.pdf>, last visited: 30 December 2013.

<sup>&</sup>lt;sup>20</sup> JP Morgan (April 2007), Ho Chi Minh Trail to Mexico, <http://at-

capital.com/at/JP%20Morgan%20Frontier%20Five.pdf>, last visited: 30 December 2013.

<sup>&</sup>lt;sup>21</sup>Gartner (September 2012), Gartner Says Alternative Offshore Locations for IT Services Are Emerging as Global Delivery Models Evolve,

<sup>&</sup>lt;a href="http://www.gartner.com/newsroom/id/2177915">http://www.gartner.com/newsroom/id/2177915</a>, last visited: 30 December 2013.

<sup>&</sup>lt;sup>22</sup> Central Intelligence Agency, see note 11.

<sup>&</sup>lt;sup>23</sup> United Nations, World Investment Report 2012, <a href="http://www.unctad-docs.org/files/UNCTAD-WIR2012-Chapter-II-en.pdf">http://www.unctad-docs.org/files/UNCTAD-WIR2012-Chapter-II-en.pdf</a>, last visited: 30 December 2013.

<sup>&</sup>lt;sup>24</sup> Kingdom of the Netherlands (June 2011), Investing in Bangladesh

<sup>&</sup>lt;a href="http://bangladesh.nlembassy.org/binaries/content/assets/postenweb/b/bangladesh/netherlands-embassy-in-dhaka/import/publicatie---investing-in-bangladesh-final.pdf">http://bangladesh.nlembassy.org/binaries/content/assets/postenweb/b/bangladesh/netherlands-embassy-in-dhaka/import/publicatie---investing-in-bangladesh-final.pdf</a>, last visited: 30 December 2013.

- Providing protection for investments made in Bangladesh through its Foreign Private Investment (Promotion & Protection) Act 1980.
- Offering export-oriented industrial enclaves, Export Processing Zones, with infrastructural facilities and logistical support for foreign investors.
- Embracing a more flexible and competitive economic zones regime with the enactment of the Economic Zones Act 2010 which paves the way for private economic zones.

Despite possessing an attractive investment regime and relatively low labor costs compared to other countries in the region, Bangladesh has had difficulty in attracting foreign investments. The slow pace of reform implementation, endemic corruption, political instability, continual strikes, poor infrastructure, inadequate legal and judicial system, and slow government decision-making have hindered further growth in FDI.

#### 2.3.2 Ease of Doing Business in Bangladesh

According to the World Bank Bangladesh holds the 130<sup>th</sup> position out of 189 economies in 'ease of doing business' in 2014 it improved by two positions compared to 2013. <sup>25</sup> This ranking reflects the regulatory environment conducive to starting and operating a business. Bangladesh (130) ranks higher than India (134), but comes short of the South Asian regional average (121).

Bangladesh retains the lowest ranking for 'getting electricity' (189) and 'enforcing contracts' (185). In 2012 the GoB hindered 'getting electricity' by imposing a moratorium on new electricity connections from April 2010 to March 2011 due to an electricity shortage. This moratorium led to long delays for customers in obtaining an electricity connection. In 2013, Bangladesh impeded 'getting electricity' further by requiring all electricity users to meet 7 percent of their electricity needs through solar energy, making it necessary to install solar panels.<sup>26</sup>

Notably, Bangladesh ranks high in 'Protecting investors' (22) and the score is above average in 'starting a business' (74). In comparison, India holds the 34<sup>th</sup> position in 'investor protection' and 179<sup>th</sup> in 'starting a business'. In recent years Bangladesh has introduced multiple reforms to digitalize and reduce the time needed to start a business resulting in it climbing the ranking.

At present most foreign companies doing business in Bangladesh have the issue of social responsibility on the agenda. Creating awareness in Bangladesh and developing practical solutions for social development through economic development plays an important role in promoting CSR.

<sup>&</sup>lt;sup>25</sup> International Finance Corporation (IFC) and the World Bank, Doing Business, Data Bangladesh, <a href="http://www.doingbusiness.org/data/exploreeconomies/bangladesh/#starting-a-business">http://www.doingbusiness.org/data/exploreeconomies/bangladesh/#starting-a-business</a>, last visited: 30 December 2013.

<sup>&</sup>lt;sup>26</sup> International Finance Corporation (IFC) and the World Bank, see note 25.

Developing a CSR policy seems wise for Dutch companies that are active or will become active on the market in Bangladesh. Such a CSR strategy can mitigate risks such as involvement with corruption and can be developed conform guidelines developed by: the Organization for Economic Co-operation and Development (OECD), the National Knowledge Centre, the Network Organization for Corporate Social Responsibility (MVO Nederland), and the Netherlands Ministry of Foreign Affairs. Appendix 3 includes the Nyenrode code of conduct that it is recommended to take into consideration when entering the Bangladeshi market.

#### 2.3.3 Bilateral Trade between Bangladesh and the Netherlands

Trade relations between the Netherlands and Bangladesh range from agricultural products and services (food and live animals) to industrial products and services (chemicals, machinery, manufactured, other miscellaneous). However almost 85 percent of the exports to the Netherlands are garments in the textile and textile articles category. According to the Bangladesh Export Promotion Bureau around 10 percent of exports are made up of various sea-food items including fish, crustaceans, shrimps, prawns, and mollusks.<sup>27</sup> This pattern of trade is similar to general trade patterns between Bangladesh and the EU as well as the United States. The pattern reflects the Bangladeshi export sector's specialism in Ready Made Garments (RMG) and relatively high exposure to Europe. This pattern leaves the country vulnerable to global economic growth trends. The volume and direction of bilateral trade between the Netherlands and Bangladesh in the future will depend to a large extent upon how well the latter can position itself to attract Dutch exports and investments.

According to the Bangladesh Export Promotion Bureau the largest share of exports to the Netherlands other than RMG exports were accounted for by the frozen food sector, specifically in shrimps and prawns.

The most recent trade figures, as presented in Appendix 2: Bilateral Trade in Figures, describe bilateral trade between Netherlands and Bangladesh in 2012 and are sourced from ITC and WTO calculations based on the Eurostat statistics. Annual growth in the value of imports and exports between the two countries has recently increased substantially, 14 percent between 2007 and 2011. In 2012 the Netherlands was the 3<sup>rd</sup> largest investor in Bangladesh. Considering the relative share of Bangladeshi products and services in Dutch total imports (0.1 percent) it is fair to conclude that there is room for growth in trade.

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<sup>&</sup>lt;sup>27</sup> Export Promotion Bureau, Bangladesh Ministry of Commerce, Country Export Data, <a href="http://www.epb.gov.bd/countryexportdata.php">http://www.epb.gov.bd/countryexportdata.php</a>, last visited: 30 December 2013.

# 2.4 Dutch business community in Bangladesh

In 2013, according to EKN, 102 Dutch companies were active in Bangladesh, almost double the number in 2011 (59 companies). This rapid steep growth indicates that the Dutch business community is discovering the attractiveness of Bangladesh, however it is not yet a prime destination. Various issues could be contributing factors ranging from geographical market distance and a lack of marketing in the global arena, to the perceived ease of doing business with Bangladesh as discussed in section 2.3.1.

A growing number of Dutch ICT companies recognize the benefits the Bangladesh market has to offer such as young, motivated employees, and cost advantages. As a result they have embarked on the offshoring trail. **Figure 2** below shows the Dutch ICT companies, known by EKN, that source or perform ICT business activities in Bangladesh.

Organization	Business Activity					
Boo 2 Bangla Ltd.	Computer software and IT services					
Budget View	Coaches in successful business setup / or break down					
CIMSolutions	Automation agency for industry and business (web builders)					
Hawar IT	Dutch-Bangladeshi company focusing on IT and data services					
	around Computer-Aided Drafting (CAD), Geographic					
	Information Systems (GIS), Database and Web technology					
Kimball Systems	PSI – digital printing technology for garment tagging in					
	Bangladesh					
Mister Clipping	Cutting of photographs for global brands					
Parkingware BV	Solutions that use advanced car license plate recognition					
	(hardware and software products)					
Rocket Internet Benelux	International online venture builder; more than a venture					
	capital firm or an incubator, bringing together key elements					
	required to create great companies: team, concept, technology,					
	and capital					
Verint Systems B.V.	Actionable intelligence solutions					
	Figure 2: Dutch ICT companies in Bangladesh as provided by EKN 2013					

Figure 2: Dutch ICT companies in Bangladesh as provided by EKN, 2013.

# Case Study 2: Atos Foundation

With its recently established Invest2Develop program the Atos Foundation aims to provide small ICT firms in developing countries with important ingredients for economic growth: knowledge, work and income. The foundation invests in the development of people by bringing their own staff together with local employees of the ICT start-up firms in order to share their professional experience and support further development of the companies. In addition to exchanging knowledge by entering these new markets the foundation also helps the companies in opening doors to western markets. Small projects are outsourced to local firms providing them directly with work and income. To increase the reach and effectiveness of the Invest2Develop program the foundation collaborates with international non-governmental organizations by leveraging their existing support to predefined target groups within the regions.

The Invest2Develop program initially focuses on the 'Next Eleven' countries identified by Goldman Sachs as high potential economies in the 21st century, these countries offer promising outlook for investment and future growth. The Atos Foundation began with a moderately successful project in Liberia in which they provided training to 70 young developers. Based on these experiences they developed a similar strategy for a new project in Bangladesh. With help from CBI and ITC they met with several small ICT companies in Dhaka. Based on criteria concerning the business model and economic outlook as well as the potential and dedication of the management one company is selected for the program. A team of Atos managers and engineers visit this company for several weeks in order to train the staff and help the company develop a competitive value proposition for their products and services. In addition they assist in the process of finding and contracting the company's first international client.

Atos project manager Willem Hoekstra has been involved from the start and is positive about the initial results. Based on his experience in other developing countries he is pleasantly surprised at the high level of knowledge of Bangladesh's workers. Technical universities provide a level of education on par with modern industry standards. Skilled engineers are available and highly motivated to improve and prepare their service levels for international clients. With regards to the rather diverse portfolio of services being offered by the average firm, he indicates that the underlying technical aspect of many low-end ITeS is very similar. Nevertheless to bring the ICT offshoring industry to the next level, with high-end services and more added value, it is necessary for individual firms to specialize in a single field. By collaborating with other specialized industry participants firms can start developing a unique value proposition for international clients.

# 3 ICT Industry Profile: Bangladesh

This section provides a brief overview of the history of the Bangladeshi ICT sector and the role that the government plays in supporting the sector in order to give a full picture of the sector and its potential for the future. Importantly this section elaborates on the characteristics of the Bangladeshi ICT market including the different activities it consists of and its size. In determining the opportunities for up-scaling business between the Dutch and the Bangladeshi ICT sector an analysis is made that identifies which services and products Bangladeshi ICT businesses could supply to Dutch companies that are interested in offshoring their products or services.

## 3.1 Historical Perspective on the ICT Sector

Bangladesh has about five decades of experience in using computers. In its early days the ICT sector in Bangladesh mainly focused on hardware operations. The first 'second generation', world mainframe, computer was installed in 1964 at Dhaka University. Soon after this several large banks and industrial concerns started using computers, mainly for accounting and payroll applications. The Bangladeshi gas and electricity companies also began using computer systems for their customer billing. Unfortunately the financial crisis that the country faced after its independence in 1971 hampered the expansion of computer use in the Bangladeshi corporate sector. <sup>28</sup> In 1982 a computer center was established at the Bangladesh University of Engineering and Technology. This center, later renamed the Department of Computer Science & Engineering, has played a pivotal role in Bangladeshi IT education since its inception. <sup>29</sup>

The innovation of software concerning 'Bangla writing' on computers materialized in 1987. An engineer named Mainul Islam managed to write Bangla in an Apple-Macintosh computer using his self-evolved font 'Mainulipi'. With the possibility of using Bangla on computers the importance of computer use in offices and printing industries in Bangladesh rapidly grew. Soon after the introduction of the internet in Bangladesh, in 1995, the development of exportable software and multimedia systems commenced.<sup>30</sup>

<sup>&</sup>lt;sup>28</sup> Dr. Jamilur Reza Choudhury (date unknown), Information Technology in Bangladesh, Sustainable Development Networking Programme, <a href="http://www.sdnbd.org/sdi/issues/IT-computer/jrc.html">http://www.sdnbd.org/sdi/issues/IT-computer/jrc.html</a>, last visited: 30 December 2013

<sup>&</sup>lt;sup>29</sup> Department of Computer Science & Engeneering, general information,

<sup>&</sup>lt;a href="http://www.buet.ac.bd/cse/geninfo/history.php">, last visited: 30 December 2013.</a>

<sup>&</sup>lt;sup>30</sup> Chowdhury, Masud Hasan; Md Mahbub, Murshed (date unkown), 'Computer' in Banglapedia,

<sup>&</sup>lt;a href="http://www.banglapedia.org/HT/C\_0393.htm">http://www.banglapedia.org/HT/C\_0393.htm</a> last visited: 30 December 2013.

Over the years several ICT related associations have been established. The Bangladesh Computer Society ('BCS'), association of the IT professionals, for instance was formed in 1979.<sup>31</sup> BCC, the Bangladesh Computer Council, is the consequence of the evolution of the National Computer Committee which the government constituted in 1983.<sup>32</sup> The Bangladesh Computer Samity, the ICT industry association, was found in 1987.<sup>33</sup> BASIS, established in 1997, promotes the ICT sector through awareness building, practical education for new graduates and paid internships, and training programs for mid-career employees.

## 3.2 Government Policy

In June 1997 the GoB officially recognized that ICT can make an important development impact by appointing a committee to look into barriers and opportunities to export software from Bangladesh. The Committee of Export of Software and Data Processing Services submitted a report to the government with 45 recommendations. The Committee, for instance, advised the government in the short term to support the ICT industry with tax holidays and specific exemptions, to provide the necessary authority to the BCC to function as the primary facilitator, to review computer science curricula, and to prepare over 1,000 new 'trainers' for national universities. For the medium term the committee recommended the creation of a 'Market Promotion Fund' to support installation of fiber optic cables and to coordinate setting up a communication hub in Bangladesh. The GoB asked different concerned ministries to implement some of these recommendations. The Committee recommendations are communication in the committee recommendations asked different concerned ministries to implement some of these recommendations.

In 2009 the National ICT Policy was broadly reformulated across areas including education, science and technology, infrastructural development, employment generation, private sector development, agriculture, health and nutrition. The GoB included an e-governance vision and promotion program for the ICT sector in the sixth Five Year Plan. This vision should support the aim of delivering significant gains in terms of productivity and employment for both domestic as well as foreign investors. The GoB also initiated 'Digital Bangladesh' intending to set up infrastructure for enhanced connectivity. In addition to policy development the GoB is maintaining close relationships with industry associations such as BASIS, BCS and BCC.

In order to further develop the ICT sector and to realize the export potential of the sector, the GoB recently took several noteworthy initiatives:

<sup>21</sup> 

<sup>&</sup>lt;sup>31</sup> Bangladesh Computer Society, website: <a href="http://www.bcsbd.org.bd/#">http://www.bcsbd.org.bd/#">, last visited: 30 December 2013.

<sup>&</sup>lt;sup>32</sup> Bangladesh Computer Council, website: <a href="http://www.bcc.net.bd/">http://www.bcc.net.bd/</a>, last visited: 30 December 2013.

<sup>&</sup>lt;sup>33</sup> Bangladesh Computer Samity, website: < http://www.bcs.org.bd/>, last visited: 30 December 2013.

Ministry of Commerce, Letter of Transmittal (14 September 1997), Sustainable Development Networking Programme, <a href="http://www.sdnbd.org/sdi/issues/export&import/softexport.htm">http://www.sdnbd.org/sdi/issues/export&import/softexport.htm</a>, last visited: 30 December 2013

<sup>&</sup>lt;sup>35</sup> Dr. Jamilur Reza Choudhury (date unknown), see note 28.

- All Software and ICT Service companies, including those under foreign ownership, are exempt from income tax until 2015.
- Both a government sponsored long-term equity fund and short term working capital financing are offered to ICT companies.
- A special hi-technology and software technology park is being built by the government to facilitate the development of all the infrastructure needed by companies that outsource activities to them. Furthermore the GoB has established the Bangladesh Hi-Tech Park Authority to operate the Hi-Tech Park.

Next to the GoB international Trade Support Institutions (TSI) play an important role in creating business opportunities for Bangladeshi ICT and ITeS companies. Over the years several initiatives have contributed to the growth of the ICT sector in Bangladesh. The Danish Ministry of Foreign Affairs run the DANIDA program in Bangladesh 2003 to boost growth in the Bangladeshi ICT and telecom sector by supporting the establishment of commercial partnerships between Danish and Bangladeshi companies.<sup>36</sup> It was due to the DANIDA program that the first wave of ICT companies serving external markets in Bangladesh was initiated because of enhanced access to Scandinavian markets.<sup>37</sup> Many of these early adaptors expanded their geographical reach to other regions in Europe and Northern America. The Netherlands Trust Fund II (NTFII) is funded by the Dutch government to support the ICT and the ITeS sector in Bangladesh in improving its export competitiveness. In collaboration with BASIS and the Dhaka Chamber of Commerce and Industry a viable business-linkage service is set up to link Bangladeshi ICT companies with companies in the Netherlands, the United Kingdom and Denmark in order to create mutual benefits. 38 The World Bank created a country assistance strategy for Bangladesh, hereby offering financial and technical assistance. The strategy runs from 2011-2014 and recognizes a key role of the ICT sector in supporting Bangladesh's growth, competitiveness and governance agenda.<sup>39</sup>

<sup>&</sup>lt;sup>36</sup> DANIDA (2006), see note 6.

<sup>&</sup>lt;sup>38</sup> ITC and CBI (date unknown), Creating Sustainable Exporter Competitiveness IT & ITeS sector in Bangladesh, <a href="http://www.intracen.org/uploadedFiles/NEW-Fact-sheet-Bangladesh">http://www.intracen.org/uploadedFiles/NEW-Fact-sheet-Bangladesh</a> EN-v02(1).pdf>, last visited: 30 December 2013.

<sup>&</sup>lt;sup>39</sup> Internal document of the World Bank, Report No. 54615-BD.

# Case Study 3: Approvide

Founded in 2011, Approvide is a Dutch e-resource partner supporting companies with professional resources developing software solutions such as web-applications and mobile-apps. The company is a joint venture between the Dutch entrepreneur Han Verbaas and the Bangladeshi firms Upload Yourself Systems and Databiz. To target clients in the Dutch ICT market Upload Yourself Systems CEO Farhana Rahman has decided to expand the international sales activities of the company with a physical and permanent presence in the Netherlands. The initial contacts are provided by the CBI as part of their program to facilitate Bangladeshi entrepreneurs in finding their way in the Netherlands and enhance trade relationships between both countries. Within a short period of time the new sales department was established and managed by Han Verbaas.

With a permanent representative in the Netherlands and more than 100 software developers in Bangladesh, Approvide is now able to offer products and services directly to potential customers in the Dutch market. Moreover it gives the Bangladeshi company the opportunity to brand itself as a provider of ICT services according to European industry standards. Verbaas mentions the lack of appropriate marketing strategies as one of the biggest problems for companies in the Bangladesh ICT sector, preventing them from significantly developing their export revenues. "Many firms position themselves as being able to provide any possible service within the broad spectrum of the ICT outsourcing industry. When a small company is highlighting on its website that it offers smart phone applications and complex cloud solutions at the same time, it will lose its credibility in the eyes of European customers." In addition he argues that most Bangladeshi ICT companies are offering a similar portfolio of services with a lack of a clear specialization and therefore not being able to offer a unique value proposition.

According to Verbaas, developing distinctive competencies will be the main issue for the Bangladesh ICT industry in the coming years. The future of an offshoring location like Bangladesh depends heavily on its ability to adapt itself to modern industry requirements which are no longer dominated by the low cost aspect. Many companies experienced that the labor cost advantage often became offset by additional costs due to communication problems. Nearshoring in Eastern Europe is strongly benefitting from geographical and cultural advantages. Wages in the region have become more competitive in recent years enabling Eastern European countries to position themselves as top ranked locations for ICT offshoring. In addition onshoring is becoming more popular as a result of decreasing wages in Western Europe and the United States. With increased competition on international markets, the sector in Bangladesh should examine how to differentiate itself from competing regions and should go beyond offering basic services with a wide range of products. Verbaas clearly identifies

opportunities for companies like Approvide in specializing and developing stand-alone software components which generate higher added values. The combination of innovative and technically advanced products and the ability to offer total ICT solutions at competitive prices do provide a unique value proposition that could strengthen Bangladesh's position in global ICT value chains.

#### 3.3 Market Overview

#### 3.3.1 Market Players

According to BASIS industry statistics from 2012 there currently are over 800 IT and ITeS companies registered in Bangladesh. The total industry turnover is estimated around 250 million USD. In 2012 BASIS carried out a survey among its member companies showing that over 75 percent of the member companies are involved with customized application development and maintenance. Almost half of them are offering ITeS to its customers. The specialization of the BASIS member companies is shown in **Figure 3**.

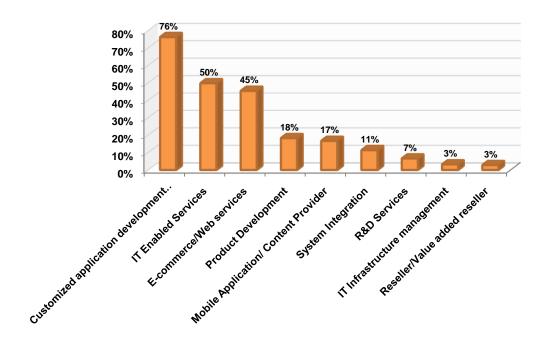


Figure 3: Business specialization of BASIS member companies in 2012, source BASIS 2012.

Approximately 65 percent of BASIS' member companies have between 10 and 30 employees. It is estimated that not more than 20 companies have over 100 employees and just 5 companies in the Bangladeshi IT industry have over 200 employees. Based on these statistics it can be concluded that the market is dominated by Small and Medium Enterprises (SME).

The BASIS survey shows that over 60 percent of their member companies solely focus on the internal Bangladeshi market. Recently in Bangladesh large-scale automation projects were implemented in sectors like banking, telecom, pharmaceutics, garment and textile which have increased the domestic demand for software and ITeS. According to BASIS statistics the domestic IT service industry market has grown at 20 to 30 percent per annum during the last few years. Banking and other financial sectors are the main domestic target group for Bangladeshi ICT sector. Although the banking

software market is dominated by foreign software solutions local companies are working on maintenance and implementation of this software. A number of companies have developed software solutions, providing a range of ancillary services related to banking. Manufacturing sectors including garment, textile and pharmaceuticals have created sustainable demand for IT solutions like ERP, HR information systems, and production and financial management software.<sup>40</sup>

The ITC estimates that around 200 Bangladeshi ICT companies serve international markets by offering outsourcing services and project delivery models. The BASIS survey shows that out of the exporting member companies the revenue of around one third of these companies is fully export based. In terms of export destinations North America (Canada and the US) dominates, whereas European countries like the UK, Denmark, the Netherlands and Germany have emerged over the last few years to become major export destinations (see **Figure 4** below). The DANIDA and the NTFII programs play an important role in this respect focused as they are on enhancing trade in the field of ICT between Bangladesh and Europe. The BASIS survey shows that of the exporting member companies in 2012 just 8.3 percent exports to India whereas 63.8 percent exports to the US.<sup>41</sup>

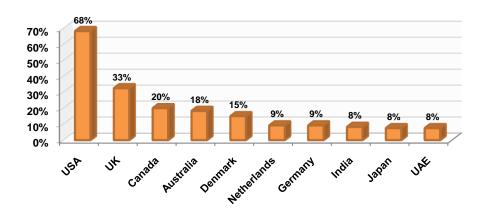


Figure 4: Top export destinations BASIS member companies, source: BASIS 2012.

Apart from the 800 registered IT and ITeS companies Bangladesh has an active community of freelancers. According to the ITC Exporter Directory there are over 10,000 ICT freelancers active in Bangladesh in 2012, billing an export revenue over USD 7 million.<sup>42</sup> The Bangladeshi IT freelance

<sup>&</sup>lt;sup>40</sup> BASIS (date unknown), Bangladesh Software and IT Service Industry – recent Trends & Dynamics, < http://www.basis.org.bd/resource/About\_BASIS\_&\_Bangladesh\_Software\_and\_ITS%20\_Industry.pdf>, last visited: 30 December 2013.

<sup>&</sup>lt;sup>41</sup> Ibid.

<sup>&</sup>lt;sup>42</sup> NTFII (2012), ITC Exporter Directory,

<sup>&</sup>lt;a href="http://www.intracen.org/uploadedFiles/intracenorg/Content/About\_ITC/Where\_are\_we\_working/Multi-pull-attention-new-working-multi-pull-attention-new-working-new-working-new-working-new-working-new-working-new-working-new-wor

community bids for work on internet websites like oDesk, eLance and Guru. According to the KPMG freelance outsourcing jobs typically include editing, proof reading, translation, data entry, web research, virtual assistance, web design and software programming.<sup>43</sup>

The opportunities in Bangladesh have been acknowledged by several global ICT companies. For example, the Korean technology firm Samsung has opened a high-end Research and Development (R&D) center in Bangladesh employing over 250 engineers. VizRT, a Norwegian company that creates content production tools for the digital media industry, is building captive centers following acquisitions of ICT production companies in Bangladesh. Other global IT companies (e.g. AMD, LG and IBM) are currently in the process of setting up back-office R&D or support centers in Bangladesh.<sup>44</sup>

#### 3.3.2 Products and Services

At present the ICT sector in Bangladesh can be classified into four main areas: information technology (including software solutions), ITeS, network solutions and hardware solutions. Whereas most Bangladeshi market players initially offered their services and products predominantly on the domestic market, Bangladeshi software solutions and ITeS are nowadays exported to other regions like Europe and Northern America.<sup>45</sup> Software Solutions are feasible particularly for Information

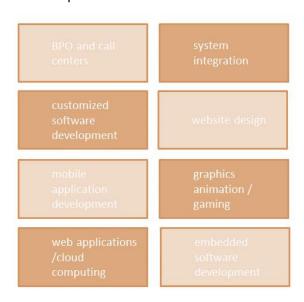


Figure 5: Types of IT services and products exported from Bangladesh. Source: ITC Exporter Directory 2012.

Technology Outsourcing (ITO) whereas back office activities are regularly outsourced by making use of ITeS. This can be referred to as Business Process Outsourcing (BPO).

In the ITC Exporter Directory a distinction is made between eight different categories of IT products and services exported from Bangladesh (see **Figure 5**).<sup>46</sup> Some of these categories consist of broad segments in which the range of ICT products and services will vary. This variety could be explained by the relatively large population in Bangladesh

country\_programmes/NFT\_II/FINAL%20NTFII%20Bangladesh%20Exporter%20Directory%202012.pdf>, last visited: 30 December 2013.

<sup>&</sup>lt;sup>43</sup> KPMG (January 2012), see note 8.

<sup>&</sup>lt;sup>44</sup> BASIS (date unknown), see note 40.

<sup>&</sup>lt;sup>45</sup> KPMG (January 2012), see note 8.

<sup>&</sup>lt;sup>46</sup> NTFII (2012), ITC Exporter Directory, see note 42.

having different skill sets and expertise.<sup>47</sup>

According to the industry outlook provided by BASIS the major niches in Bangladesh for ICT service providers can be found in BPO and the following fields of ITO: web development and design, mobile application development, graphic design, customized application development, and maintenance.

#### 3.4 Benefits of the ICT sector

To date the ICT industry could be seen as one of the top sectors in the country for graduate employment in terms of creating high quality jobs. According to BASIS the average monthly compensation for an ICT employee is approximately US\$ 200 per month.

Comparing the size of the national population and the size of the national economy, it seems that the ICT industry in Bangladesh, especially the ICT and ITeS exports, is still relatively small. Looking at the characteristics of the market, the global trends in offshoring, and the growth of ICT services and products exported from Bangladesh over recent years (see **Figure 6**) we can conclude that the significance of the ICT sector for the Bangladeshi economy will grow in the near future.<sup>48</sup>

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<sup>&</sup>lt;sup>47</sup> T. Kanti Bose, Md. Reaz Uddin and Md Nazmul Huda (2013), Prospects of Bangladesh as a leading outsourcing destination in IT sector', International Journal of Managing Value and Supply Chains, Vol 4. No.2., June 2013.

<sup>48</sup> Ibid.

Fiscal Year	<b>'</b> 06- <b>'</b> 07	<b>'07-'08</b>	'08-'09	<b>'</b> 09- <b>'</b> 10	'10-'11	'11-'12	<b>'12-'13</b>
Export (million USD)	26.08	24.09	32.91	35.36	45.31	70.81	101.63
Growth (over previous year)	-3.44%	-4.83%	32.59%	7.44%	27.25%	56.28%	43.53%

Figure 6: Export trends Software / IT services, source: BASIS.

According to BASIS estimations within the next five years 1 percent of Bangladesh's total GDP will come from the software and IT services sector and over 150,000 Software and IT professionals will be working in the Bangladeshi IT industry.<sup>49</sup>

## 3.5 Market Analysis

An analysis to explore the possibilities of Bangladesh as an ICT offshoring destination was conducted based on interviews (see section 1.2) with industry experts and practitioners from Bangladesh as well as the Netherlands. This analysis shows the Bangladeshi ICT sector as it is seen by current participants. The following section of the report will reflect on the offerings and strengths of the Bangladesh ICT sector as well as some risks and barriers.

#### 3.5.1 Strengths

Overall the interviewees recognize that the Bangladesh ICT sector has the potential to become a global destination for offshoring. One of the biggest strengths of the Bangladeshi ICT sector, as mentioned in many interviews, is the young and educated workforce.

"The biggest strength in Bangladesh is the young population that we have. They can be trained easily and fit in the sector needs." Bangladeshi ICT exporting company

"As a result of a decent education system, the average level of technical knowledge is surprisingly high compared to Dutch standards." **Dutch/International ICT company** 

In addition to the talented workforce, Bangladeshi ICT companies are very flexible in acquiring additional workforce if a project scales up.

"The technical knowledge of the Bangladeshi workforce is considerably high and comparable with the Netherlands. In addition to that, Bangladeshi companies are rather flexible in scaling up the workforce when needed." **Dutch/International ICT company** 

Thirdly, the cost advantages in Bangladesh are visible and reflected upon by many interviewees.

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<sup>&</sup>lt;sup>49</sup> BASIS newsroom (7 October 2013), 1 Percent of country's GDP will come from Software & IT Service within next 5 years, <a href="https://www.basis.org.bd/index.php/media/news\_detail/217">https://www.basis.org.bd/index.php/media/news\_detail/217</a>, last visited: 30 December 2013.

"Costs in Bangladesh are approximately 40 percent lower than in India and Philippines." **Dutch trade support initiative** 

"Due to the large population the wages are still very competitive. Bangladesh is even cheaper than competing countries such as Sri Lanka and Philippines." **Bangladeshi ICT exporting company** 

"Employee readiness to work and lower costs are the ultimate beauty of the Bangladesh market." Bangladeshi public sector organization

"Bangladeshi services and products are better priced than in other ICT offshore destinations. With better quality, lower prices and a better commitment (understanding of the client problem, time schedules and resources to be put in) Bangladesh should compete with Indian companies." Bangladeshi ICT exporting company

#### 3.5.2 Weaknesses

As a developing market Bangladesh has a fair set of weaknesses. Most of them come from lack of skills, know-how and investment in the country. The main weakness of the Bangladeshi market remains infrastructure and power shortages.

"The main issue is the infrastructure (power knock-outs and connectivity)." **Dutch trade** support initiative

"The main weakness is the lack of reliable infrastructure. Internet speed, bandwidth and electricity are key problems that regularly affect daily operations. Since many of the companies are dedicated to software development, damage of poor internet connectivity is limited. In addition, most of the companies have in-house power generators to deal with electricity shortages." Bangladeshi public sector organization

It is worth to mention that many of the bigger Bangladeshi ICT companies make use of fall back lines for internet and electricity. The internet connection in Bangladesh has become more reliable since the landline to India was laid next to the submarine cable from Singapore.

The Bangladeshi ICT sector also suffers from poor international visibility and lack of brand name as a global offshoring destination.

"Industry as a whole is not very well positioned in the global ICT value chain. Bangladesh is hardly known as an ICT offshoring location." **Dutch trade support initiative** 

The ICT sector in Bangladesh is comprised of mainly small ICT companies that currently seem to lack focus and scale to take up large long-term projects.

"Scalability is an issue as 90 percent of the companies have 10-30 employees." **Bangladeshi ICT exporting company** 

"The companies in Bangladesh do not manage to create a unique sales proposition. They all offer a wide range of products and services. 80 percent of the companies in Bangladesh are offering the same services. Whereas the technical work can be done, the long term service is not very reliable because of the size of the companies." Bangladeshi ICT exporting company

The Bangladeshi workforce has very well developed hard skills but is believed to be less developed on soft skills according to the interviewees. There is also a perceived gap between the industry needs and university qualification.

"There is a big lack of soft skills in Bangladesh. If you have 100 candidates for the job, probably just 2 have the right soft skills (listening, keeping conversation going, etc.) This makes training costs high." Bangladeshi ICT sector organization

"Sometimes there is a gap between the industry needs and the IT graduates. To solve the problem, companies need to offer trainings and internships for post-graduates." **Bangladeshi**ICT sector organization

An interviewee mentioned the investment climate:

"Due to the lack of investments the competition is not tough and the turnover of employees is lower than in other countries. The investment climate is good, hence there is a lot of room for growth." Bangladesh ICT exporting company

When asked about the main target group to export Bangladeshi ICT product and services to almost all interviewees indicated that SMEs in the Netherlands should be targeted. Although the sector is eager to serve multinationals and high profile clients it is currently more likely that SMEs will become the first new customers. Apart from some companies in the field of desk top BPO and Voice ITeS there is a perceived lack of scale to serve larger companies. This could be explained by the size of the ICT companies in Bangladesh. As indicated in section 3.3.1, 65 percent of BASIS' member companies have between 10 and 30 employees and it is estimated that not more than 20 companies have over 100 employees. These small Bangladeshi ICT companies seem to lack the capacity to serve the demand of (Western) multinationals. Furthermore the companies in Bangladesh currently often lack an appropriate track record and references to attract large companies.

Some interviewees expect the growth in the sector to come from companies which already have ICT offshoring experience in countries like India and the Philippines. According to them, as soon as these companies realize the cost competiveness of Bangladesh they will start placing their orders in Bangladesh instead of in other offshoring destinations. In contrast several interviewees stressed that if a company currently has a business relationship with India, for example, it would be hard to convince them to switch to Bangladesh. This could be another argument to target Dutch SMEs with no previous offshoring experience assuming that most Dutch large companies already have activities running in India and other offshoring destinations.

During the interviews the barriers for Dutch companies to offshore ICT activities to Bangladesh have been discussed extensively. Many interviewees argue that this has nothing to do with the offerings and capabilities of the Bangladeshi ICT industry. Moreover they feel that most Dutch companies simply are not aware of the possibilities in Bangladesh. In order to upscale the number of ICT business relationships between both countries the Bangladeshi ICT sector should market itself better according to some interviewees. In their view, the GoB and several industry organizations like BASIS, BCC, BCS and BACCO play an important role in this regard. On a company level, they feel that individual companies should make sure they have a unique sales proposition by tapping into niche markets.

## Case Study 4: Nascenia

Nascenia, a Bangladeshi ICT company specialized in the development of software solutions for web and mobile phone applications, was established in July 2010. The founders, three young and talented Bangladeshi IT experts, used to be colleagues at an American captive IT center in Dhaka. However, because of financial reasons, this captive center was closed down early in 2010. The three IT experts became jobless and decided to rent a spare room in a friend's office in Dhaka. From this single room they started offering IT services to international clients via internet. They dedicated their time and some of their savings to their initiative and Nascenia was born.

Nascenia is derived from the word 'Nascent' as the aim of the founders was to grow gradually. In 2013 the management set the goal of becoming one of Asia's top software brands employing over 1,000 people within five years. Currently Nascenia has over 40 employees. The company has grown at an annual rate of 200 percent on average. Co-founder Shaer Hassan mentions the fact that the company carefully defines its offerings and has decided to focus on just one technology as one of the key factors of the business model. By targeting one particular niche market, Ruby on Rails, it is easy to find customers.

The services offered by Nascenia are not suited for the local Bangladeshi market because of the high end quality and the costs associated with this way of delivering services. Currently about 95 percent of the company's revenue originates from outside Bangladesh. Among its customers are companies from countries like Denmark, the US, Sweden and the Netherlands. Clients find Nascenia via search engines on the internet, references, and, most importantly, via match making events. This experience suggests that Bangladeshi ICT companies operating in international markets should be less focused on competing with their national peers. Companies represented in this sector should instead support each other to jointly market Bangladesh as an ICT offshoring destination.

According to Hassan there is an untapped international market SMEs that are discovering ICT offshoring and outsourcing opportunities. Since most of the Bangladeshi providers of ICT services have less than 100 employees and therefore not being able to serve large international clients, there is a unique opportunity in this market segment. If companies like Nascenia manage to offer the right portfolio of services to this specific target group, the Bangladeshi ICT industry could enhance sustainable revenue growth and earn its own place in international value chains. However, within this potential client base, many SME's should first realize the value of offshoring. Project failure can happen if the commitment at the client's side is poor. For successful ICT offshoring project deliverables need to be documented and properly communicated.

## 4 ICT Industry Profile: The Netherlands

#### 4.1 Introduction

The ICT sector in the Netherlands shrank by 0.6 percent to €29.7 billion in 2012. Despite the drop in spending the ICT sector performed better than the overall Dutch economy which contracted by 0.9 percent in 2012<sup>50</sup>. In the years since the financial crisis the Dutch ITC sector has faced a wave of redundancies due to reduced project volumes and increased offshoring to low wage countries.<sup>51</sup>

The software segment continues to perform best in this sector while the ICT hardware and office technology segments were most hit by the recession. Whereas the software segment showed some growth in 2013 hardware purchases were on hold due to poor performance of the overall economy.

The Netherlands maintains 7<sup>th</sup> place in the ranking of the most advanced ICT economies in the world alongside Korea (1<sup>st</sup>), Sweden (2<sup>nd</sup>), Finland (5<sup>th</sup>), and United Kingdom (8<sup>th</sup>)<sup>52</sup>. In the same ranking Bangladesh was placed 135th out of 157 countries. In the Netherlands 94 percent of all households have access to the internet compared to an average of 73 percent of all European households.

The Dutch government has an ambition to remain one of the world's top five knowledge economies. To encourage the required innovation to reach this ambition it has launched a policy of investing in top sectors starting in 2011. Even though ICT is not considered to be a top sector itself it acts as the catalyst for innovation in the other sectors.<sup>53</sup> In the vision of the Dutch government the ICT sector increases productivity, stimulates economic growth, and helps to solve social problems. For this reason the Dutch government offers subsidies and allowances towards the salary costs of R&D employees through the Dutch R&D tax credit (WBSO). The WBSO budget for the allowances in 2013 amounts to € 735 million, € 129 million less than in 2012.<sup>54</sup>

## 4.2 ICT Offshoring Trends: Survey

In order to get a better picture of the current offshoring trends in the Dutch ICT market, an online survey was conducted. A total of 103 Dutch ICT companies completed the survey, a response rate of 13 percent.

<sup>&</sup>lt;sup>50</sup> ICT Nederland, Martmonitor 2013, <a href="http://www.ictmarktmonitor.nl/ict-marktmonitor-2013/english-summary/">http://www.ictmarktmonitor.nl/ict-marktmonitor-2013/english-summary/</a>, last visited: 30 December 2013.

<sup>&</sup>lt;sup>51</sup> Dutch News (Friday 14 September 2012),

<sup>&</sup>lt;a href="http://www.dutchnews.nl/news/archives/2012/09/it\_sector\_hit\_by\_job\_losses\_an.php">, last visited: 30 December 2013.

<sup>&</sup>lt;sup>52</sup> ITU newsroom press release latest tech figures and global ranking,

<sup>&</sup>lt;a href="http://www.itu.int/net/pressoffice/press">http://www.itu.int/net/pressoffice/press releases/2013/41.aspx></a>, last visited: 30 December 2013.

<sup>&</sup>lt;sup>53</sup> ICT Nederland, Martmonitor 2013, see note 50.

<sup>&</sup>lt;sup>54</sup> Ibid.

#### 4.2.1 The Profile of Participants

Out of the 103 respondents to the survey, 57 percent have indicated that they work with development and production of software, 36 percent provide consulting services for ICT, and 54 percent provide other services related to ICT (see **Figure 7**). As depicted in **Figure 8**, 56 percent of all responses came from SMEs, 34 percent from medium enterprises, and the remaining 10 percent were contributed by larger firms.



Figure 7: Respondents' Profile: ICT industry segments.

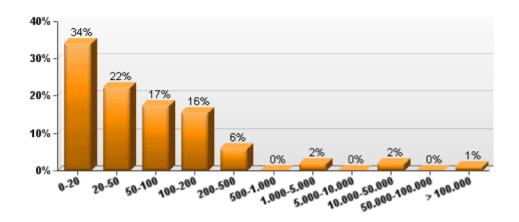


Figure 8: Respondents' Profile: Company size (full-time employees).

#### 4.2.2 ICT Offshoring

Almost half of the participating companies (46 percent) have relocated their ICT business activities to a foreign country. In this section we analyze the answers of companies that already offshore their ICT activities to foreign markets. India, Poland and Thailand are the top three most popular offshoring destinations for Dutch ICT companies (see **Figure 9** for a full list).

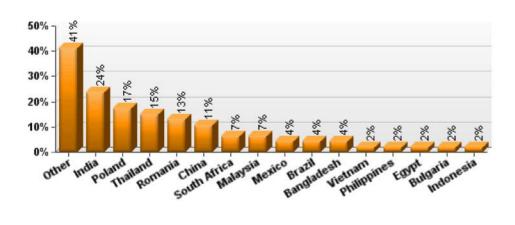


Figure 9: Most popular offshoring destinations.

The survey reveals that respondents do not have a strong preference towards how to relocate their activities and sometimes use a combination of methods; 59 percent have experience with offshore outsourcing (using a third party in the foreign market), 48 percent opts for captive offshoring (direct control).

When asked how their company found local business partners respondents indicate: via Dutch commercial intermediates (30 percent), via professional networks (22 percent), independently (20 percent), and via local commercial intermediates (15 percent).

**Figure 10** depicts the types of services that the respondents offshore. Among the most popular are customized software development (61 percent), web applications and cloud computing (30 percent), mobile application development, and system integration and website design (each 17 percent).

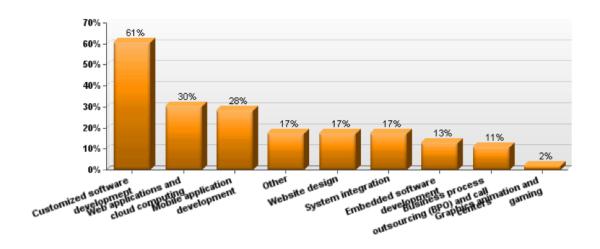


Figure 10: Types of services that are offshored.

70 percent of the respondents indicate cost savings as the main motivation for offshoring ICT services to lower cost countries. 'Access to specialized knowledge from external party' and 'access to flexible capacity from external party' come in second and third with 41 percent and 39 percent respectively. **Figure 11** depicts the full range of motives for choosing offshoring.

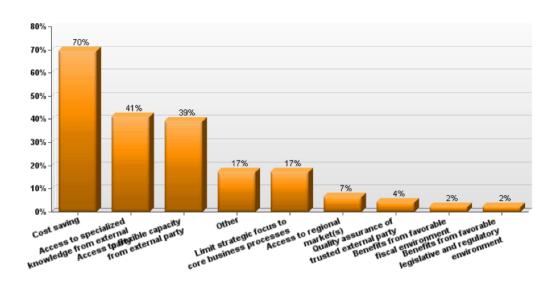


Figure 11: Motivation to relocate ICT activities to foreign locations.

On the one hand, the participants of the survey had a positive overall experience with offshoring their ICT business activities rating the experience at 4 out of 5. On the other hand, there are also many obstacles that prove offshoring to be complicated. **Figure 12** contains a full list of difficulties the companies experienced by relocating their ICT business activities to foreign locations. Among the

most common are: cultural differences (35 percent), Communication/language barrier (33 percent), and quality of the service/product (26 percent).

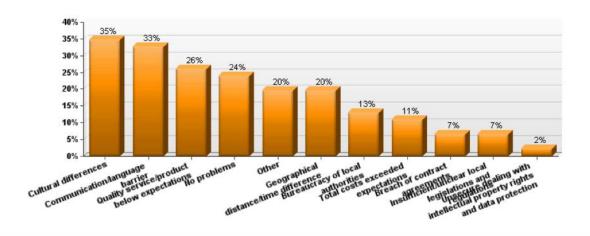


Figure 12: Difficulties when offshoring.

#### 4.2.3 Likeliness to Offshore Future ICT Services

Only 32 percent of all respondents indicate that they are planning to offshore additional ICT activities within the next 3 years. Companies that already offshore are more likely to do so in the future than those that are currently not involved in any offshoring (54 percent vs. only 14 percent respectively).

Among the main reasons for not relocating ICT services respondents indicate: communication/language barrier (27 percent); geographical distance/time zone (24 percent), satisfaction with Dutch workforce (24 percent), and ICT activities require specific in-house knowledge (20 percent).

When asked about the types of activities respondents would choose to offshore, the answers do not differ much from the question in section 4.2.2. The dominant offshored activities are: customized software development, web applications and cloud computing, and mobile application development.

#### 4.2.4 Offshoring to Bangladesh

More than half of the survey participants are not familiar with Bangladesh as an ICT offshoring location. Of the 45 percent who are familiar only 31 percent consider Bangladesh as a possible provider of their ICT needs. The main perceived benefits of Bangladesh as an offshoring destination are: labor costs (93 percent), labor productivity (42 percent), other costs (42 percent), skilled and educated labor (36 percent), knowledge and technology (29 percent), and EU trade support incentives (29 percent). Among the main perceived disadvantages of the Bangladeshi market as an

offshoring destination are: culture (33 percent), time zone (27 percent), language (23 percent), and strikes (20 percent). For the full list of perceived advantages and disadvantages see **Figure 13** and **Figure 14** respectively.

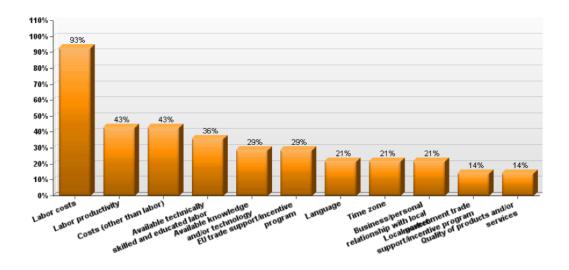


Figure 13: Perceived benefits of Bangladesh as an ICT offshoring destination.

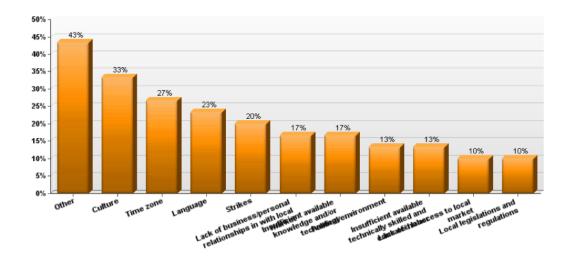


Figure 14: Perceived disadvantages of Bangladesh as an ICT offshoring destination.

# Case Study 5: HawarlT

Founded in 1994 and headquartered in the northern Dutch city Sneek, HawarIT is a company that has emerged from a successful cooperation between a few newly graduated engineers from the Technical University of Twente. They combined their academic knowledge with their entrepreneurial ambition and within a short period of time they manage to serve their first clients who were mainly active in the design and process technique industry. Based on this solid foundation the company has grown into an autonomous and independent consultancy and software agency specialized in the fields of CAD, GIS Database and Webtechnology.

Since 2000 HawarIT has operated back offices in Bangladesh enabling them to offer customers a unique price-performance proposition. Cees Nieboer, company CEO and founding partner, explains the decision to offshore parts of their operations to Dhaka as the result of a naturally evolved process. This process is initiated by a former colleague who had moved to Bangladesh to commit himself to development work and immediately recognized the potential of the Bangladesh ICT labor force. Starting with offshoring only small projects gradually a sustainable business relationship with local partners was established that has been strengthened over time. In order to guarantee its Dutch clients an adequate service and price value level on the long term HawarIT decided to increase its commitment and control over the daily operations in Bangladesh by starting a joint-venture with its local partners. Currently there are 50 people working fulltime in the Bangladesh office. This enables HawarIT to assist its clients 24 hours per day with a wide range of ICT services.

When being asked about the advantages of offshoring ICT activities to Bangladesh instead of relocating to more common locations like India or the Philippines, Nieboer mentions the availability of a technically skilled workforce at affordable prices. This provides HawarIT with the opportunity to offer its clients bespoke ICT solutions at lower prices. As these bespoke services are normally labor intensive many other SMEs in the Netherlands are only able to work with more affordable standardized software. Nieboer continues by saying that "Top students are still easy to hire in Dhaka, and most of them receive a decent education with sufficient linkage to current developments in the international ICT industry." However he also mentions that it sometimes is better to select students from the layer below top students as HawarIT offers its employees intensive training and on the job learning. The top students are often eager to pursue their careers at high profile international ICT companies whereas HawarIT wants its employees to commit themselves for the long term.

With over 10 years of experience in the Bangladesh ICT sector Nieboer is convinced that the sector is currently not using its full potential. He stresses that the Bangladesh ICT sector could enhance

collaboration between firms in order to compose a unique proposition that includes a total solution for the client, and to jointly compete against larger international companies. The sector should try to eliminate distrust between local firms and help each other by referring projects involving specific skills. They also should partner to ensure a high quality service that is in line with modern industry standards. By collaborating the sector would become more competitive and able to serve top end international clients.

#### 5 Conclusion and Recommendations

This report has provided an overview of the supply side of the ICT industry in Bangladesh and the demand side of the ICT industry in the Netherlands. A deeper analysis has been completed on the gap between the needs and the supply of the ICT offshoring services.

Bangladesh economic data show a solid average annual growth rate of its GDP of 5.6 percent between 1994 and 2013. This flourishing environment for growth is created by a young, skilled and motivated workforce, numerous initiatives of the GoB stimulating the economy and improving the educational system, high ranking of easiness to do business, and cost competitiveness compared to the surrounding markets. However Bangladesh, as a young democracy, has a constant battle to maintain peace in the country and there are serious issues with widespread corruption and bureaucracy. Infrastructure to support economic growth is inadequate and often not able to serve companies with basic needs such as a stable power supply and access to high speed internet. In addition the financial sector is not developed to the level at which it is able to accommodate economic growth with adequate financial services and additional funding.

Bangladesh has a young population, with nearly two thirds of the population under the age of 34, which, combined with increasing educational quality, creates a talented and skilled pool of young workers with the ability to read and write in English. In combination with the relatively low wages, this is an attractive asset for potential offshoring services in many different industries. Based on data provided by the EKN the Dutch business community has barely discovered the attractiveness of Bangladesh as just over 100 Dutch companies are active in Bangladesh; it is not a prime destination yet. Various issues, such as geographical market distance, lack of marketing of Bangladesh in the global arena, and the perceived ease of doing business in Bangladesh could create barriers for Dutch companies looking to enter the Bangladeshi market.

Gartner places Bangladesh on its list of top 30 offshore ICT services destinations. Looking at the Bangladeshi ICT offshoring industry it can be concluded that although it is relatively young it is rapidly developing. In the fiscal year 2012-2013, according to BASIS, the total value of ICT exported services from Bangladesh was \$ 101.63 million. It is estimated that within five years 1 percent of Bangladesh's total GDP will come from the software and IT services sector and over 150,000 software and IT professionals will be working in the Bangladeshi IT industry. At present the ICT sector in Bangladesh can be classified into four main areas: information technology (including software solutions), ITeS, network solutions, and hardware solutions. Bangladeshi software solutions and ITeS are leading exports to Europe and Northern America.

This research indicates major niches for Bangladesh ICT offshoring companies in BPO and several fields of ITO such as web development and design, mobile application development, graphic design, customized application development, and maintenance. In Bangladesh these services are mainly offered by SMEs employing between 10 and 30 people. A growing number of independent freelancers reach international clients by finding projects via online match-making and marketplace platforms. The field research reveals that the Dutch ICT sector mainly demands customized software development, web applications and cloud computing, mobile application development, system integration, and website design. They also value the after-sales service and reliability of their offshoring partners.

Looking at the offerings in Bangladesh and the demand of the Dutch ICT sector we can conclude that there are matches particularly in the field of (1) web design; (2) mobile application development and (3) customized / web application development (see **Figure 15**).

Service	Niche Supply: Bangladesh	Demand: Netherlands
Web Design	✓	✓
Mobile Application Development	✓	✓
Customized /Web Application Development	✓	✓
ВРО	✓	
Web Development	✓	
Graphic Design	✓	
Application Maintenance	✓	
Customized Software Development		✓
Cloud Computing		✓
System Integration		✓

Figure 15: Overview of the Bangladeshi ICT supply and Dutch ICT demand

In order to strengthen the bilateral commercial ties in the field of ICT and support the improvement of the Bangladeshi business environment, with a spill-over enhancing the lives of the poor by bridging the gap between the demand of the Dutch ICT sector and the supply of the Bangladeshi ICT sector, the following recommendations are made as a result of the research.

#### Recommendations for the GoB:

#### • Market Bangladesh as an ICT Offshoring Destination

The visibility of Bangladesh as an ICT offshoring destination needs to be improved upon. Both private and government industry supporting associations, such as DCCI, BASIS, BACCO, and BCC, should jointly leverage marketing efforts, actively seeking collaboration with international TSIs. In recent

years considerable efforts have been made by the World Bank, the DANIDA aid program and the different NTF programs enrolled by ITC, CBI, BASIS and BACCO. However for many Dutch ICT companies Bangladesh as an ICT offshoring destination is still not high up the list. Therefore an attractive, distinctive value proposition for Bangladesh needs to be created and widely marketed. Proactively partnering with foreign trade development organizations is recommended as the GoB and sector organizations together with TSIs can enhance domestic and foreign commercial interests. Their aim is to develop the Bangladeshi economy through the increase of bilateral trade and foreign investments.

#### A Collaborative Bangladesh ICT Industry

As a result of both the limited size and lack of international track record most Bangladeshi companies face difficulties to attract and serve larger international clients. If the sector manages to collaborate by means of partnerships then the capacity to serve MNEs can be created. Besides collaboration between industry peers through short-term partnerships or long term joint-ventures lead to more available technical know-how and additional financial, organizational and marketing resources. These are necessary to ensure access to foreign markets. Companies can also exchange or rotate workers in order to develop additional technical or commercial skills.

#### Improve Infrastructure

Next to the existing sea cable and the landline with India an additional undersea optical fiber cable will be installed. This cable is expected during 2014 and will be essential for further development of the ICT sector. While impact is limited for ITO services (customized software development and graphics animation and gaming), web based and voice enabled services such as call centers and helpdesks heavily depend on the stability of fast internet connections. As this still remains a weak spot in Bangladesh it would help if the GoB could focus on creating infrastructure comparable with the standards in developed countries. Establishing additional internet hubs and broadband networks in remote areas is something that could be considered. Limited access to internet for companies and freelancers outside urban areas slows down further industry development and formation of additional small ICT clusters.

#### Recommendations for the private sector (sector organizations as well as companies):

#### • Unique Sales Propositions

Bangladeshi ICT companies should specialize in particular product and service ranges in order to create more reliable and unique sales propositions. Looking at the ICT Export Portfolio it stands out

that small firms offer a broad range of ICT services and products. Differentiating from other ICT service providers by focusing on a limited number of products and services within the range of ICT offerings will improve the delivered quality, and stimulate innovation and further development of the ICT sector. The combination of innovative and technically advanced products and the ability to offer total ICT solutions at competitive prices will provide a unique value proposition that could strengthen Bangladesh's position in the global ICT value chain.

#### Create a Quality Controlled Match-Making Platform

Potential foreign clients should be able to find Bangladeshi companies and examine their offerings easily. Currently it lacks a quality controlled and well promoted platform showcasing Bangladeshi ICT companies. It would create business opportunities if Bangladeshi companies offer products and services on a standardized platform based on several market segments within the ICT industry. In order to improve, to promote and to protect the Bangladesh ICT offshoring industry as a brand on the international ICT value chains, it is important that the participating Bangladeshi ICT providers are thoroughly screened and categorized according to their company profile, offerings, capacity and track record. The platform could be initiated, managed and facilitated by sector organizations like BCC, BASIS and BACCO, who maintain close relationships with their registered members. A separate section within the platform could be dedicated to independent freelancers offering their specialized services for smaller projects.

#### Support Innovation

Based on the rapid changes and developments in the global ICT landscape, it is important that the Bangladeshi ICT sector continues to innovate and to move up the value chain. To create the right conditions for innovation, the following measures need to be taken into account: developing specialized training facilities for talented ICT engineers, establishing ICT hubs, comparable with software development clusters in the US and the telecom cluster in Finland in order to have coordinated interaction between industry participants, supporting associations and educational bodies within such cluster, and involve university graduates with specializations in marketing, business development and management.

Innovation as a result of more insights in current trends and developments, as well as a clear analysis of modern needs in the international ICT value chains, will lead to products and services with higher added value for the Bangladesh ICT industry.

# **Appendices**

# Appendix 1: List of Interviewees

N of Interviewees	Affiliation
6	Bangladeshi ICT exporting companies
3	Bangladeshi public sector organizations
2	Bangladeshi ICT sector organizations
3	Dutch / International ICT companies (with experience in
	Bangladesh)
4	Dutch / International Trade Support Initiatives with a focus
	on ICT
2	Dutch ICT outsourcing experts

Figure 16: List of interviewees - research on offerings of the Bangladeshi ICT industry.

# Appendix 2: Bilateral Trade in Figures

Table 1: Bangladesh Total value of trade and investment.

	Total (bln)	Value		rlands Shar gladesh (mln	e Share in Total NL V )	alue (bln)
Imports	\$41		0.5%	(\$219)	0.03% of exports	(\$794)
Exports	\$26		3%	(\$759)	0.11% of imports	(\$717)
FDI – Inflow	\$1.1		10.3%	(\$117)	0.4% of outflow	(\$32)
FDI – Outflow	\$0.9		-			(\$17)

Source: Dutch Embassy in Dhaka, 2013.

Table 2: Bangladesh key trade commodities.

	Global (general)	Netherlands (specific)
Import		1) Machinery (31.7%)
products	1) Manufactures 59.8%	2) Pharmaceutical products (8.5%)
	2) Agricultural products 22.6%	3) Edible animal products, dairy, honey (7.1%)
	3) Fuels and mining products	4) Optical, photo, technical, medical, etc.
	10.3%	apparatus (7%)
		5) Electrical, electronic equipment (6.5%)
Export		1) Textiles and articles (85%)
products	1) Manufactures 93.6%	2) Fish, crustaceans, mollusks (9.6%)
	2) Agricultural products 5.2%	3) Footwear (2.8%)
	3) Fuels and mining products	4) Tobacco and manufactured tobacco
	1.1%	substitutes (1.2%)
		5) Vegetable textile, woven fabric (0.8%)

Source: Global (World Trade Organization, 2012) / NL (International Trade Centre, 2012).

Table 3: Bangladesh key international partners.

Share in world trac	le (goods only)	Foreign Direct Investme	ent
Export	Import	1	million
1. EU 27 (51.2%)	1. China (15.6%)	1. Egypt (13.5%)	\$ 152.30
2. US (25.7%)	2. India (13.2%)	2. US (10.4%)	\$ 117.74
3. India (4.0%)	3. EU 27 (9.7%)	3. Netherlands (10.3%)	\$ 116.75
4. Canada (3.5%)	4. Kuwait (7.2%)	4. UK (10.29%)	\$ 116.32
5. China (1.7%)	5. Indonesia (5.1%)	5. South Korea (10%)	\$ 113.06

Source: trade (World Trade Organization, 2012) / FDI (UNCTAD, 2012).

Table 4: Export destinations for Bangladesh.

1)	US	\$ 5.1 billion
2)	Germany	\$ 3.7 billion
3)	UK	\$ 2.5 billion
4)	France	\$ 1.4 billion
5)	Spain	\$ 1.2 billion
6)	Canada	\$ 993 mln
7)	Netherlands	\$ 759 mln
8)	Belgium	\$ 742 mln

Source: (Export Promotion Bureau, 2012) / discrepancy NL (CBS, 2012).

### Appendix 3: Code of Conduct Nyenrode

# Bangladesh Trade and Investment Program Conduct Guidelines regarding Corruption and Transparency (Code of Conduct)

#### Introduction

The Embassy of the Kingdom of the Netherlands (EKN) in Dhaka, within its scope of economic diplomacy, has partnered with Nyenrode Business Universiteit in order to stimulate economic relations between the Netherlands and Bangladesh. Strategic aim of the Embassy is to strengthen bilateral commercial ties in a responsible manner and support the improvement of the Bangladeshi business environment with a spill-over effect that improves the lives of the poor. The partnership aims to increase sustainable bilateral trade and investment in four identified sectors: food (safety), logistics, water and the IT-sector, with a special focus on outsourcing activities. The focus of sustainability will be on employment generation (specifically targeted at women) and introducing clean (and where applicable innovative) technology.

Informing Dutch companies, entrepreneurs, stakeholders and cooperation partners about the risks of doing business in Bangladesh, especially with regard to integrity issues and corruption, is an intricate part of stimulating responsible business, and therefore it is an important component of the Bangladesh Trade and Investment Program. Nyenrode Business Universiteit has as such developed Conduct Guidelines to which not only Nyenrode itself must adhere, but is also provided to all cooperation partners of Nyenrode with the request to comply with it in their daily practice. Corruption risks will be considered and dealt with throughout all activities undertaken in the framework of the program.

#### The Conduct Guidelines

Nyenrode Business Universiteit, within the framework of the Bangladesh Trade and Investment Program, values 'doing what is right' and demands of its cooperation partners, in whatever legal form, to read and voluntarily apply the following guidelines in order to ensure good business practices. The Conduct Guidelines of the Bangladesh Trade and Investment Program are primarily based on the internationally accepted *ICC Rules on Combating Corruption* (2011) published by the International Chamber of Commerce (ICC).

The ICC Rules are intended as a method of self-regulation by business against the background of applicable national law and key international legal instruments. Their voluntary acceptance by Enterprises will promote high standards of integrity in business transactions, whether between Enterprises and public bodies or between Enterprises themselves. These Rules play an important role in assisting Enterprises to comply with their legal obligations and with the numerous anti-corruption initiatives at the international level. They also provide an appropriate basis for resisting attempts at extortion or solicitation of bribes.

The Conduct Guidelines for the Nyenrode Trade and Investment Program dictate compliance with Part I (the Rules) and Part II (policies to enact in order to support compliance with the rules) of the ICC Rules on Combating Corruption:

#### Part I: Rules

- 1. Article 1: with regard to **Prohibited Practices.** Specifically, enterprises will prohibit the following practices at all times and in any form:
- Bribery.
- Extortion or Solicitation.
- Trading in Influence.
- Laundering the proceeds of the corrupt practices mentioned above.
- 2. Article 2: with regard to **Third Parties.** Specifically, with respect to third parties enterprises should:
- instruct them neither to engage nor to tolerate that they engage in any act of corruption;
- not use them as a conduit for any corrupt practice;
- hire them only to the extent appropriate for the regular conduct of the Enterprise's business; and
- not pay them more than an appropriate remuneration for their legitimate services.:

#### **Part II: Policies**

- 3. Articles 3-9 to be applied/enforced with regard to:
- Business Partners.
- Political and Charitable Contributions and Sponsorships.
- Gifts and Hospitality.
- Facilitation Payments.
- Conflicts of Interests.
- Human Resources.
- Financial and Accounting.

Please refer to annex: ICC Rules on Combating Corruption, for details on the above rules and policies Nyenrode demands its partners to comply with.

The underlying Conduct Guidelines are in line with the Netherlands Embassy policy regarding integrity and corruption issues. Please refer to the brochure *Eerlijk zakendoen, zonder corruptie. Praktische tips voor ondernemen in het buitenland* published by the Rijksoverheid NL (July 2012) as well as the *Reporting Guidance on The 10th Principle Against Corruption* published by the United Nations Global Compact and Transparency International (2009) for further information. These reports serve as useful guides in favor of ethical business practices omitting corruption and Nyenrode stresses the importance of reading these guides

#### Appendices:

- International Chamber of Commerce. (2011). ICC Rules on Combating Corruption,
- Rijksoverheid. *Eerlijk zakendoen, zonder corruptie. Praktische tips voor ondernemen in het buitenland.* (July 2012).
- The United Nations Global Compact and Transparency International and. (2009). *Reporting Guidance on the 10<sup>th</sup> Principle against Corruption*.

#### Herewith I declare to:

- 1) Have read the Conduct Guidelines and the appendices referred to in the code;
- 2) Comply with these guidelines in all activities related to the cooperation with Nyenrode Business Universiteit.

Name		
Signature	Date	

## Appendix 4: Online Questionnaire

- 1. In which segment(s) of the ICT industry does your company operate? (multiple answers possible)
  - a) Software development
  - b) Software publishing
  - c) ICT consultancy
  - d) Telecommunication
  - e) Production of electronic components and equipment
  - f) Production of communication equipment
  - g) Production of consumer electronics
  - h) Wholesale of ICT equipment
  - i) Other services related to ICT
- 2. How many full time employees (FTE) does your company have globally?
  - a) 0-20
  - b) 20-50
  - c) 50-100
  - d) 100-200
  - e) 200-500
  - f) 500-1.000
  - g) 1.000-5.000
  - h) 5.000-10.000
  - i) 10.000-50.000
  - j) 50.000-100.000
  - k) > 100.000
- 3. Has the company relocated any of its ICT business activities to a foreign country(s)?
  - a) Yes
  - b) No
- 4. To which country(s) are these ICT business activities relocated? (multiple answers possible)
  - a) India
  - b) China
  - c) Bangladesh
  - d) Philippines
  - e) Vietnam
  - f) Indonesia
  - g) Thailand
  - h) Malaysia
  - i) Mexico
  - j) Brazil
  - k) Romania
  - I) Bulgaria
  - m) Poland
  - n) Egypt
  - o) South Africa
  - p) Other, please specify:

- 5. How would you categorize the ICT processes that are relocated to foreign countries? (multiple answers possible)
  - a) Business process outsourcing (BPO) and call centers; please specify:
  - b) Customized software development
  - c) Mobile application development
  - d) Web applications and cloud computing
  - e) System integration
  - f) Website design
  - g) Graphics animation and gaming
  - h) Embedded software development
  - i) Other, please specify:
- 6. Relocating business activities to foreign countries can be done under direct control (captive offshoring), or via a third party (offshore outsourcing). Which way has your company relocated its ICT business activities to the foreign country? (multiple answers possible)
  - a) Captive Offshoring
  - b) Offshore Outsourcing
- 7. How did your company find local business partners? (multiple answers possible)
  - a) Via a Dutch commercial intermediate
  - b) Via a local commercial intermediate
  - c) Via a Dutch branch organization
  - d) Via a local branch organization
  - e) Via a Dutch government organization
  - f) Via a local government organization
  - g) Via an online match-making website
  - h) Other, please specify:
- 8. What were the main reasons to relocate ICT business activities? (multiple answers possible)
  - a) Cost saving
  - b) Access to specialized knowledge from external party
  - c) Access to flexible capacity from external party
  - d) Quality assurance of trusted external party
  - e) Limit strategic focus to core business processes
  - f) Benefits from favorable legislative and regulatory environment
  - g) Benefits from favorable fiscal environment
  - h) Access to regional market(s)
  - i) Other, please specify:
- 9. What is your overall experience with outsourcing/offshoring your ICT business activities?
  - a) Very negative
  - b) Somewhat negative
  - c) Neutral
  - d) Somewhat positive
  - e) Very positive
- 10. What are the most common difficulties the company experienced by relocating its ICT business activities? (multiple answers possible)
  - a) No problems
  - b) Total costs exceeded expectations
  - c) Quality service/product below expectations
  - d) Breach of contract agreements

- e) Unsecure dealing with intellectual property rights and data protection
- f) Bureaucracy of local authorities
- g) Insufficient/unclear local legislations and regulations
- h) Geographical distance/time difference
- i) Communication/language barrier
- j) Cultural differences
- k) Other, please specify:
- 11. Is the company planning to relocate (additional) ICT business activities to a foreign country within the next 3 years?
  - a) Yes
  - b) No
- 12. For which reasons did the company decide not to relocate (additional) ICT business activities to a foreign country? (multiple answers possible)
  - a) There is a better alternative
  - b) It is too risky
  - c) Lack of knowledge and certainty when finding the right business partner
  - d) Lack of knowledge and certainty when finding the right location
  - e) Lack of knowledge and certainty about local legislation and regulations
  - f) Lack of knowledge and certainty about intellectual property and data protection
  - g) Geographical distance/time zone
  - h) Communication/language barrier
  - i) Cultural differences
  - j) Other, please specify:
- 13. How would you categorize the ICT processes that are planned to be relocated to foreign countries? (multiple answers possible)
  - a) Business process outsourcing (BPO) and call centers; please specify:
  - b) Customized software development
  - c) Mobile application development
  - d) Web applications and cloud computing
  - e) System integration
  - f) Website design
  - g) Graphics animation and gaming
  - h) Embedded software development
  - i) Other, please specify:
- 14. Relocating business activities to foreign countries can be done under direct control (captive offshoring), or via a third party (offshore outsourcing). Which way is the company planning to relocate its ICT business activities to the foreign country? (multiple answers possible)
  - a) Captive Offshoring
  - b) Offshore Outsourcing

- 15. How many full time jobs are needed to fulfill the relocated ICT business activities in the foreign country?
  - a) 0-10
  - b) 10-20
  - c) 20-50
  - d) 50-100
  - e) 100-200
  - f) 200-500
  - g) 500-1.000
  - h) 1.000-5.000
  - i) 5.000-10.000
  - j) >10.000
- 16. Is your company familiar with Bangladesh as an outsourcing/offshoring destination for ICT business activities?
  - a) Yes
  - b) No
- 17. Does the company consider Bangladesh as an option for relocating ICT business activities?
  - a) Yes
  - b) No
- 18. For which reason(s) does the company consider Bangladesh as an option for relocating ICT business activities? (multiple answers possible)
  - a) Labor costs
  - b) Costs (other than labor)
  - c) Labor productivity
  - d) Available technically skilled and educated labor
  - e) Available knowledge and/or technology
  - f) Local legislations and regulations
  - g) Fiscal environment/economic policies
  - h) Access to local market
  - i) Business/personal relationship with local market
  - j) Local government trade support/incentive program
  - k) EU trade support/incentive program
  - I) Quality of products and/or services
  - m) Adequate logistics network/infrastructure
  - n) Culture
  - o) Language
  - p) Time zone
  - q) Other, please specify:
- 19. For which reason(s) does the company not consider Bangladesh as an option for relocating ICT business activities? (multiple answers possible)
  - a) Labor costs
  - b) Costs (other than labor)
  - c) Labor productivity
  - d) Insufficient available technically skilled and educated labor
  - e) Insufficient available knowledge and/or technology
  - f) Lack of/ no access to local market
  - g) Lack of business/personal relationships in with local market
  - h) Poor quality of products and/or services

- i) Inadequate logistics network/infrastructure
- j) Local legislations and regulations
- k) Fiscal environment/economic policies
- I) Political environment
- m) Corruption/bureaucracy
- n) Geographical distance
- o) Culture
- p) Language
- q) Time zone
- r) Strikes
- s) Other, please specify:
- 20. Do you have any advice for the Bangladesh ICT outsourcing industry with regards to enhancing their position and communication in the Dutch market?

# Appendix 5: Data Matrix

Indicator / Interviewee	BD ICT exporting company	BD ICT exporting company
Trends in ICT outsourcing- global	Nearshoring of ICTs ervices in Europe is the trend nowadays. Companies choose for countries like Slowakia, Greece and Poland as there is less difference in culture and time.	I strongly believe that there is an untapped market of SME companies, potential to outsource. If companies realize the value of outsourcing (in the client side ) there are hudge mutual benefits.
The nds in ICT outsourcing - Bangladesh	n/a	n/s
Offerings in BD ICT sector	Mostly there are relatively "small projects" offered. Focus is mainly on the development of applications and E-commerce.	Software solutions and development of apps.
Strengths BD ICT sector	Skill and Quality	De dicated and ski lied people
We akin ess BD ICT sector	The companies in Bangladesh do not manage to create a unique sales proposition. They all offer a wide range of products and services. Looking at the sizes of the companies (SMBs) this is not trustworthy. Looking at the services and products offered (E-commerce and apps), these are standalone' products. To deliver such a project not strong relationship is needed. To upscale IT outsourcing in 8D companies should work on long lasting relationships. SR6 of the companies in 8D is offering the same services. They however don't market themselves appropriate. Also, the quality and the look and feel of the products delivered do not meet the European standards.	We need to create the capacity to run the business on the macro level.  People don't come to Bangladesh to shop the IT market. An ICT hub in Bangladesh is needed. We need to develop skill sto become bigger. To work for the large customers, partnerships would be very useful.
Risks in volved ICT outsourcing to Bangladesh	n/a	Hirring and retaining the talent, engineers have the mobility and options to work at the best companies of the world. Our exemployees work for Google, SISCO and Microsoft. We should create the right environment to make them happy and keep them here.
USB of BD as ICT ours our cing des fin a fion	Size of worlforce and cheap labour. On the world market these USB's however are not unique.	Price and quality.
Target Group in Netherlands	Because of the scale of companies and projects in 8D the target group would be Dutch SMBs. This could be companies who for example work for Albert Heijn but not Albert Heijn itself.	
Current Barriers for Dutch companies to outsource to BD	It is hard for 8 D companies to find ou stome is in the Netherian ds as the opportunities in 8 D are still unknown by the broader public.	the country is hard to brand: Floods / Political instability / Terrorism
RoleofGoB	The IT sector in 8D should market itself better the GoB can play a role in this.\	Focus on communication instructure and should take investment barriers away. The covernment is however already helping with Basis / NTF / World Bank (also from ITC).
General Comments		Projectfail as commitment from the client side is lacking. To make outsourcing successful the initial thoughts need to be written down and properly communicated. As there are some cultural differences, it is necessary to have good communication and the right project management in place.

Indicator / Interviewee	BD ICT exporting company	BD ICT exporting company
Trends in ICT outsourcing - global	After the Lehman shock, many companies had to run there business by looking for low cost solutions. Thus we feel that there are great business opportunities on the 8D outsourcing market. We should give our hands to Western companies. However, neashoring is a challenge. Good quality resources and prices could also be found in Europe. However, we are branding outselves. Lexpect that big companies will keep on doosing for offshoring whereas smaller companies, with smaller budgets, go for nearshoring (flights within 2 hours is more useful as you can fly easily to	n/s
The nds in ICT outsourcing - Banglade sh	the company you are partnering with).  After the Lehman shock, many companies had to run there business by looking for low cost so Jutions. Thus we feel that there are great business opportunities on the 8D outsourcing market. We should give our hands to Western companies. However, nearshoring is a challenge. Good quality resources and prices could also be found in Europe. However, we are branding ourselves. I expect that big companies will keep on dhoosing for offshoring whereas smaller companies, with smaller budgets, go for nearshoring (flights within 2 hours is more useful as you can fly easily to the company you are partnering with).	For the near future the growth will be in ITES. The market in 8D is still struggling to have real hardcore developers. Not enough people are studying hardcore IT.
Offerings in BDICT sector	We develop products for the customers. We introduce ourselves as a developer (software and applications) and do mechanical design. In the BD market there are good opportunities for voice BPO. There is a huge opportunity market for call centers (BPO).	Most of the ITe Sare primarily: Desk top publishing / Graphic design / Q &A services for software and applications
StrengthsBDICTsector	Our services and products are better priced than in other IC offshore destinations. With better quality, lower prices and a better commitment (understanding of the dilent problem, time schedules and resources to be put in) we should compeed with Indian and Japanese companies.	easily and will fit in the sector needs. The good thing about BD is that due
We akin ess BID ICT sector	n/a	Scalability is an issue as 90% of the companies has 10-30 people. However there are around 20 companies who have 100H employees. And around 3 companies have 200H.
Risks in volved ICT outsourcing to Bangladesh	Frankly, our clients do not feel risks (such as strikes). We have an office always running, also during strikes. Connectivity is very good, we have our own systems in place with offices on different locations.	Risks are primary in finding the right partners. You should make sure you are on the same line.
USB of BD as ICT outsourcing destination	Computer sciences is among number 1 subject for students in 8D.  Universities deliver 10.000 – 12.000 students with a degree in computer science. Also, 65% of the 8D population is below 25 years old. Thus there is a good skilled young labor force.	High quality solutions for a competitive price.
Target Group in Netherlands	In BD there are many small companies (40 – 70 employees). These companies can suit the demand from Dutch SMEs. We have more resources (more than 250 employees) and focus on big clients. Parties already experienced in offshoring (for example to India) will consider BD as there next outsourcing destination.	Most of the clients are SME's. For small companies it is different to scale up (lack of access to finance). Companies need to invest in infrastructure to handle bigger clients. While doing so the cost benefits are even bigger.
Current Barriers for Dutch companies to outsource to BD	8 Das an IT outsourcing destination seems to be unknown in the Netherlands. Also there is a lack of good references in the Netherlands.	The economy is growing so fast, the infrastructure seems not to be able to deal with this. So electricity and connectivity at ill are weak spot. Training facilities are not adequate. There is a gap between college and working practice, companies should train the resources that they hire themselves.
Role of G oB	BASIS and the Go8 are working to introduce the world to the Bangladeshi IT market. Go8 has the Digital Bangladesh Vision. I dea is to show that BD has the right infrastructure in place by 2020. With this vision, the Go8 is supporting the sector very much.	
General Comments	We are feeling that the IT sector offers good prices and quality. Aim is to be in the top 5-10 as an outs ourcing destination. Over the last years we have been moving well as many glob all market players (Google, Honda, Microsoft, Samsung etc.) enter the 8D market.	GoB took the great initiative to start High Tech Parks. For start up as well as for large companies. This in itiative will gain some momen tum.

Indicator / Interviewee	BD ICT exporting company	BD ICT exporting company
Trends in ICT outsourcing - global	n/a	A lot of freelancers, for a corporate difficult to compete with individuals, need to become more innovative in order to survive.
gioca		Due to globalization companies change their business model from product based to service based.
Trends in ICT outsourcing - Bangladesh	n/s	1 individuals who work in different online portals 2. business offer services to internationals both are growing individuals are low priced, but there is bad experience, notable to give post-deliver support in that case clients need to rely on corporate outsourcing, individuals are more cost-effective, but corporate outsourcing is more reliable.
Offerings in BD ICT sector	Graphic Design / Application and website Development / Software Development / Software testing assuranceITe S is the main offer. B D is cheaper and B D companies are looking to collaborate with Western companies. There is a win-win. B D companies can exposure themselves whereas western companies have good cost advantages.	Software product that is global as a solution, consulting services on 81 and data warehouse, software development. (as a company)  graphic design, maintenannee, data entry, e-commerce development - other individuals
Strengths BD ICT sector	Our resources are as good as they are in India, however the price is better.  There is an window of opportunity for foreign countries (and companies) as not so many countries collaborate yet with 8 D.	Human resources which need to be promoted into the global arena.  These people already are employed by bangladeshi companies and some of them work for oversees clients. Need to know that processes to comply for oversees dients.  Talented individuals are familiar with BD process, but they need to know the requirements of NL companies.
Weakness BD ICTs ector		Also talent pool because they work for 8D companies  Match-making, lack of promotion in the oversees market.  Need a match-making portal
Risks in volved ICT outsourcing to Bangladesh	political instability	software development: (1) understanding of outsourcing requirement, (2) timing; (3) approval mechanism  Services: SPD, can be monitored every moment, much less risk. Just the
USB of BD as ICT outsourcing destination	High quality for a reasonable price. We have agood number of IT graduates.	match-up of skills.  Dedicated and hard-working people, very competitive in terms of cost.  Cost doesn't matter, the dedication is very important.
Target Group in Netherlands	Small to midsize companies should be targeted. If joint experiences are made the BD companies can try tap in to a market with bigger organizations (MNEs).	SMEsize ICT firms
Current Barriers for Dutch companies to outsource to BD	<ol> <li>Political instability (this however is periodically). 2. English is a factor, however as it is our second language this barrier could be overcomed, in general the BD people can read and write. 3. The connectivity is getting better.</li> </ol>	n/a
Role of GoB	Go 8 should stabilize. Also Go8 should build good bilateral relationships with other countries (visum issues etc). Connectivity improved a lot however an extra seacable would have been better. Also, specialized training institutions should be founded. There is a gap between university and businesss life.	GoB needs to create opportunities for the young talented, motivated work force.  Current programs are not beneficial to all ICT companies, the more programs the better.
General Comments		n/a

Indicator / Interviewee	Bangladeshi ICT sector organization	Bangladeshi ICT sector organization
Tre n ds in ICT outsourcing - glob al	n/a	n/a
Trends in ICT outsourcing - Banglade sh	In terms of the voice BPO there will be a big growth on the BD market, it took afewyears to grow up but now there is a growth of 10% per quarter.	BD IT sector is exporting software and IT servies in 60 countries of the world (north America is the biggest one, afterwards Europe). In 2012–20131 USD million USD from the IT export. Growth of the industry on average over the last years is 30 procent. This also is the outlook for the coming years. BASIS expects that IT will be second largest sector of the country after Garment within 3–10 years.
Offerings in 8D ICT sector	ITeS- Voice BPO	Web development and design / Mobile applications / Graphic Design / Customized design
Strengths BD ICT sector	There is a huge wo fisforce for het Voice BPD market. IT is mostly for graduated engineers whereas many people could have a job, just after some training, in this market.	Bangladesh is still cheaper than other countries and capable to deliver quality business. Low priced labor force.
Weakness BD ICT sector		For IT graduates sometimes agap between industry needs and university exist. BIT however offers trainings and internships for post-graduates in order to bridge this gap.
Risks involved ICT outsourcing to Bangladesh	Agents won't be able to come to the office due to strikes / Electricity problems / Connectivity is quit good, but not perfect, however if it goes down there are satellites available.	n/a
USB of BD as ICT outs our ing destination	India is high turnover of employees (30-60% peryear) / Cost in competiting countries are going up / 8D is the only country that has such a hudge percentage of the workforce under the 23 years old (65%) / 8D is a homogeneous nation (99 percent is mustim) with one single language	
Target Group in Netherlands	Create a value propositions for the MINEs as they already understand the BPO outsourcing market. Besides, building relationships with SMEs is time consuming and is project management in tensive.	
Current Barriers for Dutch companies to outsource to BD	It is a very political country	n/a
Role of GoS		Government is requested and agreed to make a significant funds available for marketing. Aim is to have Bangladesh as the next IT destination for the developed world.
General Comments	Vast majority coming from University are unemployed. The key is to get them young and to provide jobs to the middle class. Within 3-5 years they should leave. However there is no problem with it because the have real live experience with all the soft skills learned so they will be employable.  This will be good for the whole society.	

Indicator / Interviewee	Bangladeshi public sector organization	Bangladeshi public sector organization
	-1-	and it will according
Trends in ICT outsourcing - glob al	n/a	8 PO is still growing.
Trends in ICT outsourcing - Bengledesh	ICT is the fastest growing sector in Bangladesh. From a GoB perspective we are trying to diversify our export products. ICT is one the new sectors for the BD economy.	n/a
Offerings in BD ICT sector	Software Development and ITeS. Basically it is the development of IT products and ITeS. It is a diverse level from low end services (dipping) to high end services (ship designing).	BPO: processing / data / Security / Airtrafficking / booking. Also BD has a good pool of Android, Java and Dotnet developers.
Strengths BD ICT sector	We are quick learning, positive, eager to learn and young.	Readiness to work and the price are the ultimate beauty of 8 D market.  Also, location wise it is a good country as it is next to India. The time zone is very good for 8 propean Market. At least we have 6-8 hours overlap.
Weakness BD ICT sector	Basically it is the development of IT products and ITeS. It is a diverse level from low end services (dipping) to high end services (ship designing).	n/s
Risks in volved ICT outsourcing to Bangladesh	The business risk is very low. As you just transfer an order to BD and the people will do the delivery on time. Very low risks are involved.	The infrastructure at our office is so powerful. We have the internet line four way redundant and a two way redundancy for electricity (fall back lines). IP issues is not a problem as we have insurance policies and so on.  Also we have certain ISO certificates in place.
USB of BD as ICT outsourcing destination	BD has thousands of iT graduates, trained enough to handle the latest technology with cheapercosts. The BD IT companies can produce or develop ourselves.	BD is a rising country. Our talented people are very sharp. The English accent is better thas in India. We have evibrant culture. The BD ICT sector is hungry for the professionalism and the work, this makes we give high service. The commitment level is very high as we work 363 days a year and 24 hours a day.
Target Group in Netherlands	Not the very big companies in NL should be targeted as they go to India.  The big companies have long time relationships with India. They might consider new relationships with 8D if the issue of prices come up the table. The main focus however would be on SMES.	For office SPO we focus on multinationals
Current Barriers for Dutch companies to outsource to BD	n/a	The Dutch just started inventing the ICT sector in B.D. BD is booming and is coming. There are mutual benefits. The motto of our company is to have our customers as 'partners'.
Role of GoB	You should have a test time of 3 months. The first three months to build a relationship is crucial. After 3 months you feel whether the relationship is sustainable and whether you can continue together.	
General Comments	The Go 8 tries to bring down the issues with the connectivity. However there is still an issue with access to finance. Some funds are recently set up to give seed money etc.	

Indicator / Interviewee	Bangladeshi public sector organization	Dutch/International ICT company
Trends in ICT outsourcing -	n/s	The upside of IT outsourcing is that also SMEs can make use of tailor made software instead of huge (expensive) software programmes (like Bean, Bractand) in which many features won't be used by the particulair SME user
Trends in ICT outsourcing - Benglade sh	The our ment trend in Bangladesh as an ICT outsource location is the large amount of individual freelancers who participate on outsourcing auction sites, where they can bid and obtain small assignments for software development. The Bangladesh computer society is trying to create a center point for communication. A new platform where demand and offering from all sector participants can be structured. At this moment they are still in the preliminary phase of development.	n/s
	Since many individual free lancers are entering the industry, there is still a very wide range of services being offered without any particular specialization. Nevertheless the majority of providers of ICT services are focused on mobile web and app development.	ITES - technic skills is not a problem. The BD companies can offer all desired services and products.
Strengths BD ICT sector	Bangladesh offers a large pool of highly talented engineers	Cheap labor / good education / workforce has hard, analytical and engeneering skills
	The main weakness is the lack of reliable infrastructure. Internet speed, bandwidth and electricity are key problems that regularly affect daily operations. Since many of the companies a declicated to software development, damage because of poor internet connectivity is limited. In addition, most of the companies already have in-house power generators to deal with electricity shortages	not so much innovation power (mabye due to muslim culture) / the universities are not connected with the companies (from theory to practice) / there is a lack of focus within the BDIT companies, they all over a too wide range of products and services.
Risks in volved ICT outsourcing to Bangladesh	If foreign clients contact and seek help with professional branch organizations like Basis or the Bangladesh Computer Society, most of the risks are avoidable	If you start a captive center or JV in 8D it might be hard to keep the top engineers within your company as they all have the ambition to work for MNB in the US. There is a risk that you educate people who won't stay that long with your company.
USB of BD as ICT outsourcing destination	Bangladesh offers a large pool of highly talented engineers	A skilled cheep workforce.
Target Group in Netherlands	Basically any foreign company that is planning to automate part of the work process can be considered as potential clients for the ICT sector in Bangladesh	Because of the size of the companies in 8D (mostly 10 - 40 employees)  SME is the Netherlands are the best target group. SMBs in general 'speak the same language' and have similair management structures in place. In case a Dutch SME outsources to an IBM outlet in India he because a humber. The 8D companies are skilled enough to deal with the demand for European customers, however it can be a problem to have enough capacity to get the work done. The 8D companies delivergreat work on mid size projects (200 - 2000 hours). When a project is bigger problems arise with the capacity within a 8D company. Furthermore the world wide growth in offshoring is in the SME segment.
Current Barriers for Dutch companies to outsource to BD	There are no real barriers if companies contact professional branch organizations like Basis or the Bangladesh Computer Society to act as an intermediary between parties.	Connectivity still is an issue. We have two different internet operators for our BD office to make sure we have a 'fall back line'. Working with sate lilites turend out to be too expensive. The BD companies are skilled enough to deal with the demand for European customers, however it can be a problem to have enough capacity to get the work done. The BD companies deliver great work on mid size project (200 - 2000 hours). When a project is bigger problems arise with the capacity within a BD company
Rolle of G oB		The BD government should promote the collaboration between BDSMEs.  There exists lot of distrust in the sector. With consortie of IT parties more business could be generated.
General Comments	n/s	

Indicator / Interviewee	Dutch/International ICT company	Dutch/International ICT company
Trends in ICT outsourcing - global	More attention for in sourcing and nearshoring to new upcoming outsource locations as a result of increasing labor costs in top tier locations	Most important to pic in the future will remain the development of local labor cost related to the company's home country.
Trends in ICT outsourcing - Ban glade sh	Increasing level of technical know-how and customer service	n/a
Offerings in BD ICT sector	The underlying technical aspects of many software products appear to be very different, but in fact are rather comparable. The refore many companies are offering a similar wide range of products. This is not necessarily a problem, but in general a certain level of specialization is preferred	Software development. The quality of offered services is approaching industry levels in Europe
Strengths BD ICT sector	As a result of a descented ucation system, the average level of technical knowledge is surprisingly high compared with Dutch standards. In addition the average service level of 8D companies has considerably improved	Technical knowledge of workforce is considerably high and comparable with the Netherlands, while average labor cost are only 23% of a Dutch worker. In addition 8D companies are rather flexible in scaling up the workforce when needed.
Weakness 8D ICT sector	So far the foundation has not yet experienced any mentionable weaknesses	So far the company has not yet experienced any mentionable weaknesses during the two years in which they are collaborating with 8D partners
Risks in volved ICT outsourcing to Bangladesh	Intel lectual property rights are a problem in many countries. Language codes can always be sold to a third party. It is very important that the client receives the codes as well, so that he is able to switch from service suppliers if necessary	In tellectual property rights will always be a serious point of attention. To prevent partners from stealing source codes, they have signed disclosure agreements. However it will always be unpredictable how viable these agreements are in a relatively unknown country in case of violation.
USB of BD as ICT outsourcing destination	Highly dedicated and skilled workforce at competitive prices	A sixill ed che ap workforce
Target Group in Netherlands	SMEsize ICT firms	Mainly ICT companies in the field of software development
Current Berriers for Dutch companies to outsource to BD	No real barriers if you manage to find professional assistance from experienced match makers	Fear of losing control of the process, lack of clear and sufficient communication, lack of trust and confidence. However, in the Netherlands many workers a starting to work from home, which also requires a comparable level of confidence from the employer. Companies should always start with outsourcing only small projects in order to find the most suitable business partner.
Role of GoB	n/a	n/a
General Comments	With regards to capability, they should focus on small and simple projects like apps and websites, with software solutions based on modern and upto-date techniques. No major projects like mainframes.	BD companies should attend IC Tfairs in Europe and show there products and services in a pro-active manner with live demonstrations.

Indicator / Interviewee	International trade support initiative	International trade support initiative
Trends in ICT outsourcing - glob al	n/a	The online outsourcing market (freelanding) gives a lot of potential for developing countries.
Trends in ICT outsourcing - Ban glade sh	Things are changing as recently also MN Es made investments in BD. Think about Accenture which invested in GP IT (acaptive center) in September 2013 and about Samsung who opened a R&D center.	n/a
Offerings in 8D ICT sector	graph ic design. For the BD market a distinction can be made as follows:  Non-Voice BPD (mainly execution, not so much creativity): 1. Data— digitization (mostly domestic market) (go od company is DevNet: Does digitalization and DataCapture work, transcription work): 2. Graphic Design 3. Clipping: 4. PhotoShop (no value addition because there is no creative	On the ITO side there is some software development (however not high end). Digitization and basic BPO like market research are good offerings of the BD ICT sector.
Strengths BD ICT sector	component, no creation). Volice BPO Access to a pool of IT skills that is fading in Europe / Competitive Costs (not the programming skills, these are scarce) / Cilent commitment / Eagerness to perform	In terms of Human Resources the competitive advantage are costs and the volume. On the lower end jobs the 8 Dworkforce has good skills.
Weekness BD ICT sector	No creativity / Lack of experience dealing with high profile clients / Critical mass with integration of the sector and companies etc. / Political environment is still not fully stable	
Risks in volved ICT outsourcing to Bangladesh	Intellectual Property is a weak spot in Bangladesh. It is not so much a problem for iT companies who want to subcontract as they can easily set up a server private network in the Netherlands (without exchanging codes). However if we talk about the SME segment there won't be a trial if	and hartoils.
USB of BD as ICT outs our cing destination		There seems not to be a particular area were the BD people have inherent skills. There are no particular large operations that have shown a unique sales proposition. The market should find it's own niche.
Target Group in Netherlands	SME in the Netherlands will be the main target group for 8 D companies as there is no scale to serve MNE's.	For now it would be SMEs. However if a MNE flag ship company on the dient side would be enter the market this would be great for the marketing of the IT sector in BD.
Current Barriers for Dutch companies to outsource to BD	India is expensive and does not address the requirements which where	Captive outsourcing is challenging because you need to look at infrastructures and living conditions in 8D if you want to bring your executives and managers. The lifestyle in 8D is not so good and offices are expensive. With services outsourcing you focus on lower to mid end outsourcing it is much more manageable. However there is a lack of track record for the high end outsourcing.
Role of GoB	Voice over IP legistiation $\Delta$ connectivity need to be tackled.	The Ministry of Commerce is every year financing a roadshow for the IT sector. During this road show the industry can market itself abroad.
General Comments		There are many studies done already. You should focus on connecting the companies from the Netherlands and SD. It is interesting to look at linking up the two markets.

Indicator / Interviewee	Dutch trade support initiative	Dutch trade support initiative
Trends in ICT outsourcing - global	n/a	The latest trend is reverse economic traffic in the global ICT outs our cing industry. Large companies in common locations like Bangal ore in India are she ad of the market regarding technical know-how, but are still missing skills and knowledge for product innovation, organizational management, and decisive sales and marketing strategies. These companies seek partnerships with consultants and service providers in the western world
Trends in ICT outsourcing - Bangladesh	Recently we crossed the 100 million USD line last year. The market growth is on an average of 30% growth. We are targeting 1 billion USD by 2020-2021. This trend is very positive.	One of the latest trends is custom made software solutions for Islamic Banking. Systems to support banking services in line with the Sharia
Offerings in BD ICT sector		In addition to the most common services in the ICT outsourcing industry, some companies are now focusing on Islamic Banking. Furthermore it is noticeable that many developers are very skilled in internet solutions like web design, in which they are up-to-date with the latest technology
Strengths BD ICT sector	Cost Effectiveness Level – costs in 8D are approximately 40% lower than Indian and Philippines. The English proficiency is very good as in 8D. Another competitive advantage is that we have a young work force. 36 million people are under the age of 18. Quality education is provided in 8D. 183.000 students are graduating from 14 universities 14.300 IT graduates every year.	Even though they have a skilled and well educated workforce, there are no particular strengths to be found in 8D. Only in certain small niche marke to they are able to provide specific added value
Weakness BD ICT sector	We are emerging so there are some weaknesses. The main is the infrestructure (power knock outs and connectivity). Most of the companies in the IT industry (800) are in the segment. They are lead by a CEO and still struggling with the development of middle management. If some one is developed they switch of to another company. In 8 D there are many SME (self-financing).	The industry as a whole is not very well positioned in global ICT value chains. 8D is hardly known as an ICT outsource location. Most companies are not well managed and not prepared to provide an unique service value proposition. The hierarchical corporate culture also affects daily operations.
Risks in volved ICT outsourcing to Bangladesh	Private sector development is going on. We are not afraid of the political situation. These barriers can be overcomed easily. If there is a strike or a blockade the people can work from home easily.	Wide spread corruption and bure aucracy might be a problem. In addition, companies should not underestimate difficulties being caused by the large geographical distance. How do you keep control of operations at the other side of the world?
USB of BD as ICT outsourcing destination	Private sector development is going on. We are not afraid of the political situation. These barriers can be overcomed easily. If there is a strike or a blockade the people can work from home easily.	n/a
Target Group in Netherlands	Almost all the companies in BD are SME size. So they are basically targeting SME overseas.	SME size ICT firms
Current Barriers for Dutch companies to outsource to BD	thing is that other European companies are unfamiliar with BD as an	With the right approach, there are no real barriers in BD. It is important for foreign companies to inform themselves about the local corporate culture. Be aware that the direct approach in the US and Europe is not very common in countries like BD.
Role of GoB	The policy is investment friendly, especially for IT. For example IT income is tax free. With the Digital 8D Vision the Go8 is actively working on IT.  The Access to information project is supported by US Aid. They are working close with the government.	Bureaucracy is wide spread and achieving goals might require alternative approaches. A local network is essential in the start-up phase. It is also recommended to keep dose contact with the Dutch embassy
General Comments	It is a crucial question whether the IT industry sector in 8D can already deal with big projects. When we organize meeting in 8D mainly SMEs from Europe will come. If the project is bigger they normally divide it between 8D companies (collaboration). In graphic design some companies are joining together and supporting in this way. Thus they are developing. However big projects are still rare in 8D.	

Indicator / Interviewee	Dutch ICT outsourcing expert	Dutch ICT outsourcing expert
Trends in ICT outsourcing - glob al	Due to the crises the growth in the ICT market has slowed down.	cloud, big data, so cial, mobile.  Crisis made budgetsmaller, but companies wanted to spend the money more efficiently - opportunities for IT companies all over the world.  Potential buyers are looking for other potential destinations in order to diversify risks.  major outsourcing destinations become less competitive, that creates double outsourcing.
Trends in ICT outsourcing - Ben glade sh	n/a	Bangladesh Next innitiative - country branding program. Many professionals, many companies (130 in outsourcing/800 to tal IT companies). Intent - market IT outsourcing destination.  Bangladeshi companies learned to do marketing and communication.
Offerings in BD ICTs ector	ITO and BPO. The offerings from Bangladesh are good and the quality is sufficient. However, companies can find the same products and services in other countries like Palestine, Russia, Nepal and Pakistan. Bangladesh should differentiate itself from these countries.	Large pool of highly educated people and quite a number of capable companies.
Strengths BD ICT sector	Capacity is good and infrestructure is not a problem for Dutch companies.	Large pool of highly educated people and quite a number of capable companies.  Communication infrastructure is good.
Weekin ess 8D ICT sector	The image of the sector in BDhoweverneeds to be improved.	Country visibility
Risks in volve d ICT outsourcing to Bangladesh	Labourcosts in BD are cheaper, however because of distance and communication othercosts apply. IP rights could be an issue for ITO. However this is as much an issue in BD as it is in other outsourcing destinations.	Political instability, internal politics
USB of BD as ICT outs ou roing destination	lower turnover of employees 2.Cheap Labour (cheaper than India)     3.Less cultural barriers than with other countries	Nothing unique in Bangladesh. Competitiveness is easy to find. Can compete with other countries of similar size.
Target Group in Netherlands	B D should focus on Dutch companies who not have offshored its operations yet. If companies already have a relationship for example with India, why would they want to change? Potential exists in the SME segment as the market in BD is fragmented with no more than 10 companies having over 100 employees, thus is almost impossible to attract MME's.	Many dutch companies are versible: horizontal market, vertical market and technical experbse. SME are interesting partners for Bangladesh because in Bangladesh most companies are also SME. Large Dutch companies go for captive offshoring.  SMEIT software development companies Start-up IT companies
Current Barriers for Dutch companies to outsource to BD	Companies are not aware of Bangladesh as an ICT outsourcing destination.  Promotion and marketing is key.	Relative unknowness of IT providers in Bangladesh Otherwise there are no reasons why not to choose Bangladesh
Role of GoB	GoB should be more active in marketing the possibilities in 8D. The 8D embassy in the Netherlands and the 8D Chamber of Commerce could be more active in building fruitful relations with the Dutch private sector	Go8 helps the IT sector with education; national strategy for the ICT sector; tax exemption for companies with foreign ownerships; financial scheme for working capital financing; opening software technology parks
General Comments	n/a	n/a

