Information & Communication Technologies for Jobs in the Pacific

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About this Report

This report draws on international experiences in developing the global outsourcing services (GOS) industry—including the emerging concept of online outsourcing (OO)—to explore new and innovative ways to overcome the unique geographic and demographic challenges of the Pacific Island Countries (PICs), and create more inclusive jobs, particularly for youth and women. The report positions the GOS industry as a possible starting point for PICs to harness the potential of ICTs by creating an enabling environment for technology transfer, innovation, and digital entrepreneurship.

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<tr>
<td>ADB</td>
<td>Asian Development Bank</td>
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<td>BPAP</td>
<td>Business Processing Association of the Philippines</td>
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<td>BPO</td>
<td>Business Process Outsourcing</td>
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<td>FDI</td>
<td>Foreign Direct Investment</td>
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<td>GDP</td>
<td>Gross Domestic Product</td>
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<td>GNI</td>
<td>Gross National Income</td>
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<td>GOS</td>
<td>Global Outsourcing Services</td>
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<td>ICT</td>
<td>Information and Communication Technologies</td>
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<td>IT</td>
<td>Information Technology</td>
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<td>ITES</td>
<td>IT-enabled Services</td>
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<td>ITO</td>
<td>Information Technology Outsourcing</td>
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<td>KPO</td>
<td>Knowledge Process Outsourcing</td>
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<td>NASSCOM</td>
<td>National Association of Software and Services Companies (India)</td>
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<td>ODA</td>
<td>Official Development Assistance</td>
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<td>OO</td>
<td>Online Outsourcing</td>
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<td>PICs</td>
<td>Pacific Island Countries</td>
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<td>RIM</td>
<td>Remote Infrastructure Management</td>
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<td>RPA</td>
<td>Robotic Process Automation</td>
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<td>SIDS</td>
<td>Small Island Developing States</td>
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All dollar amounts are U.S. dollars unless otherwise indicated.
Executive Summary

The Pacific region is in the midst of an information and communication technologies (ICT) revolution in which small island countries are increasingly connected to the global economy. The region's improving Internet connectivity presents an opportunity for Pacific Island Countries (PICs) to overcome their inherent limitations, and help address the long-standing issues of employment and income generation, which is vital to accelerate progress towards ending poverty and creating an inclusive society.

The PICs possess unique vulnerabilities that make addressing poverty and development challenges particularly difficult and complex. These include geographical remoteness from major global markets, small country size, limited natural and human resources, cultural and ethnic diversity, aid dependency, and vulnerability to climate change and natural disasters. The high youth population and growing youth unemployment in the region is a particularly pressing development challenge for the PICs. An estimated 23 percent of the potential youth labor force is unemployed, reflecting only the formal sector and omitting those in casual, low-paid, or subsistence occupations. In some countries unemployment is estimated to be as much as 58 percent. Hence, the consideration of ICT-based and other employment options is not only timely, but also necessary.

The purpose of this study is to examine the feasibility of leveraging ICT to help generate job opportunities in the PICs. This is because of the positive experiences that several countries, including small island economies, have had in generating new types of employment opportunities. It analyzes the job creation prospects in this area for Fiji, Samoa, and Tonga (hereafter referred to as the "three countries") as a first phase in a broader review of the Pacific. The study’s main focus is on cities and urban areas, given the still low availability of Internet infrastructure and services in rural and remote areas and islands in the Pacific region.

The study focuses specifically on the IT-enabled global outsourcing services (GOS) industry. ICT covers diverse subsectors that include telecommunications and IT hardware and software. International experience has demonstrated that the GOS industry can bring significant employment to developing countries – such as India with 3.1 million direct jobs, or Mauritius with 18,000 direct jobs – particularly benefitting women and young people.

Outsourcing generally refers to a production strategy in which a business chooses the most cost-efficient location for delivery of services for their internal operations and/or external clients, even if the service is produced in a foreign country. The GOS industry therefore includes nearshoring and offshoring, those aspects of outsourcing produced abroad, and includes diverse types of services in IT (ITO), business processes (BPO, including voice or nonvoice-based), and knowledge processes (KPO).

According to KPMG, in 2013 the global market size of the GOS industry was estimated at $952 billion per year, with ITO's share at $648 billion and BPO's at $304 billion. GOS was expected to grow at a compounded annual growth rate of 4.7 percent and 6.0 percent for BPO to 2017. Of this total, the estimated global market size for nearshoring and offshoring was estimated at $140 billion per year. This international market is more relevant for the purposes of this study, since it excludes the larger onshoring market. The GOS market size for the Asia Pacific (APAC) was estimated at $188 billion per year in 2013. The Australia and New Zealand market could be of particular interest for the PICs, which was estimated at $31 billion per year, and represented 17 percent of the total Asia Pacific market. India continues to lead as the global outsourcing services destination, while China, Malaysia, Mexico, Indonesia, Thailand, and the Philippines have also positioned themselves as top-tier destinations. Small island economies are also competitive and are benefitting from this global industry, with Mauritius and Jamaica recognized among the offshoring leaders in their respective regions.
Fiji is the only country in the Pacific Islands with industry experience in GOS. The country already hosts major offshoring operations for ANZ Pacific Operations and Mindpearl, both BPO-focused operations sited in the Kalabu Tax Free Zone operated and administered by the Fiji Trade and Investment Bureau (Investment Fiji). ANZ Pacific currently has an estimated 400 workers, while Mindpearl has 660 workers. Fiji also won the European Outsourcing Association’s Offshoring Destination of the Year Award in 2014 (Lewis 2014; Mindpearl 2014), which acknowledges destinations and operators that have most successfully serviced the UK and other European outsourcing markets.

Online outsourcing (OO) is a new GOS industry approach that has emerged in recent years. OO refers to the performance of tasks conducted over the Internet by workers from anywhere in the world, using online marketplaces or exchanges. These online marketplaces provide clients with access to a global labor pool of workers, and provide a platform on which workers can perform and deliver their work. The global OO industry is highly diverse and evolving. It also covers different types of tasks, from low complexity activities such as data entry and website sign-up, to high complexity ones such as web/software development and accounting services.

The market size for OO was estimated at about $2 billion in 2013, which is a fraction of the total GOS market. There are already numerous OO marketplaces across the world. Industry experts suggest that the top three platforms (Elance-oDesk, Freelancer.com, and Zhubajie/Witmart) account for about 50 percent of the market; of these three firms, Elance-oDesk is the clear market leader, with $750 million of combined revenue in 2013.

Online outsourcing offers new benefits and value for global outsourcing services players. It also represents a unique and new opportunity to provide employment and incomes for masses of youth and women. It is particularly attractive for PICs because it enables these countries to completely transcend their inherent challenges of size and geography.

The job creation potential of the GOS is significant – the traditional nearshoring and outsourcing industry is expected to create an additional four million direct jobs worldwide by 2016. Further, every direct job created in this industry is estimated to produce indirect employment for about 2.5 people in other sectors. On the other hand, OO sources (World Bank 2015b) suggest that there are currently 48 million workers globally registered on online working platforms, and about 10 percent of them (4.8 million in total) are actively completing tasks.

Creating employment in the GOS industry could also bring about other socioeconomic benefits for PICs. International experience suggests that the development of a vibrant local GOS industry generates positive spillovers to other sectors of the economy by facilitating knowledge and technology transfer, fostering local innovation, and driving positive social change for women.

Nevertheless, the positive job creation implications of the GOS industry will also have to be considered in the broader development context of the region. As mentioned above and suggested by the World Bank's 2014 publication on Well-being from Work in the Pacific Island Countries:

> While business environment reforms can open up new opportunities for private sector development and employment creation, such measures are unlikely to spur sufficient work to meet emerging demands even in the best possible business environment.

It is important to have quantitative estimates of the impact that the global outsourcing services industry may have on a country to better understand its potential, and to facilitate decision making in industry development initiatives. This study's optimistic-case estimates indicate that the direct jobs potential is highly significant. For Fiji, for instance, the GOS industry could create 5,809 direct jobs, a fivefold increase of the current direct number of employees in its existing BPO operations. The conservative estimate indicate
that the direct jobs potential remains significant, since it is higher than current employment in some of the established industries in the countries. For Fiji, for instance, the conservative estimate still indicates more direct formal employment than the combined total of the country's agriculture, forestry, and fishing industrial sector (1,936 as compared to 1,604).

Previous research has identified the criteria for competitiveness and success. The four key dimensions determining a country's “locational competitiveness” are:

- Quality and quantity of talent,
- Competitive costs,
- Quality of relevant public infrastructure, and
- Enabling environment.

These four dimensions form a common unified framework for assessment, which has been used by the World Bank for numerous country assessments. This study also used SWOT analysis to assess the competitiveness of the PICs in global outsourcing based on these four dimensions, and found the following key competitive advantages for the three countries:

- The availability of a small labor pool that is young and qualified for basic voice or nonvoice BPO tasks. This labor pool is the youngest in the world (in terms of youth bulge and unemployment), is relatively well educated, has a high level of English skills, and is comparatively computer literate.
- Minimum wage costs are comparable to the international norm for basic outsourcing tasks.
- The availability of basic Internet infrastructure that is improving in terms of speed, quality, and cost owing to new and ongoing connectivity initiatives.
- The availability of at least one international micropayment mechanism, such as PayPal, Payoneer, or Skrill, in each country.
- A high level of political support for ICT initiatives resulting in connectivity improvements.
- Basic investment incentives are in place, but only Fiji has highly competitive ICT sector specific incentives.
- A higher ranking in terms of the ease of doing business than the leading global outsourcing services players, such as India and the Philippines.
- The emergence of a local global outsourcing services industry – Fiji already hosts some GOS operations, and in 2014 won the Offshoring Destination of the Year Award by the European Outsourcing Association.
- The ability to offer unique, nearshoring services to Australia and New Zealand. The benefits for potential clients include ease of management and operations owing to close proximity or similar time zones, relatively shorter distances than the nearest competitors, and cultural and business affinity. In addition, there is a positive association with PICs because of their image as tourist destinations.

The analysis also found several competitive disadvantages:

- The population and labor pool is small, limiting the ability to serve large clients, as well as the industry’s potential size and impact on jobs.
- Although minimum wage costs for basic BPO work are comparable with global benchmarks, this could limit cost savings for potential clients. Since the three countries are relatively new industry entrants in a largely mature global market, potential clients could be deterred.
- Uncertainty surrounds the youth’s ability and willingness to perform quality BPO tasks, since their wage expectations are higher than their country's minimum wage, and are as high as those paid to workers in proven countries like Mauritius.
- Internet costs for businesses and individuals are still relatively high.
There is limited awareness of, and virtually no experience in, OO.
Potential clients have limited awareness and experience of the region as an outsourcing destination.

The findings may also be viewed from various industry specific dimensions:

**By the three countries**: Fiji is significantly more ready than Samoa or Tonga for GOS industry development, especially in terms of connectivity, infrastructure, and existing BPO operational experience.

**By ITO/BPO/KPO subsectors**: BPO may be more feasible for the three countries in the immediate to short term. It may not be feasible to compete on ITO, and KPO may not be feasible for now because of the limited quantity and quality of necessary talent.

**By task segments**: The three countries do not appear to have obvious or particular areas of strengths or specialization for niche offerings, such as in graphic design or accounting services.

**By source markets**: There is an opportunity to target Australia and New Zealand as the primary market, and the United Kingdom and Europe as secondary markets.

**By operational and client size**: The three countries are likely to be more successful by servicing mainly small (<$10 million revenue) or emerging-sized clients ($10 to 100 million revenue), but are unlikely to be able to serve enterprise-size clients. The three countries could also target medium-sized companies because of their growing global demand for GOS.

**By traditional versus OO approaches**: Both approaches are complementary and are not mutually exclusive. The PICs are likely to be more competitive in OO than traditional approaches (nearshoring/offshoring), but the overall job impact may be higher for traditional outsourcing because of its significantly larger global market size.

In conclusion, the global outsourcing services industry appears to have significant job creation potential in Fiji, Samoa, and Tonga. Improving connectivity has made it more feasible for the PICs to examine GOS as a new and innovative channel for job creation. Beyond this, the three countries can develop a completely new industry with additional contribution to GDP and such a new service-based, digital economy industry for the PICs could also contribute to the region’s next phase of growth and development.

The comparative advantages are currently restricted to the three countries having the youngest workforce in the world, the ease of doing business, and the nearshoring opportunity with Australia and New Zealand. These are the main selling points that the three countries could use for their industry development initiatives. Fiji could also leverage its existing GOS experiences and its attractive investment incentives for setting up BPO operations.

International practice suggests that creating an enabling policy environment is necessary but not sufficient for the GOS industry to flourish, especially in the relatively mature ITO/BPO/KPO subsector. The general recommendation is for the three countries to take a phased and focused approach to develop their country’s global outsourcing services industry, starting with two industry development pilots in a selected lead country. One of the pilots could be for nearshoring/offshoring businesses and the other for OO. Fiji, given its advanced readiness, is best placed to conduct the two global outsourcing services industry development pilots on a trial and error basis to provide the practical analytical basis for longer-term industry development efforts, both within the country and for others in the region. The total cost is estimated at $5 million over 1.5 years if both pilots are implemented concurrently.

From a Pacific, region-wide industry development perspective, the PICs should also consider taking a “flying geese” approach in their efforts to grow their respective GOS industry (National Graduate Institute
for Policy Studies). Hence the possible sequence or pattern for PICs could have Fiji as the lead country to conduct pilot industry development programs, with Tonga and Samoa in the next phase, and with the remaining PICs in the final phase.

The proposed pilots for Fiji should take a conservative approach in terms of targeted industry services segments or tasks. There is also a need to bring in international expertise for the pilots, as knowledge and experience is required for the countries to compete effectively in this global industry. Depending on the pilot projects’ success, Fiji could also conduct a medium to long-term industry development project in the next phase. This next stage of industry development would aim to consolidate early competitive strengths, expand industry coverage, and move up the value chain. The pilots would also provide a more concrete foundation to identify the critical success factors for long-term GOS industry development in the piloted country, and focus on these during the next stage of industry development.

The traditional GOS pilot in Fiji would aim to catalyze industry growth by bringing in flagship or anchor clients, including from the potential primary markets of Australia and New Zealand, and assisting existing GOS operations in the country to expand their operations. These operations could be used for practical lessons, and for establishing the market linkages between the workforce suppliers (PICs) and customers in near/offshore markets. The overall scope of the pilot could include the creation of 1,000 direct jobs and 2,500 indirect jobs (based on an industry average of 1 direct to 2.5 indirect jobs). The cost and duration of the pilot is estimated at $4.5 million over 1.5 years.

The traditional pilot's activities would include:

- Provision of additional industry specific incentives in training subsidies and tax exemption for pioneer companies;
- Identifying potential local BPO services providers (for offshoring), and setting up an industry association focused on GOS;
- Establishing a high-level industry champion within the government;
- Developing a short-term industry development strategy;
- Conducting a holistic marketing and communications program; and
- Providing comprehensive business development assistance for the government and the private sector.

The details of each activity, its budget, and timeline are shown in Table 8.1 of the main report.

The OO pilot would be aimed at practical testing of OO from various perspectives, and would help to fill the information gaps in understanding the readiness of the workforce to meet available employment demands. It would test the skills mix and work motivation of job seekers to do lower level tasks (for instance, data entry, digitization, image rendering, and so on) at different levels of education and demographics (for instance, high school graduates and female homemakers). It would also assess the willingness and competitiveness of graduates and undergraduates to do higher-level tasks (for instance, programming, search engine optimization, web page design, graphic design, and so on). It would also provide insights into the long-term interest and sustainability of workers or businesses in OO, and help the pilot's workers to win and perform actual jobs on international OO platforms.

The scope of this pilot is for activities to create 300 jobs, and the estimated cost and duration is $500,000 over one year. An intermediary/agency approach is more suitable for the OO pilot because of the range of issues and support needed. Its role would include providing working facilities, recruiting workers from various demographic groups, contracting with workers to formalize the labor, providing classroom and hands-on training, enabling receipt of remuneration by workers, and conducting comprehensive monitoring and evaluation. The details of each activity, its budget, and timeline are shown in Table 8.2 of the main report.
Chapter 1. Introduction

The ICT for Jobs Study

The ICT revolution is transforming the Pacific region with its small island countries increasingly connected to the global economy. Since the early 2000s, the Pacific’s telecommunications sector has undergone deregulation and reform, and prices have been dramatically reduced. Competitive markets have led to sharp increase in regional mobile penetration, from less than 10 percent in 2006 to more than 90 percent in several countries in 2014, and urban centers are rapidly gaining access to 3G and 4G mobile broadband services.

The region's improved connectivity presents an opportunity for PICs to overcome their inherent limitations, and help address the long-standing issue of employment and incomes. The youth bulge and the growing youth unemployment in the region is a particularly pressing development challenge for the PICs. Hence the consideration of ICT and other employment options is not only timely, but also necessary.

The purpose of this study is to examine the feasibility of leveraging ICT for jobs in the PICs. This is because of the positive experiences that several countries, including small island economies, have had in generating new types of employment opportunities, facilitated by ICT. The study focuses specifically on the IT-enabled global outsourcing services industry, since ICT covers diverse subsectors. This global outsourcing services industry is also commonly referred to as nearshoring and offshoring; and is generally for services in IT, business processes, and knowledge processes. International experience has demonstrated that the industry can bring significant employment to developing countries – such as India with 3.1 million direct jobs, or Mauritius with 18,000 direct jobs. The industry also brings significant job potential for young people and women. For instance, in India, young people aged 26-35 account for 70 percent of these jobs, and in the Philippines women constituted nearly 60 percent of the 900,000 people employed in the industry in 2013 (Tholons 2014).

The study analyzes the job creation prospects in this area for Fiji, Samoa, and Tonga (hereafter referred to as the "three countries") as a first phase in a broader review of the Pacific. These three countries were chosen because of recent improvements in connectivity, particularly near-universal access to mobile services in Fiji and Tonga, and prospective widespread availability of high-speed Internet in Samoa.

The study also draws upon global experience, including from India, the Philippines and small island economies such as Mauritius, and other relevant literature. As discussed in the World Bank's 2014 publication on Well-being from Work in the PICs:

"T]akeholders' expectations about the region's trajectory of development (and job creation) will need to be realistic. Due to inherent geographic obstacles (for example, remoteness, small country size, dispersion) and small populations, PICs are unlikely to experience export-driven development and associated employment creation on the scale seen in the broader East Asia Pacific region".

This study notes and agrees that the same level of realism should be applied to any global outsourcing services industry development initiative in the Pacific. Hence its focus is on GOS as a new and complementary approach to job creation in the region, and is not meant to supplement or replace existing job creation approaches.

The study's analysis uses a common framework that is derived from the methodology of various leading consulting firms in global outsourcing services, which covers the dimensions of:

- Quality and quantity of talents;
- Competitive cost;
- Relevant infrastructure; and
• Enabling environment.
Based on the study's findings and conclusions, this report presents recommendations and action plans for the selected Pacific island governments to take the next step in exploring the potential of this industry.

Background

The Pacific island countries (PICs) comprise 25 nations and territories and are spread over more than 25,000 islands across the western and central Pacific Ocean. It is home to 20 out of the 51 Small Island Developing States (SIDS) that are recognized by the United Nations.

Agriculture (including forestry and fishing), foreign aid, remittances, and tourism remain for most countries the main source of livelihood. The tourism sector has experienced substantial growth over the past decade. In Fiji, for example, one in three people are directly or indirectly employed in the tourism sector, which accounts for about 35 percent of GDP (Panapasa 2013). There have been few successes in agriculture, and fish exports and sale of fishing licenses have been unable to produce significant earnings (Hezel 2012). With the exception of Fiji, PICs also receive some of the highest levels of foreign development aid in the world relative to the size of their economies. On average, official development assistance (ODA) accounted for over 25 percent of recipient GDP in PICs (Feeny et al 2014). Remittances are also a particularly important source of income for Pacific households, which, for example, accounted for nearly one-quarter of the countries' GDP in Samoa and Fiji (ILO 2014).

PICs possess unique vulnerabilities that make addressing poverty and development challenges more difficult and complex. These include geographical remoteness from major global markets, small country size, limited natural and human resources, cultural and ethnic diversity, aid dependency, and vulnerability to climate change and natural disasters. These vulnerabilities have also hindered the region's progress towards the Millennium Development Goals (MDGs), which has been slow and uneven. After Sub-Saharan Africa, the Pacific is estimated to be the furthest away from achieving the MDGs (ILO 2014).

Further, a growing population, rapidly accelerating urbanization, and increasing monetization of economies is making employment creation a pressing priority, particularly for young people (World Bank 2014). Across the region, people under the age of 24 account for about 56 percent of the population of most Pacific island countries, and the youth (15 to 24) account for a third of the working age population (15 to 59 years) (UN System Task Team 2012). However, the stagnating economies have been unable to absorb new labor force entrants at a pace sufficient to prevent the spread of unemployment and underemployment. An estimated 23 percent of the potential youth labor force is unemployed, reflecting only the formal sector and omitting those in casual, low-paid or subsistence occupations (Wilson 2012). In some countries unemployment is estimated to be up to 58 percent (World Bank 2014).

Economic opportunities for women also remain limited in many of the PICs. Statistics suggest that, in most Pacific countries, there are twice as many men as women in paid employment in the nonagricultural sector (Pacific Islands Forum Secretariat 2011). Most women also occupy lower level positions in the public sector, which is usually the largest employer. In the Pacific, many women work in the informal sector as they are expected to engage in income-generating activities to support the family, but are frequently home-based focusing on subsistence agriculture, marketing of agricultural products, and petty trading. They also often have greater difficulty in accessing finance to grow their business, and the justice system for resolving commercial disputes (IFC 2010).

Several countries have tried to develop a more export-oriented approach in order to foster businesses that could create revenue and jobs but with little impact (ILO 2014). Studies suggest that policies aimed at fostering the emergence of an export-oriented private sector, like that experienced in East Asia, are unlikely to be effective in generating substantial jobs, except for the export of natural resources. This is largely
because of the inherent geographic obstacles of PICs resulting in high costs of production and trading and hence lower price competitiveness of exports World Bank 2014).

Policy makers are increasingly pressed to think of innovative ways to address the growth and jobs challenges within the formidable constraints, and at the same time reduce the country’s brain drain by creating incentives for youth to invest their skills in their home countries. The World Bank (2014) suggested that it is vital to increase international labor mobility to expand Pacific islanders’ access to larger labor markets where employment opportunities are concentrated (for example, in Australia and New Zealand) (World Bank 2014). However, this will require changes in the immigration policies of receiving economies, and while it may lead to more stable livelihoods and greater remittances, there are also effects of the “brain drain” of skilled workers to consider. Training skilled workers is vital to strengthen the public sector as well as to build a vibrant private sector, and foster local entrepreneurship.
Chapter 2. The Global Outsourcing Services Industry

ICT and Global Outsourcing Services

The global ICT sector accounts for a significant share of total employment, employing almost 15 million people in OECD countries in 2009, and millions more around the world. These include ICT jobs for specialists who produce ICT, and ICT-intensive users who consume ICT (World Bank 2013). The OECD classifies these roles in the following way:

- **ICT specialists**, who have the ability to develop, operate, and maintain ICT systems. ICTs constitute the main part of their job;
- **Advanced users**, who are competent users of advanced, and often sector-specific, software tools. ICTs are not their main job but a tool; and
- **Basic users**, who are competent users of generic tools needed for the information society, e-government and working life (OECD 2012). This includes those working in the IT-enabled global outsourcing services industry.

This study focuses on ICT specialist and ICT intensive users who provide services under the IT-enabled global outsourcing services industry, rather than on telecommunications or the IT hardware and software subsectors. This is because international experience suggests that the global outsourcing services industry offers significantly greater potential for job creation for PICs. The telecommunications subsector has already created a large number of jobs in the PICs – the telecommunications revolution is estimated to have created livelihoods for at least 30,000 people in Papua New Guinea alone – those who sell airtime for Digicel. The benefits have reached countries including Samoa, the Solomon Islands, Tonga, and Vanuatu, and are now stretching into the North Pacific. On the other hand, the IT subsector comprises large segments in hardware and packaged software that are dominated by established global players, such as Dell, Lenovo, Cisco, Huawei, Microsoft, Oracle, and SAP. The structural requirements for participating in these subsectors are also not viable for the PICs because of their inherent challenges in terms of small size and geographic remoteness. Fiji, for example, has only 258 direct jobs in software and IT consulting compared with 2,358 direct jobs in its telecommunications industry.

Definition and Segmentation of Global Outsourcing Services

Advances in information technology (IT) and Internet connectivity have given impetus to a new dimension of globalization over the past two decades: the cross-border trade in services outsourcing. This global outsourcing services (GOS) phenomena refers to the production strategy in which a business seeks to find the most cost efficient location for delivery of services for their internal operations and/or external clients, even if the service is produced in a foreign country (in other words, the work can be done on behalf of a company outside of the country where the company is located). Numerous other terms have been used to describe all or some of these activities. This study defines global outsourcing services to include IT and IT-enabled services (IT/ITES), IT-business process outsourcing (IT-BPO), and IT, business process, knowledge process outsourcing (ITO/BPO/KPO). More recently, GOS has been referred to as IT and business process management (IT-BPM) by leading countries such as India and Philippines, in order to create the identity of being a full-service value provider rather than an industry that plays only in the lower-end of the services spectrum.

Outsourcing generally refers to the subcontracting of a process, such as product design or manufacturing, to another company – called a third-party service provider. Outsourcing may occur within or outside a country (Bardhan et al 2013). For GOS, the typical services outsourced are IT, business processes, and
knowledge process; and the traditional approaches for GOS outsourcing have been onshoring, nearshoring and offshoring. Table 2.1 describes each approach and their characteristics.

Table 2.1. Description and Characteristics of Traditional GOS Approaches.

<table>
<thead>
<tr>
<th></th>
<th>Onshoring</th>
<th>Nearshoring</th>
<th>Offshoring</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outsourcing projects that are completed onshore</strong></td>
<td>- Services are outsourced to a locally based provider. U.S. examples include IBM, EDS, etc.</td>
<td>- Projects that are outsourced to a service provider located nearby geographically, usually within similar time zones</td>
<td>- Projects that are outsourced to providers based overseas, typically in India or China.</td>
</tr>
<tr>
<td></td>
<td>- May also be foreign companies that have a same-country operation as their client, e.g. in the United States, Wipro, Infosys, etc.</td>
<td>- Benefits are cultural similarity and ease of management</td>
<td>- May also be foreign companies locating their internal operations center in a different geography (e.g. IBM’s Finance Department is located in Malaysia and Puerto Rico).</td>
</tr>
</tbody>
</table>

Source: IDC 2012.

The GOS industry also consists of diverse types of services, and Table 2.2 provides definition and examples of services areas, required skills levels, and estimated market share of each segment according the industry's ITO/BPO/KPO classifications. The outsourced service activities have typically been highly commoditized and are labor-intensive (semi-skilled) in nature. However, such outsourcing is also increasing taking place in higher end activities, referred to above as KPO.

Table 2.2. Definition and Classification of ITO/BPO/KPO.

<table>
<thead>
<tr>
<th>Classification</th>
<th>Definition and service areas</th>
<th>Required skills level</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT Outsourcing (ITO)</td>
<td>Outsourcing of IT services; such as software development, remote infrastructure management (RIM), custom application development, systems integration, package software implementation and support, IT consulting, embedded systems, project design, plant engineering, and products.</td>
<td>The range of services can require low to high skilled personnel.</td>
</tr>
</tbody>
</table>
| Business Process Outsourcing (BPO) | Service functions that are information intensive and that are transferred outside a company to a third party. It includes services such as customer relationship management, human resource management, and enterprise resources management supporting the varied business processes in different verticals such as banking, finance, health, or tourism. The types of services provided are broad, and include:  
  - Voice based services, such as call centers/helpdesks, telemarketing, etc.  
  - Non-voice based services; such as data entry, digitization, graphics rendering, accounting, etc. | Mostly falls into the low to middle skills range (e.g. call centers to complex financial services). |
| Knowledge Process Outsourcing (KPO) | Encompasses specialist activities that are knowledge intensive, such as research and development (R&D), market intelligence, and legal services, and comprises core information-related business activities that are competitively important or form an integral part of a company's value chain. | Requires advanced analytical and technical skills as well as a high degree of specialist expertise. |

Source: Bardhan et al 2013; and authors' inputs.
GOS Market Statistics and Trends

Estimates of the market size for the global outsourcing services industry vary. Most estimates are in the range of hundreds of billions U.S. dollars per year. According to KPMG, the total market size was estimated at $952 billion per year in 2013, with ITO's share at $648 billion and BPO's at $304 billion (see Figure 2.1). Of this total market estimate, the size of the international, cross-border GOS trade between countries (nearshoring and offshoring) was estimated at up to $140 billion per year in 2013 (see Figure 2.2). This international market is more relevant for the PICs and for the purposes of this study since it excludes the sizeable domestic market within a country (that is, onshoring). The industry is growing significantly and is expected to grow at a compounded annual growth rate (CAGR) of 4.7 percent for ITO and 6.0 percent for BPO to 2017 (KPMG 2013).

Figure 2.1. BPO and ITO Market - Total, 2013 ($ billion).

Source: KPMG 2013.

Figure 2.2. BPO and ITO Market - Offshoring and Nearshoring, 2013 ($ billion).

Source: KPMG 2013.

From a regional perspective the GOS market size for the Asia Pacific (APAC) was estimated at $188 billion per in 2013 (KPMG 2013). The Australia and New Zealand market is of particular interest for the PICs,
and in 2013 it was estimated at $31 billion per year, representing 17 percent of the total Asia Pacific market (see Figure 2.3).

Figure 2.3. Asia Pacific BPO and ITO Market ($ billion).

Source: KPMG 2013.

India continues to lead as the global outsourcing services destination, and a number of other countries are becoming more established in niche outsourcing services areas. India is ranked first again in A.T. Kearney’s Global Service Location Index (2014); while China, Malaysia, Mexico, Indonesia, Thailand, and the Philippines have also positioned themselves as top-tier destinations. Egypt (10th), leads the Middle East and North Africa region providing services to European nations, and has actively promoted itself as a low-cost destination for call centers, thanks to competitive costs, a large talent pool, good universities, and proximity to Europe. The EDUEgypt program, which is being implemented under a public-private partnership (PPP) model, has been effective in developing local skills. The program aims to prepare Egyptian graduates for the local and global market, and since its start in 2008, the program has expanded to 10 universities providing training to more than 10,000 students. In the case of Mexico, the development of a skilled talent pool has been one of the critical success factors in developing the industry (see Box 2.1). Bangladesh is a new entrant that debuted at 26th in 2014, with the Bangladesh Association of Software and Information Services (BASIS) actively working to support the industry. In 2013, the outsourcing sector generated nearly $100 million in exports, with growth of close to 60 percent compared to the previous year.6

Box 2.1. Human Capital Development for IT/ITES: the Case of Mexico.

Mexico has implemented targeted efforts to become a regional leader, mainly serving clients in North America, and has steadily improved its ranking from 11th in 2009 to 4th in 2014 in A.T. Kearney’s GSLI. With its abundant skilled and English speaking labor force, it presents a range of capabilities across the country, including IT services (Guadalajara – Mexico’s Silicon Valley, Monterrey), BPO (Mexico City, Ciudad Juarez), and aerospace (Santiago de Queretaro). It has also implemented targeted skills development efforts, including the MexicoFirst program, which in partnership with the private sector seeks to increase talent readiness and job linkages in the IT and IT-enabled services (ITES) industry. MexicoFirst was created in 2008 as part of the Mexico IT Development Project financed by the World Bank, and has been acting as the bridge between universities and the IT industry. It has helped design training programs based on identified skills gaps and has negotiated with IT certification providers (for example, Oracle, Cisco, Microsoft, and so on) in order to provide certification at more affordable rates. Since its launch, more than 65,000 high-level certifications have been issued and the program is recognized as one of the most innovative best practices for developing a critical pool of trained personnel for growing the local IT industry.
Some small island economies are also competitive and benefitting from this global industry. Mauritius (36th) and Jamaica (45th) are recognized among the offshoring leaders in their respective regions. Box 2.2 describes the success Mauritius has had in the burgeoning offshoring market. Jamaica, on the other hand, is an offshoring leader in the Caribbean region, and has recently embarked on a path to move up the value chain from traditional offshoring functions (for example, call centers) to creating a unique brand identity as a global hub for digital animation, an industry that is estimated to have a shortage of about 30,000 people worldwide. The “Youth Employment in Digital Animation Industries” project was signed between the Government of Jamaica and the World Bank in September 2014 and aims to benefit 15,000 young Jamaicans by 2020.7

Box 2.2. ITES Offshoring in Small Island Economies: Mauritius’ Miracle.

The ITES offshoring industry has become a stepping-stone for smaller countries to leapfrog into the global economy. Since independence in 1968, Mauritius, a small African island Commonwealth country with a population of about 1.4 million, rapidly grew from a low-income, agricultural-based economy to a middle-income diversified economy led by the development of a strong IT/ITES industry. In 2013 the ITES sector accounted for nearly seven percent of Mauritius’s GDP and employed nearly 18,000 people. It is estimated that about 600 ICT companies currently operate in Mauritius, covering activities including software development, call centers, business process outsourcing (BPO), IT-enabled services (ITES), and other support services. Given Mauritius’ ability to service both French- and English-speaking export markets, BPO has become a particularly strong segment of the ICT sector with more than 330 companies active. Financial services and high-end BPO solutions for airlines are examples of specialized companies operating in the country (The Commonwealth 2011). Mauritius currently ranks 36th in the 2014 A.T. Kearney’s Global Service Location Index (GSLI), and is supported by two ICT industry associations, namely the Mauritius IT Industry Association (MITIA) and the Outsourcing and Telecommunications Association of Mauritius (OTAM).

The transformation was led by strong government leadership. In the early 2000s, the Government of Mauritius embarked on a strategy to make the ICT/ITES sector a major pillar of the country’s economy, which included the implementation of targeted infrastructure and human capital development, and legal and regulatory reforms (for example, tax reforms) involving a mix of government and private sector players. For instance, the government understood that the sustained growth of the IT/ITES sector would rely heavily on the provision of high-bandwidth connections. In 2002, Mauritius became connected for the first time to a submarine fiber-optic cable route linking Europe to Asia via South Africa. Subsequently, the telecommunications sector became fully liberalized in January 2003, which laid the foundation for a competitive fixed and mobile market (Oulun et al 2012). Further, the first Technology Park (“Cyber City”) project was launched in 2003 under a partnership with the Government of India, which played a pivotal role in placing Mauritius on the map as a regional business hub. It is recognized that foreign direct investment (FDI) and technology transfer via multinational companies (MNCs) have played a significant role in developing local IT/ITES skills. A government supported “Universal ICT Education Programme” was also launched in 2006, with the aim of imparting computer proficiency skills to students and workers. Finally, the government has enhanced the regulatory framework to comply with international best practices by introducing various pieces of legislation, such as the Computer Misuse and Cybercrime Act, the ICT Act, the Electronic Transactions Act, and so forth (Oulun et al 2012). Mauritius currently ranks 20th out of 189 countries, and first in Africa, in the World Bank’s Doing Business Report 2014 (World Bank Group 2014).

Nonetheless, Mauritius’ IT/ITES sector is not without its challenges, with a shortage of a skilled labor pool recognized as a critical impediment for Mauritius to become a high-income knowledge-based economy – so called “Intelligent Mauritius” – as set forth in the National Broadband Policy 2020, and in line with the National ICT Strategic Plan 2011-2014 (Oulun et al 2012). As Mauritius aims to move up the value chain to higher end IT/KPO services, ramping up qualified human capital to meet global industry demands would become increasingly important. One of the principal initiatives undertaken thus far by the government has been the establishment of an ICT academy, which aimed to train 10,000 workers by 2014, under a public-private partnership (PPP) model, and provide training in internationally recognized IT/BPO skills (for example, Microsoft, Oracle, SAP, and BCI). However, according to reports, these ambitious goals have not yet been achieved, because of a funding shortfall for the academy in its initial stages.8 The academy was officially re-launched in September 2014, and is expected to help in capacity building and to provide support in producing a skilled workforce capable of feeding the growing ICT/BPO sector in Mauritius.

Fiji appears to be the only country in the Pacific Islands with industry experience in GOS9. The country already hosts major offshoring operations for ANZ Pacific Operations, a subsidiary of Australia and New
Zealand Banking Group Limited, and Mindpearl, a global provider of BPO services to the aviation industry. Both are BPO focused operations (including in-bound voice and nonvoice based services, but excluding ITO and KPO), and are sited in the Kalabu Tax Free Zone operated and administered by the Fiji Trade and Investment Bureau (Investment Fiji). ANZ Pacific currently employs an estimated 400 workers, while Mindpearl has 660 workers.

Fiji also won the European Outsourcing Association’s Offshoring Destination of the Year Award in 2014 (Lewis 2014), which rewards and celebrates excellence and best practice in the outsourcing world, acknowledging destinations and operators that have most successfully serviced the UK and other European outsourcing markets.

In the meantime, established global outsourcing services locations such as India and the Philippines are shifting from BPO to Business Process Management (BPM). The value chain for back-office business services has evolved dramatically over the past two decades and many of the top players including India and the Philippines have started to provide higher value added end-to-end solutions to customers. In the coming years, robotic process automation (RPA) could have revolutionary consequences for industry rationalization and labor markets, allowing robots and smart machines to take over the jobs of traditional BPO employees.
Chapter 3. Traditional and Online Outsourcing Approaches

Online Outsourcing Definition, Market Size, and Segmentation

Online outsourcing (OO) is a new GOS industry approach that has emerged in recent years, owing to continual advances in technology and connectivity (A.T. Kearney 2014). OO refers to the performance of tasks conducted over the Internet by workers from anywhere in the world, using online marketplaces or exchanges. These online marketplaces provide clients with access to a global labor pool of workers, and provide a platform on which workers can perform and deliver their work. Workers are financially remunerated for their work. Online outsourcing encompasses two major sectors:

- **Microwork**, where projects and tasks are broken down into microtasks that can be completed in seconds or minutes. Microworkers require basic numeracy and literacy skills; examples of microtasks include image tagging, text transcription, and data entry. Workers are paid small amounts of money for each completed task, and barriers to entry are lower than those of online freelancing, making it particularly attractive to unemployed and underemployed individuals with no specialized skills.

- **Online freelancing** (also known as e-lancing), where clients contract professional services to distributed third party-workers. Online freelancing often requires a higher level of expertise than microwork, with workers possessing technical or professional skills. Online freelancing tasks tend to be larger projects that are performed over longer durations of time – hours, days, or months. Examples include graphic design, web development, or technical report writing. Financial remuneration tends to be higher for online freelancers than microworkers.

The market size for OO was estimated at about $2 billion in 2013, which is a fraction of the total GOS market based on the estimates in the previous chapter. Currently the online freelancing market is over ten times larger than the microwork market. There are already numerous OO marketplaces in the global market (see Figure 3.1). Industry experts suggest that the top three platforms (Elance-oDesk, Freelancer.com and Zhubajie/Witmart) form about 50 percent of the market. Of these, Elance-oDesk is the clear market leader, with $750 million of combined revenue in 2013.

The global OO industry is highly diverse and evolving, and one feasible approach to segment the industry is by the complexity level of the tasks. Figure 3.2 illustrates some common job categories and their breakdown by complexity.
Comparing Different Approaches

The global market size of OO is currently dwarfed by the size of the market for traditional GOS approaches (onshoring, nearshoring, and offshoring). However, OO offers new benefits and value for global outsourcing services players. For clients, OO provides broader access to specialized skills, more flexible and faster hiring processes and 24-hour productivity. For workers, it creates access to global job markets. For developing countries, OO represents a unique and new opportunity to provide employment and incomes for masses of youth and women.

In particular, OO is highly unique and innovative for PICs, as it enables these countries to completely transcend their inherent challenges of size and geography. OO is also less structured and more informal than the traditional offshoring and nearshoring approaches. For example, it does not require as high a level of infrastructure or enabling environment, and the workforce consists of online contractors rather than formal employees. OO’s impact could also have more development depth, as it could be more pro-poor and pro-women than traditional GOS approaches.
Chapter 4. Job Implications for PICs

GOS and Jobs

The global outsourcing services industry is potentially a viable channel for creation of additional jobs and income in the PICs. The GOS industry's growth has led to increasing demand for skilled workers globally. Availability of skilled manpower remains a binding constraint, and provides an opportunity for developing countries' leverage for job and income creation. Even a country like India, which has access to a large English-speaking talent pool, is facing a shortage of skilled manpower. India, for example, is facing a shortage of “right talents” in their GOS industry in spite of having 12 million employable people injected into their labor market every year (businessstandard.com 2014). Other developing countries that can quickly ramp up the availability of their talent pool can potentially benefit from this increased demand.

The GOS industry in India alone has created 3.1 direct million jobs. Further, every direct job created in this industry is estimated to create indirect employment for about 2.5 people in other sectors. Notably, India, the Philippines, South Africa, Mauritius, and Egypt, have been successful in creating GOS employment. India’s case shows that 70 percent of jobs are taken by young people aged 26-35 (Tholons 2014). In the Philippines, employment in the industry exceeded 900,000 FTE in 2013, where women constitute nearly 60 percent of the workforce.

Table 4.1. Estimated Job Creation from Global Outsourcing Services.

<table>
<thead>
<tr>
<th>Country</th>
<th>Estimated number of direct jobs created</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>3.1 million (plus 9.5 million indirect jobs)</td>
</tr>
<tr>
<td>Philippines</td>
<td>926,000</td>
</tr>
<tr>
<td>South Africa</td>
<td>350,000 (200,000 in BPO; 150,000 in IT)</td>
</tr>
<tr>
<td>Mauritius</td>
<td>18,000</td>
</tr>
<tr>
<td>Egypt</td>
<td>45,000</td>
</tr>
</tbody>
</table>


Sources (World Bank 2015b) indicate that there are were about 48 million workers in 2013 globally registered on online working platforms, and about 10 percent (4.8 million in total) are actively completing tasks. Of this, just over 10 percent of workers are registered with microwork platforms while the vast majority are on online freelancing platforms. There is no clear market leader in terms of the number of registered workers. Freelancer.com is the largest platform and currently reports over 15 million registered users, Zhubajie/Witmart reports over 11 million registered workers, and Elance-oDesk reports almost 10 million registered workers.

Table 4.2. Online Work Industry by Revenue and Number of Registered Workers (2013).

<table>
<thead>
<tr>
<th></th>
<th>Number of registered workers</th>
<th>Global penetrated market ($)</th>
<th>Number of active workers</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013 Microwork</td>
<td>5,800,000</td>
<td>160,000,000</td>
<td>580,000</td>
</tr>
<tr>
<td>2013 Online freelancing</td>
<td>42,000,000</td>
<td>1,900,000,000</td>
<td>4,200,000</td>
</tr>
<tr>
<td>Total (Online work)</td>
<td>47,800,000</td>
<td>2,060,000,000</td>
<td>4,780,000</td>
</tr>
</tbody>
</table>


While many online workers live in the United States, India, and the Philippines, workers are increasingly emerging in countries across the world, such as Pakistan, Serbia, and Romania. In fact, when population size is taken into account, the Philippines, Serbia, and Romania have the largest proportion of their
populations engaged in online outsourcing. With reference to Table 5 below, smaller countries can also benefit from the global OO industry, as Serbia and Romania have a higher percentage of their population working in OO than the United States.

Table 4.3. Top Five Countries for Online Workers (2013).

<table>
<thead>
<tr>
<th>Rank</th>
<th>% of global online workforce</th>
<th>Workers as % of country population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>U.S.</td>
<td>23.92</td>
</tr>
<tr>
<td>2</td>
<td>India</td>
<td>21.51</td>
</tr>
<tr>
<td>3</td>
<td>Philippines</td>
<td>18.56</td>
</tr>
<tr>
<td>4</td>
<td>Pakistan</td>
<td>5.83</td>
</tr>
<tr>
<td>5</td>
<td>UK</td>
<td>4.21</td>
</tr>
</tbody>
</table>


The new OO approach for GOS, though relatively small at this stage of development, is a particularly promising area for digital earning opportunities by young people and women in PICs. This channel is highly innovative for job creation in the Pacific because it completely transcends the PICs’ inherent and longstanding challenges of geographic remoteness, small size, isolation, and insufficiency of physical infrastructure. There is an opportunity for Pacific youth and women to work anywhere, anytime from their locality, and participate as part of the 4.8 million active global OO workers in the growing global digital economy.

Creating employment in the GOS industry could also bring about other socioeconomic benefits for PICs. International experience suggests that the development of a vibrant local GOS industry also generates positive spillovers to other sectors of the economy by facilitating knowledge and technology transfer and fostering local innovation. Experience also suggests that it drives positive social change for women. The global outsourcing industry is gender-biased towards women, as disproportionately more women are hired than in other industries. Women report in focus groups and structured interviews that in some countries online outsourcing is a positive contributor towards gender equity because it is more compatible with cultural and social norms than traditional employment (World Bank 2015b). For example, Indian women use online work as a way of earning income while caring for children and elderly family members, and Egyptian women from traditional Islamic households use online freelancing as an alternative to working in male-dominated workplaces.

However the job creation implication of the GOS industry will also have to be considered in the broader development context of the region. As mentioned above, and supported by the World Bank's report on *Well-being from Work in the PICs*, "while business environment reforms can open up new opportunities for private sector development and employment creation, such measures are unlikely to spur sufficient work to meet emerging demands even in the best possible business environment."

**Estimates of Jobs and Other Impacts for PICs**

Quantitative estimates of the impact that the global outsourcing services industry may have on a country is helpful in providing a better understanding of its potential and informs decision making in industry development initiatives. However, estimates will have to be based on several arbitrary assumptions because there is limited information on the industry available from most countries. Moreover, there is a lack of industry information from the three countries because it is a relatively new or completely unexplored industry. There is also an assumption of active government intervention in the industry. As international experience illustrates, it is not expected that the industry will grow organically without a deliberate effort by the three countries. In addition it would be useful to have optimistic and conservative estimates of industry outcomes. The optimistic case could assume that three countries achieve similar averages in terms of jobs and revenue per worker as the most successful GOS countries; the conservative case could be based on a discounted average of these factors.
A simple estimate is provided in this report to present the possible employment impact that the GOS industry may have on the three countries. Subsequent programs to develop the industry could develop a more sophisticated model for industry planning and strategic purposes. Table 4.4 presents the data for selected GOS players and calculations for:

- the number of direct jobs as percentage of population size,
- the average revenue per worker, and
- the industry's percentage contribution to the country's GDP.

It also provides the averages for these three calculations, which is used for the optimistic case estimate, and a discounted one-third of these averages for the conservative case estimate.

Table 4.4. Industry Information and Calculations for Selected GOS Players.

<table>
<thead>
<tr>
<th>Country</th>
<th>Direct jobs created</th>
<th>Population size a</th>
<th>Direct jobs as % of population</th>
<th>Total industry revenue ($)</th>
<th>Average revenue per worker ($)</th>
<th>GDP (current $) b</th>
<th>% Contribution to GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>3,100,000</td>
<td>1,252,139,596</td>
<td>0.25</td>
<td>86,000,000,000</td>
<td>27,742</td>
<td>1,876,797,199,133</td>
<td>4.58</td>
</tr>
<tr>
<td>Philippines</td>
<td>926,000</td>
<td>98,393,574</td>
<td>0.94</td>
<td>16,000,000,000</td>
<td>17,279</td>
<td>272,017,377,292</td>
<td>5.88</td>
</tr>
<tr>
<td>South Africa</td>
<td>350,000</td>
<td>52,981,991</td>
<td>0.66</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Mauritius</td>
<td>18,000</td>
<td>1,296,303</td>
<td>1.39</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Egypt</td>
<td>45,000</td>
<td>76,775,023</td>
<td>0.06</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Average (Optimistic Case)</td>
<td>0.66</td>
<td>-</td>
<td>22,510</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>5.23</td>
</tr>
<tr>
<td>One-third of average (Conservative Case)</td>
<td>0.22</td>
<td>-</td>
<td>7,503</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1.74</td>
</tr>
</tbody>
</table>

Source: see Table 4.1 for number of direct jobs.


Table 4.5 shows the optimistic case estimates in five years’ time for each of the three countries in terms of:

- direct, indirect and total jobs,
- average revenue per worker,
- estimated total industry revenue, and
- industry's percentage contribution to the country's GDP.

These calculations are based on the average figures derived in Table 4.4, with the optimistic assumption that the three countries would be able to achieve the same level of success as the most successful GOS countries in the world today.

Table 4.5. Optimistic Case Estimates of Industry Impact for the Three Countries.

<table>
<thead>
<tr>
<th>Country</th>
<th>Population size</th>
<th>Direct jobs</th>
<th>Indirect jobs</th>
<th>Total</th>
<th>Average revenue per worker ($)</th>
<th>Total industry revenue ($)</th>
<th>GDP (current $)</th>
<th>% contribution to GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiji</td>
<td>881,065</td>
<td>5,809</td>
<td>14,522</td>
<td>20,331</td>
<td>22,510</td>
<td>130,758,028</td>
<td>3,855,017,107</td>
<td>3.39</td>
</tr>
<tr>
<td>Samoa</td>
<td>190,372</td>
<td>1,255</td>
<td>3,138</td>
<td>4,393</td>
<td>28,252,930</td>
<td>801,916,058</td>
<td>466,259,084</td>
<td>3.52</td>
</tr>
<tr>
<td>Tonga</td>
<td>105,323</td>
<td>694</td>
<td>1,736</td>
<td>2,430</td>
<td>15,630,887</td>
<td>466,259,084</td>
<td>466,259,084</td>
<td>3.35</td>
</tr>
</tbody>
</table>

Source: authors’ calculations.

In this optimistic scenario, estimates indicate that the direct jobs potential is highly significant. In Fiji for example, the GOS industry could create 5,809 direct jobs over the next five years. This is more than five times the current number of GOS jobs (1,060 combined for ANZ Pacific Operations and Mindpearl), and
translates to almost 2.5 times more direct jobs than the country's telecommunications industry. In addition, it could contribute up to 3.39 percent of Fiji's GDP.

In contrast, Table 4.6 shows the conservative case estimates for each of the three countries for these same factors. In this case the calculations are based on one-third of the average numbers derived in Table 4.4. This highly conservative estimate assumes the limitations of private sector development for the three countries are also applicable to the GOS industry, in addition to being late industry entrants.

In this conservative case, estimates indicate that the direct jobs potential remains notable, as it is larger than some of the established industries in the countries. For Fiji for example, the GOS industry would add about an estimated 900 more jobs only. Nevertheless, that translates to more direct formal and "paid employment" than the combined total of the country's agriculture, forestry, and fishing sector (1,936 compared to 1,604) (Fiji Islands Bureau of Statistics 2007).

Table 4.6. Conservative Case Estimates of Industry Impact for the Three Countries.

<table>
<thead>
<tr>
<th>Country</th>
<th>Population size</th>
<th>Direct jobs</th>
<th>Indirect jobs</th>
<th>Total</th>
<th>Average revenue per worker ($)</th>
<th>Total industry revenue ($)</th>
<th>GDP (current $)</th>
<th>% contribution to GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiji</td>
<td>881,065</td>
<td>1,936</td>
<td>4,841</td>
<td>6,777</td>
<td>7,503</td>
<td>14,528,670</td>
<td>3,855,017,107</td>
<td>0.38</td>
</tr>
<tr>
<td>Samoa</td>
<td>190,372</td>
<td>418</td>
<td>1,046</td>
<td>1,464</td>
<td>3,139,214</td>
<td>801,916,058</td>
<td>0.39</td>
<td></td>
</tr>
<tr>
<td>Tonga</td>
<td>105,323</td>
<td>231</td>
<td>579</td>
<td>810</td>
<td>1,736,765</td>
<td>466,259,084</td>
<td>0.37</td>
<td></td>
</tr>
</tbody>
</table>

Source: authors’ calculations.
Chapter 5. Methodology

Research

Research for this study was based on primary and secondary data collected through desk research, field interviews, and discussions covering Fiji, Samoa, and Tonga. Interviews were conducted with government, private sector, and IT industry representatives across the three countries. The study team also conducted group interviews with undergraduate students in the University of South Pacific's (USP) campuses in Fiji and Tonga.

The study references relevant analytical work for regional-level data to the extent possible, as official statistics were found to be sparse and offering an incomplete picture of employment and work in the three countries. In particular, the study drew upon information and findings from the World Bank’s 2014 working paper, *Well-being from Work in the Pacific Island Countries* because of its direct relevance to this study.

Analytical Approach and Framework

The global outsourcing services industry is mature and has been examined thoroughly across time and geographies. Various consulting firms, including A.T. Kearney, Gartner, and McKinsey, have already identified the numerous criteria for competitiveness and success, and have developed benchmarking frameworks, locational indices, and rating criteria for determining the e-readiness and attractiveness of different locations. Table 5.1 provides a detailed list of numerous factors affecting a country's attractiveness.
Table 5.1. Frameworks for Assessment of Locations for Global Outsourcing.

<table>
<thead>
<tr>
<th>A.T. Kearney’s Global Services Location Index</th>
<th>Gartner’s 10 criteria</th>
<th>Hewitt’s International Benchmarking Model</th>
<th>McKinsey’s Locational Readiness Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>People and skills availability</td>
<td>Infrastructure</td>
<td>Infrastructure</td>
<td>Quality of infrastructure</td>
</tr>
<tr>
<td>• Remote service sector experience and quality ratings</td>
<td>• Power</td>
<td>• Real estate</td>
<td>• Telecom</td>
</tr>
<tr>
<td>• Labor force availability</td>
<td>• Telecommunications</td>
<td>• Telecom</td>
<td>• Power</td>
</tr>
<tr>
<td>• Education and language</td>
<td>• Transport</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Attrition risk</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial attractiveness</td>
<td>Labor pool</td>
<td>Connectivity</td>
<td>Talent</td>
</tr>
<tr>
<td>• Compensation costs</td>
<td>• Quality</td>
<td>• Availability</td>
<td>• Availability</td>
</tr>
<tr>
<td>• Infrastructure costs</td>
<td>• Quantity</td>
<td>• Quality</td>
<td>• Quality</td>
</tr>
<tr>
<td>• Tax and regulatory costs</td>
<td>• Scalability</td>
<td>• Cost</td>
<td>• Cost</td>
</tr>
<tr>
<td>Business environment</td>
<td>• Work conditions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Country environment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Infrastructure</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Cultural exposure</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Security of intellectual property</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educational system</td>
<td>Political and economic environment</td>
<td>General demographics</td>
<td>Cost</td>
</tr>
<tr>
<td>• Quality</td>
<td>• Stability of government</td>
<td>Environment</td>
<td>• Labor cost</td>
</tr>
<tr>
<td>• Number of institutions</td>
<td>• Corruption</td>
<td>• Macroeconomic</td>
<td>• Infrastructure cost</td>
</tr>
<tr>
<td>• New grads in IT</td>
<td>• Geopolitical risks</td>
<td>• Business environment</td>
<td>• Corporate tax</td>
</tr>
<tr>
<td>Cost</td>
<td>• Financial stability</td>
<td>• Geopolitical environment</td>
<td></td>
</tr>
<tr>
<td>• Labor</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Real estate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Infrastructure</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Telecom</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Political and economic environment</td>
<td>Language</td>
<td>Other incentives</td>
<td></td>
</tr>
<tr>
<td>• Stability of government</td>
<td>Government support</td>
<td>Environment</td>
<td></td>
</tr>
<tr>
<td>• Corruption</td>
<td>• Promotional</td>
<td>• Government support</td>
<td></td>
</tr>
<tr>
<td>• Geopolitical risks</td>
<td>• Institutional</td>
<td>• Business and living environment</td>
<td></td>
</tr>
<tr>
<td>• Financial stability</td>
<td>• Education</td>
<td>• Accessibility</td>
<td></td>
</tr>
<tr>
<td>Language</td>
<td></td>
<td>• Living environment</td>
<td></td>
</tr>
<tr>
<td>Government support</td>
<td>Cultural compatibility</td>
<td>Risk profile</td>
<td></td>
</tr>
<tr>
<td>• Promotional</td>
<td>• Cultural attributes</td>
<td>• Regulatory risks</td>
<td></td>
</tr>
<tr>
<td>• Institutional</td>
<td>• Adaptability</td>
<td>• Country investment risks</td>
<td></td>
</tr>
<tr>
<td>• Education</td>
<td>• Proximity</td>
<td>• Data protection</td>
<td></td>
</tr>
<tr>
<td>Cultural compatibility</td>
<td>• Ease of travel</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Global and legal maturity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data and intellectual property security and privacy</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


While different factors and categories are used in each model, the common four key dimensions determining a country's “locational competitiveness” are:

- quality and quantity of talent,
- competitive costs,
- quality of relevant public infrastructure, and
- enabling environment.

Figure 5.1 illustrates these dimensions and their contribution to country competitiveness.
Figure 5.1. Four Dimensions of Analysis for Country Competitiveness.

The factors affecting locational attractiveness are described in more detail below:

**Quantity and quality of talent**: Together with the existence of competitive telecommunication markets, especially for broadband services, the availability of employee skills is the single most important factor in the growth of the global outsourcing industry. This includes a number of aspects, such as suitability for employment – that is, meeting a quality standard for work in the industry and having the necessary language (not necessarily English) skills – and willingness to work in the industry, a function of both the stature of the industry and the availability of other job options.

**Competitive costs**: Primary cost considerations, from the point of view of a company making an investment decision, include: the cost of labor (from entry-level employees to seasoned managers); infrastructure costs; selling, general, and administrative expenses (SG&A); and facilities costs. For nearshoring types in particular, the evaluation of cost would also reflect fiscal or other incentives provided by the government to encourage investment, corporate tax rates, and special incentives and tax holidays.

**Access to relevant infrastructure**: Considerations include the availability, quality, and reliability of services such as telecommunications (including broadband), power, and transportation, along with availability of suitable real estate (for ITO/BPO/KPO). In countries with unreliable public infrastructure, companies look for the ability to self-provide services or alternatively for customized facilities such as IT parks—with modern office space, high-speed broadband links, reliable power supply (including backup supply), security services, and ancillary infrastructure including banks, travel desks, restaurants, transportation systems, and hotel accommodation for visiting executives. They also look for availability of land and business-friendly procedures such as quick building clearances for real estate development. The availability of good flight connections to clients and markets is also an important factor.

**Enabling environment**: The general business environment of a country – government support for ICT or GOS industries, and policies toward foreign direct investment, ease of doing business, GOS industry maturity, and so on – is also an important factor in a company’s decision about where to invest. Country risk relates to stability and transparency of law, macroeconomic stability, treatment of foreign capital, and data and intellectual property law protection, to name but a few.

*Source*: authors.
These four dimensions form a common unified framework for assessment, which has been used by the World Bank for numerous country assessments. The framework is designed in particular for assessing the traditional global outsourcing services industry, because of its stringent and highly structured requirements. However the framework could also be used for OO, which is an informal and less structured approach to GOS. Hence certain factors are not as important for OO as they are for ITO/BPO/KPO, such as the availability of government tax incentives, Internet redundancy and power, physical infrastructure such as Class A office spaces, flight connectivity, and so on.
Chapter 6. SWOT Analysis

General Description

The analysis uses the Strengths-Weaknesses-Opportunities-Threats (SWOT) tool to assess the competitiveness of the PICs in global outsourcing. Hence the study examines the strengths, weaknesses, opportunities and threats, based on the analytical framework and its four factors determining locational attractiveness. The assessment is also based on quantitative comparisons to the extent possible, and limits attempts to quantify qualitative factors, such as the willingness to work. These qualitative factors could be better examined in the next steps of industry development proposals.

The focus of the analysis is on the three countries. It also refers to the PICs when there is regional data that is applicable also to the three countries. The analysis is also from the "supply" oriented perspective of the PICs, instead of the "demand" oriented perspective of potential GOS clients, since its purpose is to inform government officials and development practitioners interested in GOS industry development for job creation.

The analysis uses information from, and makes comparisons with, various countries to assess general competitiveness from a global perspective. In particular, it includes India and Philippines, as these countries provide global industry benchmark and have higher availability of industry-related data. The comparisons with these significantly larger countries does not imply that they are the main competitor countries to the PICs but reflect the industry's global nature as the competition could be from any country in the world. For example, a BPO worker is unlikely to be able to receive more than $2 per hour for basic tasks, such as data entry, regardless of whether they are working from larger countries, like India or China, or from small countries, like Malta or Mauritius. The new OO paradigm has also made it completely irrelevant which country a worker (or competitor) is from, as it is global competition that matters.

Quality and Quantity of Talent

Strengths

Advanced English skills: The PICs have a general regional advantage of relatively high English language skills, and this is pertinent since most BPO and OO work is conducted in English. English is one of the official languages in each of the three countries and remains widely used in government, business, and education as a lingua franca. Pacific countries like Fiji also have the advantage of a relatively neutral accent for voice-based operations, such as call centers.

High literacy and education rates: The three countries also benefit from high literacy rates of 99 to 100 percent and high secondary and tertiary education rates (World Bank 2014). Available statistics show that, in 2011, net enrollment in secondary education reached 83 percent and 80 percent in Fiji and Samoa, respectively. In Tonga, a total of 14,874 students were enrolled in secondary education in 2011. Statistics also shows that there were 1,670 tertiary graduates in Fiji in 2004, and 3,830 in Samoa in 2011.

The population in the three countries also appears to be comparatively computer literate compared to their peers in other outsourcing countries. The percentage using the Internet in Fiji (37.1 percent), Tonga (35 percent), and Samoa (15.3 percent) are competitive with India (15.1 percent) and Philippines (37 percent), which are the largest outsourcing countries in the world (see Figure 6.1).

However, the study notes that, because of data constraints, it is more difficult to report the quality of secondary and tertiary education, and even more so to understand the relevance of the skills mix of secondary and tertiary graduates to employers’ needs.
Relatively high level of Facebook usage: There is also a comparable level of Facebook users in the three countries, compared with India and Philippines (see Figure 6.2). Facebook penetration rates are highly relevant for OO in particular, as some international firms use it as a quick gauge of the population’s ability to engage in OO. Their global experience suggests that individuals who can use Facebook should also be able to conduct basic online tasks, such as data entry and digitization. For instance, in Fiji, Facebook users have reached 280,000 people accounting for over 30 percent of the total population. Facebook penetrations in Tonga and Samoa are also relatively high at 24.5 percent and 18.5 percent of the total population. Though the user base is small due to the small population size, these penetration rates are comparable to countries including Mauritius (33.5 percent) and Poland (27.6 percent), which are strong IT-enabled services locations, and significantly higher than emerging countries including Moldova (10.4 percent) and Ghana (8.9 percent).
Most suitable population demographics: The PICs benefit generally from demographic characteristics that position it well from the youth and gender perspectives. International experience shows that young people are the main demographic group performing outsourcing in the world. The PICs face a youth bulge as 54 percent of the population is below the age of 24, a higher proportion than all developing countries, and the world (World Bank 2014). The relatively high percentage of females in universities in the three countries, and the relatively low rate of women’s participation in formal employment in the PICs (World Bank 2014) present a pool of talent that could be tapped for outsourcing work.

Weaknesses

Limited scalability of human resources and limited talent for ITO services: The size of the three countries’ potential labor force limits its ability to support large-scale operations, or for new operations to scale to significant sizes. The potential size of the labor force for outsourcing is dwarfed significantly by global competitor countries with larger populations, such as Egypt, India, and Nigeria. The combined total population of the three countries is less than the outsourcing workforce of India, which stood at 3.1 million in 2014. The limited human resource supply is far from adequate for attracting and sustaining large outsourcing operations and will probably be limited to operations considered to be in the small (less than $10 million revenue) or emerging ($10 to 100 million revenue) size categories. In addition, the number of talented people available for ITO work, such as coding and software development, is constrained because of the limited quantity and quality of graduates in such disciplines.

Understanding of young people’s skills requirements: There is insufficient understanding in the three countries about the skills young people need for global service work, especially in Samoa and Tonga. Except for Fiji, the experience and track record of GOS work in these countries is limited, and interviews with current youth employers in the IT industry brought conflicting responses. The youth also have relatively weak soft skills, especially in areas such as marketing and customer service. However, it is recognized that most young people in developing countries generally lack these soft skills. Such skills are also more important for workers in the traditional GOS industry segments, but are less relevant for OO as less interaction and teamwork is required.
Opportunities

High proportion of youth available: There is an underlying human resource opportunity for global outsourcing both from a full- and part-time perspective. This is because the three countries possess the highest youth demographics in the world, experience persistent unemployment and underemployment, and currently offer limited formal employment options for the educated youth and women in particular (World Bank 2014).

Pacific diaspora: Better utilization of the Pacific diaspora could help alleviate the shortage of skilled workers in the short term. It was estimated that, by 2010, about 850,000 people of Pacific island ancestry or ethnicity would have been living in the four Pacific Rim recipient countries: New Zealand, Australia, the United States, and Canada. For example, the population of Tonga decreased by over 10,000 people between 2006 and 2011, as a result of emigration.

Threats

Uncertainty about the youth's ability and willingness to work in the industry: The willingness of local workers to take up global outsourcing services work in the longer term is uncertain because of their wage expectations. Interviews with young people in the three countries' suggest that they have relatively high wage expectations, and it is unclear if such expectations can be met since it depends on their ability to provide quality output. For example, the Fijian undergraduates interviewed stated that they expected a wage of at least FJD3.5 ($1.73) per hour, even for internships or part-time jobs. This is higher than the wage rate in Mauritius, where a BPO worker earns an average of about $1.47 per hour for basic data entry tasks (The Capfour Group 2012). However, Mauritians have proven their skills in their mature GOS industry, but it is not certain if young Fijians could deliver at the same wage rate. It is also common for students in many developed countries to work part time while managing their studies. However, part-time work does not appear to be as common for young people in the three countries, as the students interviewed stated that they would only undertake such work if it did not interfere with their studies and performance in examinations. However, the study acknowledges that a more solid evidence-based assessment through a youth survey would be required in order to corroborate these assumptions and sample interviews.

Competitive Cost

Strengths

Minimum wage is comparable with established global outsourcing services provider countries: The three countries official minimum wage appears to be relatively competitive from a global perspective, even for low-level tasks such as data entry and digitization. The first minimum wage law introduced in Fiji in March 2014 set a rate of F$2.0 ($1.04) per hour. Samoa's is lower at SAT2.0 (~$0.88) per hour, although that was due to increase to SAT2.30 (~$1.01) per hour in January 2015. There is no minimum wage for Tonga. Based on these minimum wages, Fiji and Samoa are competitive with Mauritius ($1.47 per hour), and Nepal, where an OO worker is expected to earn an estimated $1.25 per hour. Minimum wages provides a cost base for assessing a country's competitiveness. However it is noted that actual and expected wages in each country may vary significantly from the minimum and, as mentioned above, it is not certain if workers from Fiji and Samoa are willing to take up work at official minimum wages.

Weaknesses

High broadband costs: The cost of broadband connectivity for both traditional and online outsourcing is not competitive in the three countries, particularly because of the data caps set by many operators, which is a disadvantage for IT-enabled businesses that rely on a large flows of data traffic within and across borders. The cost of a 512 kbit/s connection in Fiji may reach up to $26.73 per month, and in Samoa and Tonga a 2
Mbit/s connection is offered for a monthly price of $43.63 and $31.54, respectively, though with additional fees for excess usage (see Table 6.1). For example, this compares unfavorably with Philippines, where outsourcing companies can buy uncapped connection for about $22.29 (P1,000) per month for speeds of up to 2 Mbit/s, and about $44.57 (P2,000) for speeds of up to 5 Mbit/s (Senate of the Philippines 2014).

**High costs for last mile Internet:** The competitiveness of last mile broadband connectivity varies across the three countries, and generally ranges from moderately competitive to noncompetitive. For example, the cost of fixed broadband is competitive in Fiji, as packages of up to 10 Mbit/s and a 30 GB monthly data cap are available for F$49 (~$25) per month26. Fiji and Tonga are connected to submarine fiber-optic cables offering ample capacity and relatively low-cost bandwidth (wholesale). Samoa is connected to a submarine cable that is nearing the end of its life but the wholesale price is relative high because of its unregulated monopoly and legacy contract issues. Satellite services are used to provide redundancy but at relatively high cost.

<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Country</strong></td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>Fiji</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Samoa</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Tonga</td>
</tr>
</tbody>
</table>

**Source:** Data provided by Pacific telecom operators or from their websites. Table compiled by Pacific ICT Regulatory Resource Centre.

**Note:** Exchange rates are the average for the period 1 February 2014 to 26 February 2014, from [http://www.oanda.com](http://www.oanda.com).

**Opportunities**

*Reducing cost of Internet access:* The recent improvements in international connectivity in the three countries brings with it a high possibility that the cost of Internet access will be lowered significantly, both for businesses and individuals conducting outsourcing. This is concrete progress that the countries could use to market themselves, and to improve their outsourcing competitiveness in the medium to long term.

**Threats**

*Unrealized benefits of new connectivity for end users:* There is a risk that these foreseen improvements in international connectivity may not translate to cost savings or improved services for businesses and individuals involved in outsourcing. Governments in the three countries will need to ensure that the Internet services industry carry forward the cost benefits to local GOS businesses and individuals.
Availability and Quality of Relevant Infrastructure

Strengths

*Improved access to Internet:* The three countries are moderately competitive in terms of availability of Internet infrastructure for outsourcing and should be able to increase their competitiveness in the short to medium term. Fiji stands out with over 5 Gbit/s of international bandwidth, substantially more than all of the other countries combined (see Figure 6.3). It has been connected to undersea fiber optic cable for over a decade and has emerged as a regional hub, landing cables from Tonga and Vanuatu. In addition, controls imposed on international bandwidth pricing have resulted in more cost-oriented tariffs spurring demand (World Bank 2015a).

![Figure 6.3. International Internet Bandwidth, Mbit/s.](image-url)

Internet and broadband services have traditionally been readily available in the main islands and cities, and businesses and individuals in the main cities generally have access to fixed or mobile broadband services. The region is also increasingly linked to the global economy, particularly in urban centers. Since the mid-2000s, the Pacific’s telecommunications sectors have undergone deregulation and reform. Competitive markets have led to sharp increases in access to basic telecommunications throughout the region. As an indicator of access and connectivity, mobile phone penetration in the PICs has grown from below 10 percent in 2006 to between 60 and 95 percent in 2013, and this figure continues to climb, although there is some way to go before it catches up with existing GOS players (see Figure 6.4).
The World Bank, with other partners, in particular the Asian Development Bank (ADB), is also supporting a Pacific Regional Connectivity Program that aims to connect Tonga, Samoa, Palau, the Federated States of Micronesia, and other countries as needed to global communications networks in a series of phased investments in submarine fiber optic cables, or other appropriate regional connectivity solutions. In the first phase, cofinanced by the World Bank and ADB, the Tonga-Fiji submarine cable went live in August 2013. Within a few months, the number of Internet users in Tonga increased five-fold and prices fell by 60 percent. There are now plans to extend the cable to Tonga’s outer islands. In Fiji, the proportion of Internet users increased from 17 percent in 2009 to 37.1 percent in 2013.27

High level of access to electricity: The three countries enjoy high levels of access to electricity relative to other PICs. Samoa and Tonga enjoy high levels of access to power at 99 percent and 95 percent of the population, respectively. Fiji has a slightly lower level of access at 89 percent of the population. Nonetheless, in general, energy poverty is widespread in the PICs. It is estimated that 70 percent of Pacific Islander households do not have access to electricity, which is equivalent to access rates in Sub-Saharan Africa and slightly below the average for low-income countries (Dornan 2014). Further, costs of electricity are high and volatile, particularly in Samoa and Tonga. This is because of the PICs high dependency on energy imports, which makes electricity generation predominantly diesel-based, supplemented by renewable energy generation, such as hydro, biofuels, solar, and wind, depending upon available and accessible resources28.
Table 6.2. Access to Electricity in the PICs.

<table>
<thead>
<tr>
<th>Level of Access</th>
<th>Access to Power (%)</th>
<th>Population</th>
<th>GDP per Capita ($) 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low levels of access</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Papua New Guinea</td>
<td>10</td>
<td>7,013,829</td>
<td>1,794</td>
</tr>
<tr>
<td>Solomon Islands</td>
<td>14</td>
<td>552,267</td>
<td>1,517</td>
</tr>
<tr>
<td>Vanuatu</td>
<td>17</td>
<td>245,619</td>
<td>3,167</td>
</tr>
<tr>
<td>Subtotal</td>
<td></td>
<td>7,811,715</td>
<td></td>
</tr>
<tr>
<td>Medium levels of access</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Micronesia, Fed. Sts.</td>
<td>54</td>
<td>111,542</td>
<td>2,854</td>
</tr>
<tr>
<td>Kiribati</td>
<td>63</td>
<td>101,093</td>
<td>1,803</td>
</tr>
<tr>
<td>Marshall Islands</td>
<td>80</td>
<td>54,816</td>
<td>3,448</td>
</tr>
<tr>
<td>Fiji</td>
<td>89</td>
<td>868,406</td>
<td>4,390</td>
</tr>
<tr>
<td>Subtotal</td>
<td></td>
<td>1,135,857</td>
<td></td>
</tr>
<tr>
<td>High levels of access</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tonga</td>
<td>95</td>
<td>104,509</td>
<td>4,335</td>
</tr>
<tr>
<td>Cook Islands</td>
<td>99</td>
<td>20,414</td>
<td>13,478</td>
</tr>
<tr>
<td>Samoa</td>
<td>99</td>
<td>183,874</td>
<td>3,629</td>
</tr>
<tr>
<td>Palau</td>
<td>97</td>
<td>20,609</td>
<td>11,096</td>
</tr>
<tr>
<td>Tuvalu</td>
<td>100</td>
<td>9,847</td>
<td>3,712</td>
</tr>
<tr>
<td>Nauru</td>
<td>100</td>
<td>10,308</td>
<td>6,954</td>
</tr>
<tr>
<td>Niue</td>
<td>100</td>
<td>1,400</td>
<td></td>
</tr>
<tr>
<td>Subtotal</td>
<td></td>
<td>350,961</td>
<td></td>
</tr>
</tbody>
</table>

Source: Dornan 2014.

Ready access to computers and Internet: In the main islands and cities of the three countries the young appear to have ready access to personal computers (PCs) and the Internet, either in their schools or homes. For example, most undergraduate students interviewed for this study in Fiji and Tonga confirmed that they have access to both PCs and the Internet. They can also use the network of private-sector cybercafés, although they are typically located only in the city centers. In addition, the Fijian government has built more than 25 telecenters across the country and they are reported to have been widely used.29 This infrastructure could be used as OO work centers.

Access to international micropayment mechanisms: Fiji, Tonga, and Samoa have access to at least one of the three major international micropayment mechanisms, that is, PayPal, Payoneer and Skrill. These are the three main payment mechanisms used by most international OO platforms to reimburse workers for jobs or tasks completed.

Weaknesses

Quality issues with the Internet: The three countries are general weak in terms of overall quality of connectivity infrastructure. With the exception of Fiji, broadband speed, quality, and reliability are generally inadequate to support large-scale outsourcing operations that typically require full redundancy and nonstop, round-the-clock availability. Interviews also suggest that the quality of last mile connectivity can be highly unreliable. This drastically limits the countries' ability to perform microwork (under OO), which is carried out in real time on online platforms (unlike online freelancing where the work can be performed offline).

Limited availability of international transport and office infrastructure. There is insufficient international transport infrastructure. For example, it may take the same or more time to travel from Sydney to Suva, than to Manila. This is because of the lower frequency of flights and the need for transfers in between. There is also a general lack of a dedicated and permanent IT parks in Samoa and Tonga to provide Class A office spaces dedicated to nearshoring or offshoring. In contrast, Fiji has free trade zones in Kalabu and
Telepark that can and are being used for GOS operations, and the government has approved two temporary facilities at USP Stratham ICT Park and ATH Technology Park.\textsuperscript{30}

Limited access to banking: Most young people in the three countries do not have access to banking services. This is a hindrance to OO, as the international micropayment mechanisms need to be linked to a bank account for effective payment to workers.

Opportunities

Improved connectivity opens up opportunities to participate in the GOS industry: The improved Internet connectivity on some PICs (as discussed above) provides the opportunity for the local private sector to participate in the GOS industry for the first time. Such opportunities did not exist previously, given that basic connectivity is a prerequisite for participation in this industry.

Threats

Improved services are not certain: There is a threat that increased backbone connectivity may not be translated into improved connectivity services for businesses and individuals in all three countries. This could become a critical constraint for these countries to participate in global outsourcing services.

Environment

Strengths

Basic investment incentives are in place: Fiji has highly competitive incentives in place that are applicable to the GOS industry (see Table 6.3). There are specific tax incentives for companies meeting basic requirements in the ICT sector, which includes tax exemption for 13 years and duty free import of IT-related equipment for initial establishment and ongoing operations. The country also has a dedicated investment promotion agency, Investment Fiji, which actively promotes the country as a favorable location for businesses and offers various incentives for ICT-related businesses. Investment promotion in Samoa and Tonga, on the other hand, are still nascent. In July 2014, the first ever investment-profiling workshop was held in Tonga, which aimed to educate participants on how to better package and promote investment opportunities in Tonga to potential foreign investors.\textsuperscript{31}

Table 6.3. Summary of Foreign Investment Incentives in the Three Countries.

<table>
<thead>
<tr>
<th>Country</th>
<th>Investment Promotion</th>
<th>Key incentives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiji</td>
<td>Investment Fiji</td>
<td>• A package of trade and investment incentives including duty concessions, investment allowances, tax exemption, and tax free regions.</td>
</tr>
<tr>
<td></td>
<td><a href="http://www.investmentfiji.org.fj">http://www.investmentfiji.org.fj</a></td>
<td>• Corporate tax rate is 20%.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• A foreign company that establishes or relocates its headquarters to Fiji will be subject to a low corporate tax rate of 17%.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• A listed company on the South Pacific Stock Exchange (SPSE) will be subject to a low corporate tax rate of 10%, provided the company has 40% local shareholding structure. Income earned from trading of shares in SPSE will be exempted from income tax and capital gains tax.</td>
</tr>
<tr>
<td>Samoa</td>
<td>Ministry of Industry, Commerce and Labor</td>
<td>• Corporate tax rate reduced from 29% to 27% in 2007.</td>
</tr>
<tr>
<td>Tonga</td>
<td>Ministry of Commerce, Tourism and Labor</td>
<td>• Corporate tax rate is 25%.</td>
</tr>
<tr>
<td></td>
<td><a href="http://www.mctl.gov.to">http://www.mctl.gov.to</a></td>
<td></td>
</tr>
</tbody>
</table>

Relative ease of doing business: The three countries are relatively competitive in terms of overall ease of doing business, ranking at Samoa (67), Tonga (69), and Fiji (81), respectively out of 189 countries (see Table 6.4). In fact, the three countries rank higher than India (142) and the Philippines (95), two of the most
successful countries in GOS (see Table 6.5). However, weaknesses remain in the three countries that require dedicated efforts for improvement including, among other things, starting a business, protecting minority investors, and trading across borders (Fiji), getting credit (Samoa), and registering property and protecting minority investors (Tonga). The regulatory environment is important as it underlines the competitiveness of the economy and whether such an environment is conducive to the operations of a business. In particular, for small population countries, such as Mauritius (1.3 million) and Lithuania (2.96 million), the ease of doing business is highly correlated to its attractiveness as a GOS location. This correlation could be especially important for client companies considering nearshoring options in the three countries for the first time. Client companies will need to consider the local set up and operational issues that may arise from their nearshoring operations, but there are limited experiences of GOS in the three countries to give them confidence.

Table 6.4. Ease of Doing Business in the Three Countries, 2015.

<table>
<thead>
<tr>
<th>Country</th>
<th>Overall ease of doing business</th>
<th>Starting business</th>
<th>Dealing with construction permits</th>
<th>Getting electricity</th>
<th>Registering property</th>
<th>Getting credit</th>
<th>Protecting minority investors</th>
<th>Paying taxes</th>
<th>Trading across borders</th>
<th>Enforcing contracts</th>
<th>Resolving insolvency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiji</td>
<td>81</td>
<td>160</td>
<td>73</td>
<td>75</td>
<td>64</td>
<td>71</td>
<td>110</td>
<td>107</td>
<td>116</td>
<td>59</td>
<td>91</td>
</tr>
<tr>
<td>Samoa</td>
<td>67</td>
<td>33</td>
<td>57</td>
<td>20</td>
<td>48</td>
<td>151</td>
<td>161</td>
<td>73</td>
<td>80</td>
<td>83</td>
<td>124</td>
</tr>
<tr>
<td>Tonga</td>
<td>69</td>
<td>51</td>
<td>14</td>
<td>35</td>
<td>174</td>
<td>36</td>
<td>161</td>
<td>73</td>
<td>78</td>
<td>48</td>
<td>133</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Pacific island countries</th>
<th>Comparison countries</th>
<th>Country</th>
<th>Doing Business ranking</th>
<th>Country</th>
<th>Doing Business ranking</th>
<th>A.T. Kearney Global Services Location Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiji</td>
<td></td>
<td>India</td>
<td>142</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Samoa</td>
<td></td>
<td>Philippines</td>
<td>95</td>
<td></td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>Tonga</td>
<td></td>
<td>Mauritius</td>
<td>28</td>
<td></td>
<td></td>
<td>36</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lithuania</td>
<td>24</td>
<td></td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>


Emerging global outsourcing services industry: A small GOS industry appears to be emerging in Fiji and Tonga, which could help to strengthen the enabling environment in terms of industry perception, experience, and support. As discussed above, Fiji already hosts BPO operations set up by multinational companies and won an international outsourcing award in 2014. In 2012, ICT service exports grew to account for 4.3 percent of the Fiji's total service exports, compared to 2.9 percent in 2010.32 Tonga also opened a new call center helpdesk set up by Procomm Services in 2013.33 The call center is technically an onshoring, rather than offshoring operation as it serves mainly the domestic market. However such domestic operations will improve the industry's experience and provide a usable reference for expanding their GOS industry.

Weaknesses

Inherent challenges are still relevant for traditional and larger GOS approaches: The inherent constraints of small countries with small populations and geographic remoteness remain a key impediment to large-
scale nearshoring or offshoring operations in the three countries. Even in the age of globalization, 90 percent of the trade that occurs over a distance of 1,000 kilometers would cease at a distance of 9,000 kilometers, and the average Pacific island country is 11,456 kilometers from any other randomly selected country weighted by rest-of-the world GDP (World Bank 2014). For traditional outsourcing, clients and PICs service providers will still need to travel for set up of captive BPO operations, or interact for business and operational discussions for noncaptive. Hence, the distance, time, and cost of travel will still be a hindrance. However, these limitations are expected to have limited impact from an OO perspective, as business discussions and actual task performance are mainly conducted virtually online.

**Limited awareness as outsourcing destinations:** The three countries (and PICs in general) also require significant awareness raising as potential outsourcing destinations. There are no PICs in the list of well-known global outsourcing destinations published by major consulting firms. In addition, there are only limited examples of GOS-related operations to establish a proven track record for outsourcing.

**Opportunities**

**Increasing political support:** Political support is growing for the use of ICT for development in the three countries. The Government of Fiji has already recognized the importance of ICT as an enabler of economic development and has implemented a number of favorable policies and incentives. In 2013, the Government of Tonga requested the assistance of the Commonwealth Secretariat to develop a strategy to leverage investment in the country's broadband for economic development (Commonwealth Secretariat 2013). The strategy specifically identified global outsourcing services as a key industry development opportunity.

**Unexplored Australian and New Zealand markets:** There is a timely and unique opportunity for the three countries to explore Australia and New Zealand as potential sources of demand for global outsourcing services. As shown in Table 2.1, nearshoring offers the benefit of cultural similarity and ease of management. The PICs are geographically closer to Australia and New Zealand, are located in almost similar time zones, and have high cultural affinity and familiarity. In addition, compared to most potential competitors from Asia or other regions, there is a positive association with Australia and New Zealand because of the perception of the three countries as a tourist destination. Moreover, Australia's multibillion industry already has contact centers with over 200,000 seats, of which over 20 percent are outsourced. However, Australia’s most favored offshoring destinations have been the global industry leaders – the Philippines because of proximity, and India because of process excellence and industry maturity (Avasant 2012).

**Threats**

**Changing labor laws:** The labor laws in the three countries could become onerous for the OO industry. Samoa's labor laws already require part-time workers to be entitled to full-time employees’ benefits after 12 months of employment, regardless of the amount of time spent working. This is challenging for OO as most of its global workers are part-timers. Hence, an intermediary intending to recruit, train, assist, and contract local workers for OO jobs will also become liable for providing such benefits a year after hiring. The labor laws for the other two countries may change in this respect too. In 2014, Fiji introduced its first minimum wage law, and Samoa raised its minimum wage.

**Cybersecurity.** The three countries lack to a varying degree, specific policies, strategies, legislation, and regulation related to cybersecurity. In Fiji, some legislation on cybercrime was enacted through the Crimes Decree 2009: Division 6 - Computer Offences. Tonga has also enacted cybercrime-related legislation in its Computer Misuse Act 2003, Copyright Act 2005, and the Tongan Internet Corporation Registration Act 2000. In Samoa, cybersecurity-related legislation is evident in the Crimes Act 2013, the Telecommunications Act 2005, Broadcasting Act 2008, and Electronic Transactions Act 2008. However, all three countries lack legislation and a regulatory framework that is specific to cybercrime, that is, a
cybersecurity policy/strategy/framework that is in accordance with internationally recognized standards, and a national computer incidence response team (CIRT).
Chapter 7. Findings and Conclusions

Findings

The analysis found the following key competitive advantages for the three countries:

- Availability of a small labor pool that is young and qualified for basic voice or nonvoice BPO tasks. This labor pool is the youngest in the world (in terms of youth bulge and unemployment); and is relatively educated, has a high level of English skills, and is comparatively computer literate.
- Minimum wage costs are comparable to the international wage costs for basic outsourcing tasks.
- Availability of basic Internet infrastructure that is improving in terms of speed, quality, and cost owing to new and ongoing connectivity initiatives.
- Availability of at least one international micropayment mechanism in each country, for example, PayPal, Payoneer, Skrill.
- High level of political support for ICT initiatives resulting in connectivity improvements.
- Basic investment incentives are in place, but only Fiji has highly competitive ICT sector specific incentives.
- Higher ranking in ease of doing business than the leading global outsourcing services players, such as India and the Philippines.
- Emerging local global outsourcing services industry – Fiji already hosts some GOS operations, and in 2014 won the Offshoring Destination of the Year Award by the European Outsourcing Association.
- Ability to offer unique nearshoring services to the Australian and New Zealand markets. The benefits for potential clients include ease of management and operations because of proximity or similar time zones, relatively shorter distances than the nearest competitors, and cultural and business affinity.

The analysis also found the following key competitive disadvantages:

- The three countries’ population and labor pool is small, limiting their ability to serve large clients, and limiting the industry’s potential size and impact on jobs.
- Although minimum wage costs in the three countries are comparable with global benchmarks for basic BPO work, it is not highly compelling from a cost-savings perspective for potential clients, especially since the three countries are new industry entrants in a largely mature global market.
- Doubts about the youth’s ability and willingness to deliver quality on BPO tasks, while their wage expectations are much higher than their country's minimum wages, and are as high as those paid to workers in proven countries like Mauritius.
- Relatively high Internet costs for businesses and individuals.
- Highly limited awareness and virtually no experience in OO.
- Potential clients have limited awareness and experience of the region as outsourcing destinations.

These findings also may be viewed from various industry-specific dimensions:

By the three countries

- Fiji is significantly more ready than Samoa or Tonga for GOS industry development. The country has higher quantity and quality of skills, better telecommunication and physical infrastructure, a minimum wage that is still competitive, and regional and international companies already doing offshoring. Fiji also appears ready to take the lead, as it is positioning itself as the knowledge hub for the region.
By ITO/BPO/KPO subsectors

- BPO is much more feasible for the three countries in the immediate to short term. The general skills level appears sufficient and competitive for basic, voice and nonvoice-based jobs, such as helpdesks, data entry, or digitization. Minimum wages in Fiji and Samoa are also comparable to global BPO wage benchmarks. In addition, Fiji already has experience of voice-based services that could be used as offshoring references.
- It may not be feasible to compete in ITO for now, as there does not appear to be a sufficient quantity and quality of talented people available for this market segment. In addition, undergraduates’ expectations of wages are equal to those of proven locations like Mauritius, but it is not clear if they could deliver their work competitively.
- KPO is unlikely to be feasible in the short to medium term because of the much higher level of skills and service provider maturity and sophistication required.

By Task Segments

- The three countries do not appear to have obvious or particular areas of strengths or specialization for niche offerings, such as graphic design or accounting services. For example, Sri Lanka focused on accounting services in their initial industry development effort, as they had the world’s largest number of certified accountants.

By Source Markets

- There is an opportunity to target Australia and New Zealand as primary markets. They offer a sizeable nearshoring market to be tapped, and the three countries have useable comparative advantage in terms of cultural affinity and positive associations of the countries as tourist destinations.
- There is also an opportunity to target the United Kingdom and Europe as secondary markets. In particular, Fiji can offer British clients a high level of English skills, and use MindPearl’s success as reference. The European Outsourcing Association Award 2014 also provides an excellent testimonial for targeting the European market.

By Operational and Client Size

- The three countries are likely to be more successful by serving mainly small (<$10 million revenue) or emerging ($10 to 100 million revenue) sized clients, as the three countries have limited scalability of labor.
- The three countries could also target medium-size companies because of their growing global demand for GOS (Avasant 2012).
- The three countries are unlikely to be able to serve enterprise-size clients in a large scale, but could offer limited BPO operations as alternatives or backup operations to these clients’ needs for redundancy or 24/7 support. Enterprise clients have typically larger labor pool requirements, and generally prefer service providers to offer total outsourcing solutions (that is, countries that can offer various kinds of ITO/BPO/KPO to meet their complete outsourcing needs, not just BPO).

By Traditional versus OO Approaches

- Both approaches are complementary and are not mutually exclusive, from both the industry development and job creation perspectives.
- PICs are generally more competitive in OO because the traditional approaches (nearshoring/offshoring) are affected more by the inherent challenges of small size and geographic distance.
• The overall job impact may be higher for traditional outsourcing because of its significantly larger global market size.
• OO is not expected to create as many jobs because the global market ($2 billion out of $852 billion) is relatively small at this infant stage. Moreover, jobs are highly competitive because workers have to compete internationally for each piece of work offered online.

Conclusion

The global outsourcing services industry appears to have significant job creation potential in Fiji, Samoa, and Tonga. In Fiji, for example, the study estimates it could create 1,936 to 5,809 direct jobs.

Improving Internet connectivity has made it more feasible for the PICs to examine GOS as a new and innovative channel for job creation. GOS also allows the three countries to compete more effectively than in other industries, since it requires relatively less physical movement of people and exchanges of goods.

In addition, the industry’s impact goes beyond job creation. The three countries can develop a completely new industry, with the potential to contribute between 0.38 and 3.52 percent to the countries’ GDP. Such a new service-based, digital economy industry for the PICs could also contribute to the region’s next phase of growth and development.

The three countries enjoy several comparative advantages, such as having the youngest workforce in the world, the relative ease of doing business, and a significant nearshoring opportunity with Australia and New Zealand. These are the main selling points that the three countries could build upon to further their industry development initiatives. Fiji could also leverage its existing experience and reputation (with ANZ and Mindpearl), its comparatively competitive skills base, costs, and infrastructure, as well as its attractive investment incentives for setting up BPO operations.

As discussed above, it is important to note that stakeholders’ expectations about the industry’s job impact on these countries must be managed. Private sector development alone is unlikely to spur sufficient work to meet emerging job demands in the PICs (World Bank 2014). This is because the inherent challenges of size, distance, remoteness, and isolation remain key constraints for the much larger traditional global outsourcing services market. The OO industry is promising as it helps to overcome these inherent challenges but this industry segment’s size remains limited compared to the traditional outsourcing segment.
Chapter 8. Recommendations

General

The main recommendation is for the three countries to take a phased and focused approach to develop their country’s global outsourcing services industry. Although the analysis identified a few areas of potential comparative advantages, it did not find particularly unique or compelling strengths in the three countries to attract the GOS industry. Consequently, the three countries should maintain a cautiously optimistic perspective as the industry is relatively new to the region, as the much larger traditional market for nearshoring/offshoring is already mature, and given that only Fiji has some experience and operations in place.

One of the three countries could conduct global outsourcing services industry development pilots in the short term, and take the next steps for industry development, provided that the pilots prove that the industry is feasible. While holistic, long-term interventions are essential for developing the PIC's global outsourcing industry, it is also important to identify short-term initiatives that can be easily managed and quickly implemented to test the feasibility of GOS from a practical perspective, and to provide a stronger basis for longer-term interventions.

From a region-wide industry development perspective, the PICs could also consider taking a “flying geese” approach (National Graduate Institute for Policy Studies) in their efforts to grow their respective GOS industry. Such an approach would be based on a regional division of labor pattern as illustrated by East Asia’s rapid development. It describes a regional hierarchy where the production of commoditized goods and services move continuously from the more advanced countries to the less advanced ones. In East Asia’s case, Japan was the lead country, followed by the newly industrialized countries (Hong Kong, Singapore, South Korea, and Taiwan), then the main ASEAN countries (Indonesia, Thailand, and Malaysia), and finally the least developed nations (China, Vietnam, and the Philippines). Hence, the possible sequence or pattern for the PICs could have Fiji as the lead country in the first phase, because of the numerous reasons identified in the SWOT analysis. Tonga and Samoa would be in the second phase, because of their higher connectivity readiness compared to the rest of the PICs. The remaining PICs would form final phase, as connectivity in these countries improves and the region gathers expertise, experience, and visibility as destinations for global outsourcing services.

Fiji could conduct two pilots on a trial and error basis to provide the practical guidance for the longer-term industry development effort across the PICs. One of the pilots could be for nearshoring/offshoring businesses, and another for OO. The total cost of the pilots is estimated at $5 million over 1.5 years, assuming both pilots are implemented concurrently. The pilots should bring in quick wins in terms of job creation, bringing deeper understanding and fine-tuning of the industry development effort for the next stage of growth and expansion over the medium to long term, as well as industry development experience for the other PICs. The pilot should also include activities that leverage key comparative advantages and mitigates major weaknesses identified in this study.

The proposed pilots should take a conservative approach in terms of targeted industry services segments, and aim for measured and quality industry growth. Fiji could focus at the lower end of the GOS value chain (basic BPO services), since it already has experiences of such work and analysis suggests the three countries are more competitive in this market segment. They should also focus on the priority tasks identified as critical factors for success of the pilot and initial industry development effort.

There is also a need to bring in international expertise for the Fijian pilots, as knowledge and experience is required to compete effectively in this global industry. International consulting firms could be engaged for
industry development planning, marketing and communications, business development, training, and so on.38

Depending on the pilot projects’ success, Fiji could also conduct medium to long-term industry development projects in its next phase, while Samoa and Tonga initiate their activities. This next stage of industry development for Fiji would aim to consolidate early competitive strengths, expand industry coverage, and move up the value chain. The activities could be focused on longer-term issues, including:

- The development of a long-term industry vision, strategy, and action plans,
- Workforce training and company certification to international industry standards,
- Policy and regulatory adjustments for industry growth,
- Expanded marketing and business development support, and
- Additional incentives and support to encourage industry towards higher value-added services.

The pilots would also provide a more concrete foundation to identify the critical success factors for long-term GOS industry development in Fiji, and focus on these during the next stage of industry development in the country and across the region. These factors are expected to include:

**Broadband Internet:** Continued connectivity improvements in terms of speeds, reliability, and prices for GOS businesses and individuals. High connectivity costs may hinder foreign investment as well as growth of existing firms. In addition to physical infrastructure investments, a strong regulatory framework that promotes further competition based on open licensing regimes and robust infrastructure sharing would be vital to improve access and lower costs.

**Business environment:** Continued efforts to improve the business environment as represented by the Doing Business rankings. Address the issue of lengthy and complicated administrative procedures by providing a review of government requirements and develop a streamlined process for foreign investors that seek to setup businesses.

**Talent pool:** Improving the quality and quantity of the talent base for the GOS industry, in collaboration with the private sector and academia, in areas such as:

- Improved IT skills of new graduates for high value ITO work.
- Increased number of graduates in various horizontal skills, such as accounting or human resources management to support higher value added tasks in BPO.
- Public-private sector collaboration in training and certification based on the industry's specific needs. Dedicated efforts by the government will be needed to ensure the private sector collaborates more closely with universities to close the education-market gap. Further, developing basic ICT skills at basic/primary education levels are key in the planning of a knowledge-based society. This could be done by reforming the educational curriculum and raising awareness of teachers and parents.

**Diaspora:** Developing policies to better engage the Fijian diaspora. Possible options for exploration includes offering dual citizenship, tax breaks for diaspora companies, and other measures to boost investment and develop private sector capacity.

**ICT sector development:** Structural weaknesses in the ICT sector are one of the main challenges to the development of the sector. Increased government and private sector collaboration is needed to improve the enabling environment, in areas such as:

- Government’s continued assistance and support to the private sector in promoting and representing the industry to external clients;
• Improving the policy, regulatory, and incentive structure for GOS businesses and individual workers; and
• Establishing policy, regulatory, and legal frameworks to mitigate cybersecurity related risks.

Pilot on Traditional GOS

This pilot would aim to catalyze industry growth in Fiji by bringing in more flagship or anchor clients\textsuperscript{39}, and assisting existing GOS operations in the country to expand their operations. This would provide practical lessons and use as industry references for the country and region’s industry growth. It would focus on opportunities in BPO in general, given the country’s greater comparative advantage in this industry subsegment, and would be open various forms of operations in order to extract useful practical learning, including nearshoring or offshoring, and captive or noncaptive operations in the piloting country.

The overall scope of the pilot could include the creation of 1,000 more direct jobs and 2,500 indirect jobs (based on the industry average of 1 direct to 2.5 indirect jobs). The cost and duration of the pilot is estimated at $4.5 million over 1.5 years.

The pilot's value proposition would be based on the unique selling proposition discussed above. The competitive positioning of Fiji could be based on various dimensions. For segment offerings, Fiji could provide voice-based BPO services, such as telemarketing and call centers, and nonvoice based services, such as data entry and digitization that are not sector specific at this exploratory stage. With regard to source markets, the piloting country could target Australia and New Zealand as the primary market for nearshoring, with the United Kingdom and Europe as the secondary market for offshoring. With regard to client industry and size, it is proposed for Fiji to avoid industry-specific focus at this stage, and target small to medium-sized companies to tap into their growing demands for GOS.

The key activities for the pilot would include activities across the four dimensions of analysis. These key activities would include:

• Provision of additional industry specific incentives in wage, training subsidies, and tax exemption for pioneer companies;
• Identifying potential local BPO services providers (for offshoring), and set up of an industry association focused on GOS, for example, NASSCOM in India, and IT and Business Association of the Philippines (IBPAP);
• Establishing a high-level industry champion within government;
• Developing a short-term industry development strategy;
• Conducting a holistic marketing and communications program to mitigate the low awareness and perception issues; and
• Providing comprehensive business development assistance for the government and the private sector for the entire process from qualifying, negotiating, and closing business opportunities.

The details for the proposed pilot program for traditional GOS are shown in Table 8.1.
Table 8.1. Activities, Budget, and Timeline for Fiji Pilot on Traditional GOS.

<table>
<thead>
<tr>
<th>Activity #</th>
<th>Priority and importance</th>
<th>Activity</th>
<th>Subactivity</th>
<th>Additional description</th>
<th>Estimated cost ($)</th>
<th>Estimated timeline</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Project set up, implementation units and monitoring and evaluation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a</td>
<td>High</td>
<td>Identify the government's implementing agency for the pilot</td>
<td>-</td>
<td>Could be a lead agency in collaboration with a partner agency, in sectors related to ICT, trade and investment, finance, etc.</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>b</td>
<td>High</td>
<td>Set up project implementation unit in the implementing agency</td>
<td>-</td>
<td>Small unit of 3 to 5 full and part time staff/consultants</td>
<td>400,000</td>
<td>-</td>
</tr>
<tr>
<td>c</td>
<td>High</td>
<td>Procurement processing for consultants and firm</td>
<td>-</td>
<td>Includes preparation of terms of reference/bidding documents, conducting bid processes and contracting</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>d</td>
<td>Low</td>
<td>Monitoring and evaluation</td>
<td>-</td>
<td>-</td>
<td>100,000</td>
<td>-</td>
</tr>
</tbody>
</table>

2. Direct industry development activities

i. Talents

<table>
<thead>
<tr>
<th>Activity #</th>
<th>Priority and importance</th>
<th>Activity</th>
<th>Subactivity</th>
<th>Additional description</th>
<th>Estimated cost ($)</th>
<th>Estimated timeline</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>High</td>
<td>Establish wage and/or training subsidies (for up to 1,000 workers)</td>
<td>-</td>
<td>Previously offered by InvestmentFiji. For example: South Africa's previous training subsidy offered up to R12,000 (~$1,030) per trainee/agent.</td>
<td>1,000,000</td>
<td>-</td>
</tr>
</tbody>
</table>

ii. Cost

<table>
<thead>
<tr>
<th>Activity #</th>
<th>Priority and importance</th>
<th>Activity</th>
<th>Subactivity</th>
<th>Additional description</th>
<th>Estimated cost ($)</th>
<th>Estimated timeline</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>Medium</td>
<td>Set up and offer tax exemption program for existing and new GOS companies</td>
<td>-</td>
<td>For example: South Africa's incentive system offers a base incentive as a tax exempt grant paid over three years for each global services job created and maintained. A graduated bonus incentive is paid as follows: - 20% bonus for more than 400 but less than 800 offshore jobs paid annually in the year in which the target is reached; - 30% bonus for more than 800 offshore jobs paid annually in the year in which the target is reached. (see <a href="http://www.thedi.gov.za/financial_assistance/financial_incentive.jsp?id=6&amp;subthe">http://www.thedi.gov.za/financial_assistance/financial_incentive.jsp?id=6&amp;subthe</a> ncid=25)</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

iii. Infrastructure

<table>
<thead>
<tr>
<th>Activity #</th>
<th>Priority and importance</th>
<th>Activity</th>
<th>Subactivity</th>
<th>Additional description</th>
<th>Estimated cost ($)</th>
<th>Estimated timeline</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>High</td>
<td>Ensure improved national connectivity results in improved quality and cost of services for GSO businesses and OO workers</td>
<td>-</td>
<td>Foundation for GSO industry that needs to be improved to ensure basic infrastructure is comparable or competitive. Can be covered under existing telecommunication projects over the next year.</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>iii. Infrastructure</td>
<td>a. High</td>
<td>Ensure improved national connectivity results in improved quality and cost of services for GSO businesses and OO workers</td>
<td>-</td>
<td>Foundation for GSO industry that needs to be improved to ensure basic infrastructure is comparable or competitive. Can be covered under existing telecommunication projects over the next year.</td>
<td>-</td>
<td></td>
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<td>-------------------------------------------------------------------------------------------------</td>
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<td>-------------------------------------------------------------------------------------------------</td>
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<td></td>
</tr>
<tr>
<td>iv. Enabling environment</td>
<td>a. Low</td>
<td>Identify and establish industry champion in the government</td>
<td>-</td>
<td>To provide political support, and engage and represent the industry to potential clients</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>b. Medium</td>
<td>Establish private sector partners and institution</td>
<td>Identify local firms as potential BPO service providers</td>
<td>Could be conducted by GSI promotion unit; and preferably select ICT-related firms due to industry similarities</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. High</td>
<td>Short-term industry development strategy</td>
<td>Set up local global services industry association</td>
<td>Could be basic set up for this exploratory stage; with board members, companies, structure, website, market collaterals, etc.</td>
<td>200,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. High</td>
<td>Targeted marketing strategy and programs</td>
<td>Clarify and articulate value proposition; and develop marketing and communications plan based on the industry development strategy</td>
<td>Example: - Competitive BPO voice and nonvoice services, training subsidies, ease of doing business, etc. - For Australia market: Similar time zone and close by for ease of management and operations, cultural/business affinity - For UK/European market: Winner of outsourcing award</td>
<td>1,000,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Develop marketing collateral</td>
<td>Could include informational websites, brochures, presentations (slides and videos), print and nonprint advertising, etc.</td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Place advertisements and conduct events</td>
<td>Limited advertising in relevant print and nonprint media, participation in a few important and relevant events, conduct roadshows to target markets, etc.</td>
<td></td>
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<tr>
<td>e. High</td>
<td>Comprehensive business development support and program</td>
<td>Business development trips and roadshows</td>
<td>2 to 4 trips or roadshows to the targeted market for direct promotion of the country</td>
<td>1,500,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct business development assistance</td>
<td>Expert assistance to the government (for captive) and local companies (for noncaptive) in the entire business development process, covering qualifying, prospecting, proposing, negotiation, contracting, etc. Activities include: - Identifying potential client medium to mid-sized companies in targeted markets - Finding relevant high-level contacts and set up business meetings - Preparing presentations and guidance during business discussions - Assistance in proposals, negotiations and contracting</td>
<td></td>
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</tbody>
</table>
Pilot on Online Outsourcing

The OO pilot would be aimed at practical testing of this relatively new industry from various perspectives. It would assess the willingness of high-school graduates and female homemakers to do lower task types (for example, data entry, digitization, image rendering, and so on), and graduates and undergraduates’ willingness to undertake and competitiveness in higher task types (for example, programming, search engine optimization, web page design, graphic design, and so on). It would also provide insights on the long-term interest and sustainability of workers or businesses in OO, and help the pilot's workers to win and perform actual jobs on international OO platforms.

The scope of this pilot is for activities to create 300 jobs, and the estimated cost and duration is $500,000 over one year. An intermediary/agency approach is more suitable for the OO approach because of the varied types of issues and support needed. Such an intermediary has multiple roles, to:

- Provide working facilities with computers and the Internet.
- Recruit a specified number of workers from different demographic groups, including high-school and university graduates, women and disabled persons, and across occupational groups including the unemployed, students, and housewives.
- Contract with workers and formalize the workforce for labor rights and tax purposes.
- Provide classrooms and hands-on training in OO, actual use of the OO platforms, and assistance for workers to win and deliver their first jobs.
- Enable receipt of remuneration by individual workers, through bulk receipt of payments on the workers' behalf, and distribution to each worker through local bank mechanisms.
- Conduct comprehensive monitoring and evaluation, and provide comprehensive operational reports on:
  - Worker numbers, profiles, and work patterns (percentage of work done at home or shared facilities, hours worked, types of tasks performed, earnings, and so on).
  - Systems for recruiting, training, rostering of workers, shared use of facilities, payment mechanisms, and so on.
  - Audited accounts of payments to workers.

There are also various unique implementation factors that should be taken into account for the OO pilot. The pilot should contract with an organization (business, academia or NGO) as intermediary to conduct most of the pilot’s activities, as this will help to provide useful lessons on interest of different types of organization and their ability to function as intermediaries in the longer term. The pilot may also have to be conducted in the main islands or more developed urban areas as they have significantly better last-mile Internet connectivity, and could provide quick wins. The pilot should also consist of at least two operational set-ups in different locations, to cater for different task types and levels, demographics, and work. It should also bring in international expertise to help kick start the industry, given the lack of experience in each of the three countries in the global OO marketplace. The details for the proposed pilot program for OO are shown in Table 8.2.
Table 8.2. Activities, Budget, and Timeline for Pilot on Online Outsourcing.

<table>
<thead>
<tr>
<th>Activity #</th>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a</td>
<td>High</td>
<td>Set up project implementation unit</td>
<td>-</td>
<td>Small unit of 3 part-time staff/consultants. Could be set up in ministries or agencies related to ICT, trade and investment, or finance, etc.</td>
<td>100,000</td>
<td>Q1 Q2 Q3 Q4 Q5 Q6</td>
</tr>
<tr>
<td>b</td>
<td>High</td>
<td>Procurement processing for consultants and firm</td>
<td>-</td>
<td>Includes preparation of terms of reference/bidding documents, conducting bid processes, and contracting</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>
| c | High | Engagement of firm as OO intermediary | - | - Firm hired could be private sector, academia or NGO  
- Has to provide comprehensive operational reports on:  
i. Worker numbers, profiles and work patterns (percentage of work done at home or shared facilities, hours worked, types of tasks performed, earnings, etc.)  
ii. Systems for rostering of workers, shared use of facilities, payment mechanisms, etc.  
- Has to provide comprehensive audited accounted of payments to workers | 350,000 | Q1 Q2 Q3 Q4 Q5 Q6 |
| d | Low | Monitoring and evaluation | - | - | 50,000 | Q1 Q2 Q3 Q4 Q5 Q6 |

2. Direct industry development activities

I. Talents

| a | High | Recruitment of pilot and selected types of workers | Batched recruitment | - Recruit total of 300 workers from different demographic groups and target workers  
- Breakdown of demographic group is to be specified in bid documents and contracts. It will include high-school and university graduates, women and disabled people, and across occupational groups including unemployed, students, and housewives | By intermediary | |
| b | High | Classroom and on-the-job training | Batched training | - In multiple training batches during the pilot period  
- Training duration is estimated at 3 days for classroom, and 2 weeks for on-the-job | |

II. Cost

| a | | | | | | |
| b | | | | | | |

III. Infrastructure

| a | High | Provision of work facilities with computers and Internet | - | - Could use existing facilities; such as telecenters, computer labs, or cybercafes | By intermediary | |
| b | Medium | Provide micropayment services to workers | - | - Could be bulk receipt of payment from the OO platforms; and distribution to workers via cash, checks, and local bank mechanisms | |

IV. Enabling environment

| a | Medium | Contracts with workers and formalizes labor for rights and tax purposes | - | - | By intermediary |

Total cost 500,000
Reference List


http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2013/09/09/000456286_20130909094536/Rendered/PDF/809770WP0Conne00Box379814B00PUBLIC0.pdf.


Notes

1 Mobile penetration is difficult to compile as not all countries systematically collect it, and some operators are cautious about providing data. For mobile penetration, different operators use different definitions for “active” subscribers, and in some countries penetration may exceed over 100 percent.


3 Fiji Islands Bureau of Statistics. 2007. Paid Employment by Major Industry Group, by Race and Sex. http://www.spc.int/prism/fjtest/Social/paid_employment.htm. Note that no data later than 2007 seems to exist. The total population has not changed significantly over the past few years (still more than 400,000), hence it should have limited impact on the comparison.


5 Fiji (World Development Indicators), and Samoa (2011 census).


8 Significant OO related information in this report is extracted from the World Bank’s forthcoming publication on The Global Opportunity in Online Outsourcing (Project number: P149016). The publication is expected to be released in 2015.


10 Significant OO related information in this report is extracted from the World Bank’s forthcoming publication on The Global Opportunity in Online Outsourcing (Project number: P149016). The publication is expected to be released in 2015.

11 NASSCOM employment numbers available at http://www.nasscom.in/impact-indias-growth

12 According to the IT & Business Process Association of the Philippines (IBPAP).


14 Based on the government’s statistics of 2,358 telecommunications jobs discussed above.

15 Based on interviews with ANZ Pacific Operations and Mindpearl.


17 Fiji (World Development Indicators), and Samoa (2011 census).


19 According to the report, men dominate paid employment (outside of agriculture) across the PICs, and women have access to a narrower range of employment options.

20 Based on NASSCOM’s size classifications, whereby medium-sized operations are valued at $100 million to $1 billion, and large operations are those with over $1 billion revenues (see NASSCOM 2014).

21 Calculation is based on median BPO salary of MUR 8,300 per month.


24 Based on authors’ discussions with international OO firm operating in Nepal.

25 Based on authors’ discussions with international OO firm operating in Nepal.

26 Telecom Fiji Homelite Plan, see https://www.connect.com.fj/index.php?route=product&prod=612f50a56b8fc61f55800f287800a314&action=view&c
gategory=1.

27 World Bank mission data.
32 World Bank data.
38 Numerous firms provide such specialized services for the GOS industry, such as Avasant, A.T. Kearney, Ernest &Young, Gartner, IDC, McKinsey, PricewaterhouseCoopers, Tholons, and so on.
39 Defined as client companies that could provide a steady flow of work and employment for the country, boost the country's industry profile, provides a meaningful and useful testimonial, and/or is helpful for acquiring more GOS businesses.