NESsT

Supported by
J.P.Morgan

LEARNING SERIES

Closing the Skills Gap in Poland

Leveraging the Promise of Social Enterprise and the BPO Industry

Authors: Izabela Przybysz, Agnieszka Orzechowska and Gabriela Cichowicz

Editor: Nicole Etchart

CLOSING THE SKILLS GAP IN POLAND: LEVERAGING THE PROMISE OF SOCIAL ENTERPRISE AND THE BPO INDUSTRY

NESsT would like to thank the JPMorgan Chase Foundation for generously supporting the research and publication of this study, and our work to support social enterprises that provide dignified employment for at-risk communities in Poland.

NESsT would also like to thank the following organizations who participated in the research and were kind enough to share their perspectives: Association of Business Service Leaders, Broad Alliance for Digital Skills established by the Ministry of Administration and Digitalization and Poland's Digital Champion, Clear2pay, Coders Lab, Codilab, Cracow Regional Labor Office, Efektum, Euro AGD, E&Y, Fundacja Perspektywy, Geek Girls Carrots, GFT Poland, Hays Group, Infosys, Interactive Advertising Bureau Poland, Microsoft, Multimedia, National Center for Supporting Vocational and Continuing Education, Office of Electronic Communications, Orlen Upstream, Polish Marketing Association, Pragmatists, PwC, PwC Gdańsk, Santander Geoban, SkillHunt, and Zakłady Azotowe Puławy

Authors: Izabela Przybysz, Agnieszka Orzechowska and Gabriela Cichowicz
Editor: Nicole Etchart
English Translation: Peter Nicholson
Design & Layout: Melanie Finke
Cover Photography: CodersLab

ISBN 978-1-930363-49-6
Copyright ©2017 NESsT
All rights reserved

NESsT promotes the social, political, economic and religious rights of all people and does not discriminate on the basis of age, gender, race, national origin, mental or physical disability, sexual orientation and political or religious opinion or affiliation.

Do not cite, copy, distribute or duplicate without prior written permission from NESsT. If you use or quote the contents of this publication, please acknowledge NESsT as author.

This publication contains information drawn from sources outside NESsT and opinions based on that information. NESsT strives to provide accurate information and well-founded opinions, but does not represent that the information and opinions expressed in this publication are error-free.

4 Introduction

5 Youth and Women Employment Trends

9 Fastest Growing Sector: Business Service Centers

20 The Labor Market as Seen by Employers

25 Vocational Education in Poland

33 Opportunities in the BPO Sector

38 Competencies Needed by Employers

57 Innovative Models to Increase Levels of Employment

63 Conclusion

65 Appendices

Introduction

THE LACK OF APPROPRIATE SKILLS CONTINUES TO KEEP MILLIONS OF PEOPLE FROM ENTERING THE FORMAL LABOR MARKET, AND IN A STATE OF UNDEREMPLOYMENT AND POVERTY, WHILE THE LACK OF QUALIFIED LABOR AND TALENT CONTINUES TO BE A KEY CAUSE OF CONCERN AMONG EMPLOYERS THROUGHOUT THE WORLD.

To address this issue, NESsT launched NESsT Empowers, a program that tackles the lack of quality, skilled jobs available for under-served communities. The program invests in social enterprises that prepare people from these communities for dignified employment. It does this by engaging with corporations in high growth industries to partner with social entrepreneurs in designing demand-led workforce curricula and preparing at-risk communities for labor inclusion. In addition to training, these enterprises provide program beneficiaries with first-time employment opportunities in the enterprises themselves as well as rehabilitation and integration support once they begin to work. The premise of the program is that social enterprises are particularly suited for preparing at-risk communities, given their in-depth understanding of the realities faced by these communities and their proven track record in addressing these realities. The program has created more than 3,500 skilled employment opportunities to date and in the next five years, the goal is to scale NESsT Empowers by doubling its impact and creating 7,000 skilled jobs.

It is within the context of NESsT Empowers that NESsT partnered with the JPMorgan Chase Foundation to conduct research centered on identifying employment opportunities for underserved communities in Poland who face difficulties finding work. In particular, the research assessed youth without relevant work experience and women who do not currently participate in the labor force. The Report dives deeply into the skills and other support mechanisms that are needed to help these groups find long-term and livable wage employment while satisfying the employment needs of Business Services Centers, a key high growth industry in the country. The thought was that this research could also be the foundation to assess other at-risk communities and other high growth industries in the future.

The first part of the report provides a short overview of employment and underemployment trends among youth and women in Poland. The second part contains an analysis of the business services sector as the one with the greatest potential for the creation of jobs in Poland in the next few years, and discusses details of the sector, its prospects for growth, and the job skills needed by businesses operating in it. The report then examines the vocational education system in terms of the opportunities it presents to gain the skills needed for work in the business services sector. It goes on to describe the profile of vocational school graduates and their employment prospects. This is followed by a detailed description of the skills that are in particular demand by employers in the business services sector, the extent to which they are included in vocational school programs, and the steps that would need to be taken to include these skills in supplementary training programs for people who are looking for work. The next part discusses innovative measure to minimize the imbalance between labor market supply and demand that are currently being piloted by a range of different institutions in Poland and in other countries. The report ends by describing why social enterprises are best positioned to implement these best practices and what needs to happen to ensure that these models are supported by a comprehensive multi-stakeholder strategy.

Please see Appendix 1 (page 64) for a full description of the research methodology used to complete this study.

Youth and Women Employment Trends

IN 2015, POLAND RANKED AS THE EIGHTH-LARGEST ECONOMY IN THE EUROPEAN UNION AS MEASURED BY GDP AND WAS RECOGNIZED AS ONE OF THE WORLD'S MOST IMPRESSIVE GROWTH STORIES.[1] HOWEVER, DESPITE THE VERY INTENSIVE GROWTH OF THE LAST 25 YEARS, POLAND IS STILL AFFECTED BY MANY SOCIAL PROBLEMS THAT IT HAS NOT BEEN ABLE TO OVERCOME.

In fact, it could even be said that the beneficiaries of Poland's economic growth are mostly urban, educated men over the age of 35. Meanwhile, poverty in Poland has remained largely unchanged for the last 15 years. The poverty rate is 16.7%,[2] and one in five people say their material situation is poor Paradoxically, despite the fact that unemployment in Poland has fallen in recent years (in March 2016 it stood at 10%), the percentage of people living in poverty has not changed. This is because unemployment is not the only reason for their poor material situation, as many people experience difficulty finding stable work or cannot escape low wages. According to data for 2013 released by the Central Statistical Office of Poland, 1.4 million people were working only under contracts for services or work made for hire agreements, and 1.3 million people were earning less than the statutory minimum wage.[3]

The lack of stable and higher wage employment is a problem faced principally by young people. In 2014, one in four employed people under 30 was working under a contract governed by the Civil Code, such as those mentioned above, and not under a formal contract of employment governed by the Labor Code. This is not because young people choose this situation, but because other options are not usually offered to them when they are looking for their first job – employers use these arrangements in an effort to reduce their employment costs.

Analysis of labor force participation shows that in comparison to the overall population, people who are under 30 find it much more difficult to get a job. In Poland, unemployment among people under 30 is 20%.[4] Particularly disturbing, however, is the number of people classified as NEET (not in education, employment, or training), which remains at a permanently high level. According to figures produced by Eurostat for 2013, the proportion of under 30s in this category in Poland was 22.7%. Most of these are people who have tried to find work but have been unsuccessful, and who do not have the opportunity to improve their qualifications. This group also includes people for whom it is difficult to take up employment because of a disability, or, in the case of women, whose family commitments prevent them from taking on a full-time job.

The low youth labor force participation rate is also the result of changes to the education system introduced in the 1990s. These reforms were intended to achieve the following:[5]

- An increase in the proportion of students in general high school education to 80% and a reduction of the proportion in vocational education at post-

1 *Poland 2025: Europe's new growth engine*, McKinsey & Company, Warsaw, 2015.

2 *Ubóstwo w Polsce w 2015 r. [Poverty in Poland in 2015],* Central Statistical Office of Poland, Warsaw, 2015.

3 The statutory minimum monthly wage in 2016 is zł1850 (about $475).

4 Data provided by the Central Statistical Office of Poland, 2013.

5 *Reforma systemu edukacji: szkolnictwo ponadgimnazjalne [Reform of the Education System: Post-Middle School Education]*, Ministry of National Education, Warsaw, 2000.

middle school level to 20% (i.e. a reduction of more than half in the proportion of students at vocational schools compared to before the reform).
- A six-fold increase in the gross enrollment ratio in higher education (from 11% in 1990 to 65% in 2010).

These changes had very important consequences for vocational education, which became almost completely insignificant as the proportion of students attending basic vocational and technical schools fell from 53% to 20%.[6] This marginalization of vocational education not only caused a drop in interest in these types of schools among potential students, but also among the employers who worked with these schools in order to recruit prospective employees. This led to an overall reduction in the quality of education provided by vocational schools, and a parallel reduction in the employability of graduates representing different occupations.

Another significant factor which lowered the prestige of vocational education was the fact that a large number of new institutions of higher education opened during this period in Poland, while at the same time there was a reduction in the entrance requirements at high schools and universities. Between 1990 and 2010 the number of students in higher education in Poland rose by 370%. This growth occurred mainly among students in social sciences and humanities at privately funded universities, because opening new courses in these areas and increasing the number of places available to future students was relatively cheap and did not require investment in special facilities and equipment such as laboratories, machines, etc. There was also a reduction in the number of students interested to enroll in science and math courses, which was a consequence of changes in educational policy that anticipated lower achievement in these subjects at high school. For example, from the 1980s to 2009, mathematics was not a compulsory subject to receive a high school diploma. Another reason the quality of tertiary education was not very high was because universities, and in particular privately funded ones, were interested mainly in attaining high student enrollment and much less interested in providing high quality education. As a result of these changes, the gross enrollment ratio in higher education in Poland is now 41.2% – higher than both the EU and OECD averages (37.9% and 33% respectively).[7]

The main consequence of this process is the growing imbalance between supply and demand seen in the labor market in recent years. There is an increasing oversupply in some occupations, where the number of qualified personnel is significantly higher than is needed by the market, such as the case of nutritionists, clothing technology technicians, hospitality technicians, and gardeners. Also an oversupply of university graduates in humanities and social sciences, without a corresponding need for talent in these areas among employers.[8] While at the same time, labor trends show that there is still a strong need for people trained in certain vocational skills that have been de-emphasized. As a result, it

6 *Reforma systemu edukacji: szkolnictwo ponadgimnazjalne [Reform of the Education System: Post-Middle School Education],* Ministry of National Education, Warsaw, 2000.

7 *Education at a Glance,* OECD, Paris, 2010.

8 Analysis of the structure of education at Polish universities shows that the highest proportion of students are studying courses in social sciences and law (37.6 %), whereas technical subjects account for only 16% of students (*Szkolnictwo wyższe w Polsce [Higher Education in Poland]*, Ministry of Science and Higher Education, Warsaw, 2013).

is often said that the educational reforms that took place after 1990 did not match the needs of the labor market which has in turn resulted in unemployment and underemployment of young people on the supply side and a talent gap and lack of skilled labor among many industries and sectors on the demand side.

In Poland, women are also in a particularly difficult situation in the labor market. This is seen by factors such as the low number of women working in technical occupations, gender pay inequality, and the higher unemployment rate, lower labor force participation, and lower employment rate among women.

Polish women are better educated than men, and this has been the case in Poland since the 1980s. In 2015, for example, 20.1% of women had completed tertiary education compared to 15.6% of men.[9] In spite of this, however, having a university education has not protected women from unemployment. One of the main causes of this situation is the fact that women more often choose to study humanities and social sciences,[10] whereas, as mentioned earlier, the supply of graduates in these areas greatly exceeds demand. Women study technical and science subjects less often, although these subjects offer better employment opportunities. For example, women are less likely to choose specializations such as mechanic and IT technician, and in technical secondary schools with an IT track, women comprise only around 10% of students. This is one factor that contributes to worsening the position of women in the labor market.

This situation is reflected in the unequal salary received between women and men often for the same positions. In 2015 women earned an average of zł3,400 gross per month, while men earned an average of zł4,200. Women were therefore affected by a pay gap of 19%.[11]

Unemployment among women is two percentage points higher than among men.[12] The situation is particularly difficult among young women – 33% of women under 24 are looking for work.[13] Women are also more often at risk of long-term unemployment. In 2014, 41.6% of registered unemployed women had been unemployed for longer than a year, while in the case of men this figure was 34.9%.[14]

In addition, a large number of women are unemployed and are not looking for a job. The Central Statistical Office of Poland reported that in 2015, women accounted for 61.6% of all people who are not in the labor force in Poland, while men made up 38.4%. Almost half of these women are of working age. Inactive women more often than men cite family responsibilities as the reason for leaving the labor force. They also often cite discouragement due to their failure to find work, or a lack of belief that work can be found at all.

9 Data provided by the Central Statistical Office of Poland, 2014.

10 Data show that in 2011 only 31% of men chose to study humanities, 34% chose social sciences, and 88% chose IT *(Szkolnictwo wyższe w Polsce [Higher Education in Poland],* Ministry of Science and Higher Education, Warsaw, 2013).

11 Data based on *Ogólnopolskie badanie wynagrodzeń 2014 [Polish National Pay Survey 2014]*, conducted by the website www.wynagrodzenia.pl (Sedlak&Sedlak).

12 Data provided by the Central Statistical Office of Poland, 2015.

13 Data provided by Eurostat, 2014.

14 Data provided by the Central Statistical Office of Poland, 2014.

Demographic Crisis

Another important aspect affecting the growth of the Polish economy and opportunities for youth in the labor market is that of demographic trends. All population forecasts show that between now and 2030, Poland will confront two important trends: a fall in the population and marked changes in its structure, which will be seen in the ageing of society. These two trends will be the result of the growing imbalance between the falling birthrate and the death rate, and of the gradual extension of average life expectancy. While in 2010 there were around 5.5 million people under 30, it is predicted that in 2060 there will only be 3 million. According to the forecasts, the size of the 60+ age group will increase from 7 million in 2010 to around 13 million in 2060.[15]

A further problem for Poland is negative net migration – more people leave the country to look for work than those who come into the country for the same reason.[16] For years, economic migration from Poland has continued at a high level. In 2014, going abroad to find work at some time in the next 12 months was being considered by as many as 14.7% of Poland's working population.[17]

Paradoxically, these same demographic trends may represent an opportunity for women, youth and other people who do not currently participate in the labor force. For continued rapid growth of the economy, Poland needs to reduce outward migration among people seeking employment and ensure that these groups, as well as others that are not participating in the labor force (NEET) can find stable employment at home. To do this, the public and private sectors need to reassess educational reforms and begin to invest in providing affordable and appropriate education and training opportunities for these same groups that will prepare them to meet the real needs of the local market. And to do this, there needs to be a much focused effort to understand the talent needs of employers, and particularly of high growth industries in the country.

As mentioned in the introduction, and based on overall industry research, this study will focus primarily on Information Technology and Business Services Centers, as one of the highest growth industries in the country. However, a similar focused approach of intentionally preparing youth, women and other groups for stable employment can be applied to other high growth industries.

15 *Przewidywane zmiany struktur wieku ludności Polski a podaż pracy. Czy przyszły spadek liczby aktywnych zawodowo w Polsce jest nieuchronny [Predicted Changes in the Age Structure of the Polish Population and the Labor Supply. Is a Future Fall in the Number of People Participating in the Labor Force in Poland Inevitable?],* Warsaw, 2012.

16 According to the Central Statistical Office, net outward migration has been rising over the last few years and in 2014 reached almost 15,000.

17 *Migracje zarobkowe Polaków [Economic Migrations of Poles],* Warsaw, 2014.

Fastest-Growing Sector: Business Services Centers

IN RECENT YEARS POLAND HAS SEEN THE ESTABLISHMENT OF INCREASING NUMBERS OF BUSINESS SERVICES CENTERS, OFFERING GREAT PROMISE FOR GROWTH IN THE POLISH ECONOMY.

These include shared services centers (SSC), business process outsourcing (BPO) and information technology outsourcing (ITO) providers, and research and development (R&D) centers. While it is true that most of what these organizations do involves carrying out work outsourced to them by other firms and that this limits their potential for development, this is nonetheless a dynamically changing and diversified sector. A range of services is provided in the sector, including IT, finance, accounting, human resources, and marketing, creating a need for people with a variety of different qualifications and experience. Experience gained in the sector can benefit career development, even if in any one center the possibilities for promotion are limited. Work of this kind also enables employees to be part of the global economy, because business services organizations provide services to large international corporations, and the processes involved are managed across global markets.

Over the last few years, Poland has emerged as a world leader in the growth of business services centers. The range of services provided is more extensive than in other countries in Central Europe, and while new service providers of this kind continue to be launched in Poland, those which have been in operation for some years are also increasing their workforce numbers. The explosive growth in business centers is interesting when considering that outsourcing is just over ten years old and is the country's youngest business sector. The reasons for this growth are found in Poland's human capital, the convenient logistics available in cities, the fact that it is on the same time zone as most other EU countries, its stable and predictable legal system, and labor costs that are lower than in Western Europe. Analysts predict that with the right policy this sector can undergo still further growth over the next decade, creating as many as 450,000 jobs.[1]

Close to half of all outsourcing centers operating in Central and Eastern Europe are located in Poland. Furthermore, in the Tholons *Top 100 Outsourcing Destinations 2015* report,[2] which looked at factors including the quantity and quality of human resources, labor force education, the cost of doing business, available infrastructure, and investment risk, Cracow was ranked the best outsourcing location in Europe and ninth best in the world. Alongside Cracow, this year's (2016) ranking places Warsaw at 30th in the world and Wrocław at 62nd.

In 2004, 91 services centers established with foreign capital were operating in Poland. In 2007 there were over 200, in 2010 the number had reached 300, and in 2012 the number passed the 400 mark. In 2015 there were 532 services centers in Poland owned by foreign investors, and on top of this here were other services centers operating under Polish ownership. A recent survey[3] shows that the business services sector in Poland currently employs around 160,000 people in over 530 centers.

1 *Sektor nowoczesnych usług biznesowych w Polsce 2015 [The Business Services Sector in Poland 2015],* Association of Business Service Leaders, Warsaw, 2015.

2 *Top 100 Outsourcing Destinations 2015*, Tholons, 2014.

3 *Sektor nowoczesnych usług biznesowych w Polsce 2015 [The Business Services Sector in Poland 2015],* Association of Business Service Leaders, Warsaw, 2015.

A characteristic feature of this sector is that it is strongly concentrated in cities. The ten largest business services locations (Cracow, Warsaw, Wrocław, the Tricity area, Łódź, the Katowice agglomeration, Poznań, Bydgoszcz, Szczecin, and Lublin) account for 95% of all jobs in foreign-owned services centers in Poland. In 2014 the largest employer in this respect was Cracow, where foreign services centers employed 30,600 people, or 24% of all staff in this sector in Poland.

Types of Services Provided

The business services market in Poland is very diverse. Centers based in Poland provide a wide range of services for clients throughout the world, and most offer services in several business processes. Furthermore, research shows that the range of these services is increasing year-to-year.[4]

Data from 2014 show that the most common type of services center in Poland were shared services centers (SSCs), of which there were 165, employing a total of 44,100 people. There were 113 R&D centers, which employed 21,600 people, and 109 BPO centers, which gave work to 33,700 people. A further 21,100 people were employed in a total of 73 ITO centers, and 7,700 people were working in 10 other business services centers which were difficult to fit into any of the above types. The number of people employed in services centers of each type is shown in Table 1 (right).

Table 1: Employment Numbers in Services Centers

Type of Center	Number of Centers	Number of People Employed
Shared Services Center (SSC)	165	44,100
Research and Development (R&D)	113	21,600
Business Process Outsourcing (BPO)	109	33,700
Information Technology Outsourcing (ITO)	73	21,100
Other	10	7,700

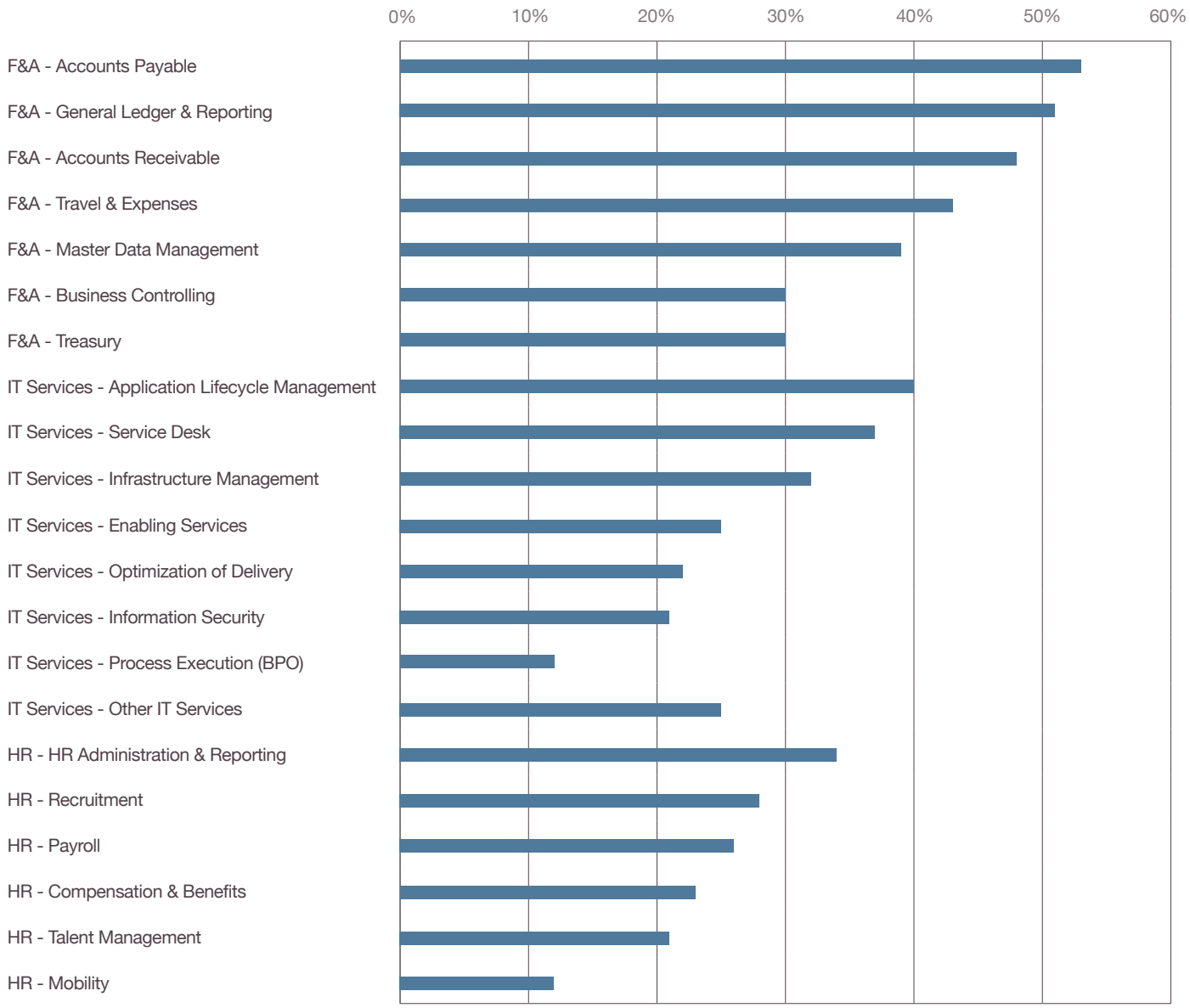
Source: *Sektor nowoczesnych usług biznesowych w Polsce 2014 [The Business Services Sector in Poland 2014],* Association of Business Service Leaders, Warsaw, 2014, p. 12.

4 *Sektor nowoczesnych usług biznesowych w Polsce 2015 [The Business Services Sector in Poland 2015],* Association of Business Service Leaders, Warsaw, 2015.

Graph 1 (page 12-13)[5] shows which business processes are managed in services centers in Poland. The most popular are finance, accounting, and administration. As many as 50% of centers provide services in accounts payable, general ledger, and reporting. A large share is also occupied by services in IT and data management. The most commonly offered services in the area of support for marketing and sales processes (including online sales) are the design and supply of advertising materials and services (in particular below-the-line advertising), sales support, and event organization. Other services include the construction and servicing of advertising media, sending mailshots, and outsourcing of auxiliary and back-office functions – among the most popular services here are the archiving of paper and electronic documents.

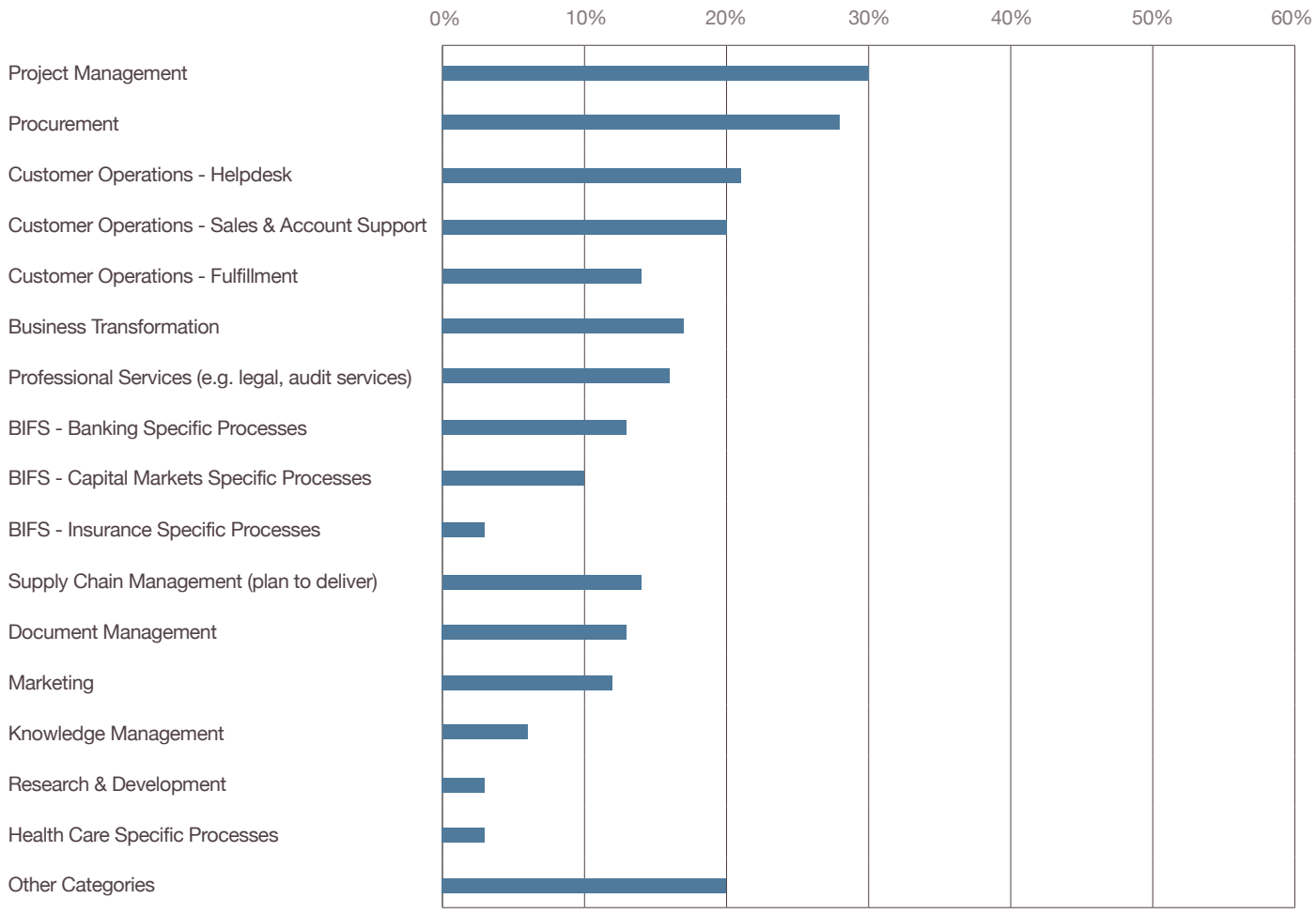
5 Some centers offer services in several different areas, meaning the percentage values given do not add up to 100.

Graph 1: Proportion of Centers Offering Particular Services



Source: *Sektor nowoczesnych usług biznesowych w Polsce 2015 [The Business Services Sector in Poland 2015],* Association of Business Service Leaders, Warsaw, 2015, p. 22.

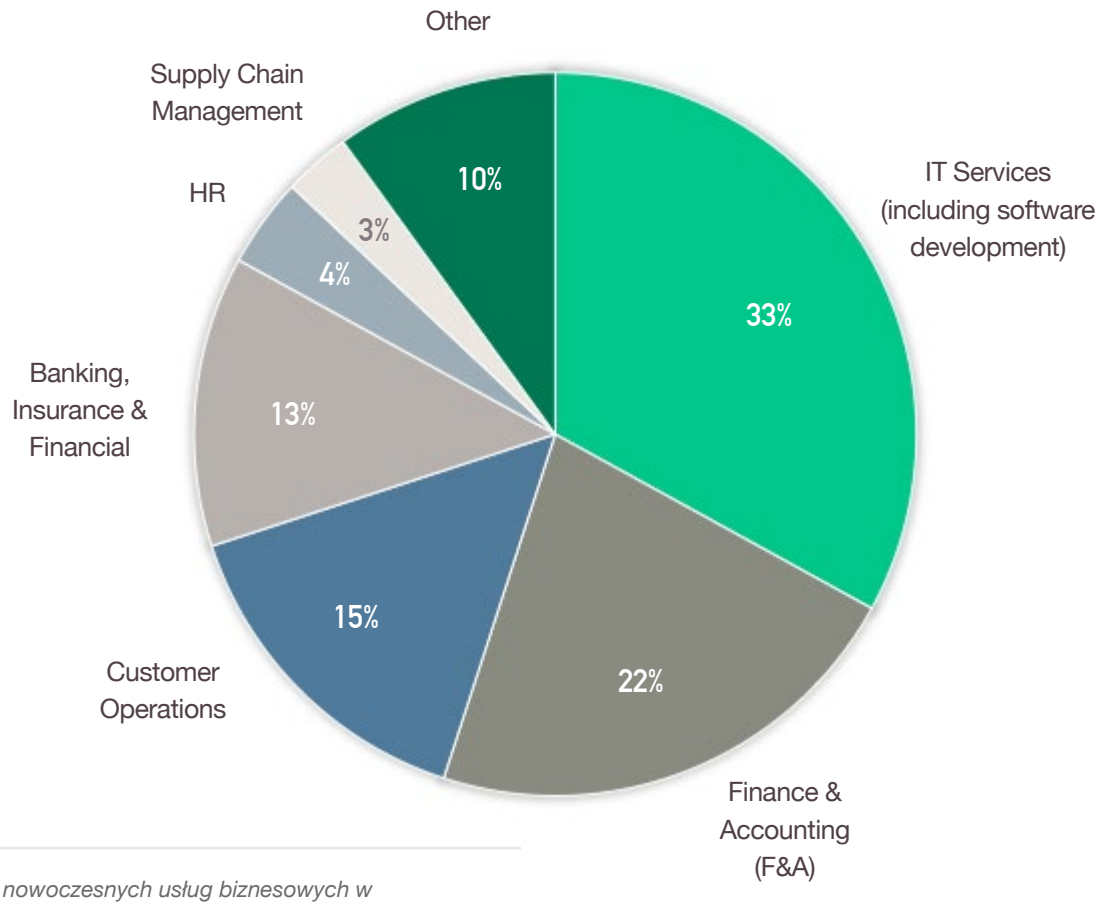
Graph 1: Proportion of Centers Offering Particular Services (continued)



The employment structure in different sectors is shown in Graph 2 (below). A recent study shows that over 33% of people employed in business services centers work in services related to IT, 22% in finance and accounting, 15% in customer operations, 13% in banking, insurance, and financial services, and 4% in human resource management. When compared to 2014 data, IT, finance and accounting services are experiencing the highest rates of growth.

Business services sector employers interviewed for this study expect that they will need to increase recruitment of new personnel as this growth continues. They also admitted that this will not be easy, and that finding employees with certain skills has been difficult for the past several years. Many of them said that the difficult situation in the labor market means they have been forced to lower their requirements during recruitment and have had to accept the need to provide people with

Graph 2: Employment Structure in Services Centers Grouped by Category of Process Managed



Source: *Sektor nowoczesnych usług biznesowych w Polsce 2015 [The Business Services Sector in Poland 2015],* Association of Business Service Leaders, Warsaw, 2015, p. 20.

training in vocational skills after employing them. The problem is not just with finding new employees, but also with keeping them. Employers admitted they face high turnover, with employees leaving to work in other, newly established services centers, which makes it difficult to run operations smoothly.

The skills that are in greatest demand can be divided into three categories based on the results of primary research:

- Managerial skills related to work in the business services sector.
- Professional skills in accounting and finance, cash flow analysis, sales and procurement, business transformation, document management, sales and marketing support, and telephone customer service and telemarketing (in call and contact centers). There is also great demand for specialists in IT and telephone systems, and in particular in areas such as programming, writing applications, the use and design of tools for data collection and processing, and securing and analyzing information.
- Language skills, in particular in English, German, French, Spanish, Italian, and Portuguese.

Although people with these skills and competencies have the greatest chance of finding employment in the sector, it should be noted that business services centers mostly recruit people with little work experience. Interviews with employers showed that often the field or technical area studied at university or a more specialized educational or training institution is not the most important factor when deciding whether to employ a prospective candidate. Indeed, employers are open to hiring people who have completed their secondary education but have not gone on to pursue higher education. Employees are also recruited from among humanities graduates, even if the hiring opportunity is not directly related to these subjects. The employers we spoke to gave examples of employees who are succeeding and moving up in their firms despite not having formal qualifications. These included cases of people working in IT services centers who do not have an education in IT and who originally treated programming as a hobby or had a practical knowledge of spreadsheet data analysis.

Conditions of Employment in the Business Services Sector

All of the firms included in the research employ their staff under formal contracts of employment governed by the Labor Code. Employees are usually given an initial contract for a probationary period of three or six months. If during this time their work is up to standard, they are given a permanent contract. The employers interviewed also stressed that they use measures to help employees with child care, such as allowing flexible working hours. Some firms ask employees which days of the week they can work, and in some cases there are employees who can only work on weekends. This is done at Geoban in Gdynia, but there are probably also other centers that have similar practices. For many people who have family obligations (usually women in the case of Poland), measures of this kind are the only way they can take up paid employment. These characteristics demonstrate that business services centers – to a greater extent than perhaps other employers – can adapt to the needs of employees with families and give people a real chance to find employment and combine this with family life.

It was difficult to obtain information on compensation from the interviews with employers. Most of the people interviewed were reluctant to reveal the salary levels offered to new employees, explaining that this was confidential information that might be used by rival firms

trying to poach staff. For this reason, the information about average earnings given in this report is based both on some information obtained during the interviews substantiated by data from published reports on remuneration in the sector.[6] The information from these sources was consistent.

The highest compensation in the business services sector is earned by IT professionals. As was said by one employer, for about four years now the sector has been a "candidate's market" in Poland, meaning that there are more positions available than people applying. Employers stressed that it is very hard to find people with good programming skills and adequate relevant experience. This is seen in the levels of compensation received by people who meet these requirements. According to the people interviewed, people with IT qualifications who are starting their first job can expect to earn around zł3,500 (US$870) gross per month. This information is confirmed by published reports on the remuneration of IT professionals. It should be noted that this is a specialization where earnings rise quickly with experience. After five years, IT professionals can achieve a gross salary of zł10,000 (US$2,400) per month.

People with no previous experience who are hired to work in positions related to finance and accounting processes, customer operations, banking, and technical support start at approximately zł2,500 (US$620) gross monthly. Length of service affects remuneration in these areas too, but salaries do not rise as quickly or by as much as in the IT sector. The people interviewed said that after two years in these positions people could be earning up to zł3,500 (US$870) gross. A higher salary is possible if in addition to English, an employee can speak another foreign language. Most firms in this sector also offer employees non-financial benefits such as private medical care, sports club membership, and opportunities for training in the firm's facilities in other countries.

Clients of Services Centers Located in Poland

Analysis shows that the largest group of clients served by services centers in Poland are businesses in the financial sector. One in two services centers was found to be working for customers in this category. In addition, the clients of business services centers are often firms from sectors such as industrial and consumer goods manufacture (39%) and technology and telecommunications (38%). Other clients include firms that provide legal and consulting services, and firms involved in marketing. Indeed, the experts say that Poland is no longer a place where only simple transactions are made. In Poland's services centers advice is given and services are provided to the world's biggest companies, such as BNP Paribas, BOSCH, BP, Citibank, Credit Suisse, Deutsche Bank, General Electric, HP, HSBC, IBM, ING, Lufthansa, Microsoft, MoneyGram, Nordea, RBS, Samsung, Santander, Shell, TNT Express, UBS, and UniCredit.[7]

6 *Rynek usług IT 2015 w Polsce [The IT Services Market in Poland 2015],* Association of Business Service Leaders, Warsaw, 2015.

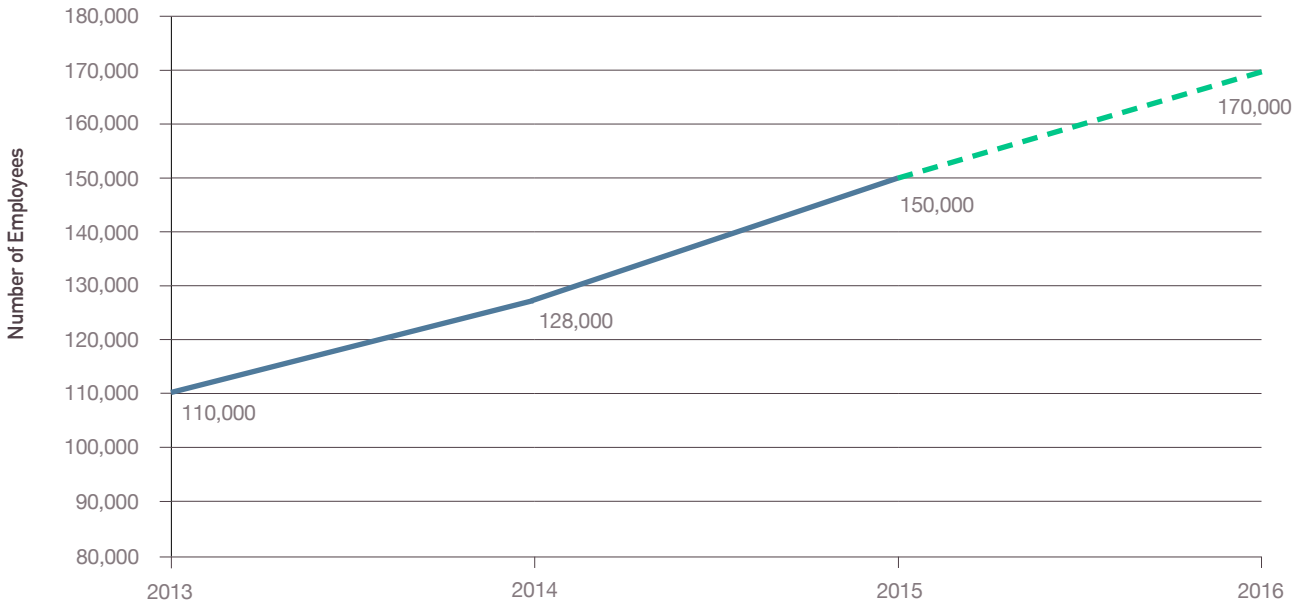
7 *Przegląd outsourcingowy [Outsourcing Review], No. 4,* Fundacja Instytut Outsourcingu [Institute of Outsourcing Foundation], Warsaw, 2013.

The Future of the Business Services Sector

According to Poland's Outsourcing Institute, which has been watching trends in the sector in the recent past, over the next few years Polish business services organizations will come to be seen as employers offering the very best job prospects. The number of jobs in the sector is growing by about 15-20% year-to-year. For several years, no other branch of the economy has had created as many job opportunities, both for people starting a career as well as those with more specialized training and experience. Graph 3 (below) shows the growth of employment in the sector from 2009 to 2015 and the forecast to the end of 2016.

There are no indications that this dynamic growth will change in the near future. On the contrary, many factors suggest that this sector will grow in Poland in the next few years. Most importantly, the situation in world markets since the financial crisis of 2008 has not fully stabilized, and as a result global firms are

Graph 3: Employment in Foreign-owned Services Centers in Poland



Source: *Sektor nowoczesnych usług biznesowych w Polsce 2015 [The Business Services Sector in Poland 2015],* Association of Business Service Leaders, Warsaw, 2015, p. 22.

investing cautiously and reducing as far as possible their operational costs. One way in which this is being done is by using outsourcing processes.[8] It is often better for companies with operations in many countries to assign separate functions to their services centers to carry out specific processes; as this is more cost-effective than employing people in each country to carry out the same functions. An alternative is to use existing services centers that already specialize in providing support for specific processes. The factors discussed below show that Poland is a very good location for the growth of this sector.

High Quality Labor Market

Poland is a large country where it is relatively easy to find people qualified to work in business process outsourcing. In the last decade this has been the main factor contributing to the establishment of many new firms in the business services sector, which has in turn created a supply of qualified managers and professionals in Poland. This means that the country is well-positioned to grow, both by expanding the services of existing firms as well as by attracting foreign investors who want to launch new firms. Hiring people who have experience in the sector and are familiar with the institutional setting in Poland increases the potential success of these new firms and lowers the risk of working in countries where this sector is only beginning to emerge.

Location

Business services centers usually do well in cities with good infrastructure and where it is easy to find potential employees. In Poland there are more cities that meet these criteria than in other countries in Central and Eastern Europe. As a result, service providers often decide to locate in Poland, because the opportunity to choose between many different sites allows them to start the new venture in the place that offers the best conditions for growth.

In addition, business services centers occur in clusters, or groups of mutually related businesses located in the same place, often using the same suppliers and operating in related areas. This kind of structure brings with it a number of benefits in terms of improved opportunities for the growth of individual services centers and their ability to innovative, as well as increasing the competitiveness of the entire cluster. The most important of these benefits include increased productivity, technology diffusion and knowledge transfer resulting from direct contact between firms in the cluster, the ability to undertake joint marketing activities, and cost optimization. For this reason, investors in the business services sector choose countries where the sector has already reached a certain stage of development, such as the case with Poland.

In addition, local authorities are increasingly creating an investor-friendly environment, offering easier communication with administrative bodies, better provision of information needed by investors, and improved support to firms when recruiting. Poland also has good flight connections to cities in Western Europe and has a more advanced motorway network, in addition to time zone advantages that were already mentioned.

8 *World Investment Report 2015,* United Nations, New York, 2015.

Economic and Legal Factors

In contrast to Ukraine and Russia, Poland enjoys a stable legal and economic situation. Poland's membership in the European Union means that changes to legislation can be expected to be predictable. This is very important information for investors, as it reduces investment risk. Business services centers often manage processes for customers in several countries of the world at the same time, and this involves processing large amounts of data. It is very important to protect and secure these data, and it is essential to have predictable procedures that allow the secure operation of this sector.

Another important factor is that there are a number of special economic zones in Poland, and they are one of the main attractions to investors. Business services providers that are considering starting operations in Poland can benefit from many forms of investment incentive, including income tax exemptions for income derived from business conducted within the zone, and tax relief on the purchase of new technologies and the costs of operating research and development centers. There are special economic zones in many locations around Poland, the largest in terms of area covered are in Pomerania, Katowice, and Łódź. All the zones provide ideal conditions for the growth and development of BPO centers.

Summary

The business services sector in Poland is undergoing rapid expansion, and there are many signs that this will lead to the creation of large numbers of new jobs. Today employers are already reporting difficulties in finding qualified candidates for newly created positions. The ability to find people with specific skills over the next few years will probably be a significant factor that determines whether a firm operating in this sector will be able to grow.

It is important for the business services sector that the formal education system develop in a way that allows it to adapt to the needs of employers, and also that a system of informal education can be developed that enables future employees to retrain or to improve their skills. The difficulties in finding suitable candidates mean that employers have now started to look for people who are willing to retrain. Some firms are arranging additional training on their own initiative, such as courses in accounting, offered to graduates in languages and linguistics.[9]

The difficult situation of employers is exacerbated by the looming demographic crisis. It is in their interest to activate people who are currently outside the labor market but who are able to take up employment if they are given suitable preparation. In Poland, this group is composed principally of women and young people, including graduates of post-secondary schools and technical schools as well as university graduates in subjects that do not offer much chance of finding work, such as humanities, social sciences, etc. As will be seen later in the study, the Business Services Centers sector seems to be aware of this and is open to initiatives that may help them reach out to potential candidates for employment.

9 An example of this is Infosys BPO in Łódź, which has set up the Infosys Finance Campus. More will be said about this in Chapter 6.

The Labor Market as Seen by Employers

HAVING CLEAR AND UPDATED INFORMATION ON THE EXPECTATIONS OF EMPLOYERS REGARDING THEIR LABOR NEEDS IS CRITICAL IN CLOSING SKILLS GAPS AND BEST PREPARING PEOPLE FOR THE JOB MARKET AND TO MEET EMPLOYER NEEDS.

However, not many in-depth studies of what employers expect from job applicants have been carried out in Poland. Conducting studies of this kind is difficult, because employers and the sectors in which they operate are highly diverse. To have a true understanding of needs requires a large representative sample, something which entails organizational difficulties as well as high costs.

In recent years, an annual study on the expectations of employers towards employees has been conducted by the Jagiellonian University in Cracow on behalf of the Polish Agency for Enterprise Development. The Human Capital in Poland[1] study was made using a representative sample of workplaces employing from between two to over 1,000 people. It also looked at advertised jobs. The research was carried out as a panel study and repeated annually from 2010 to 2013.[2] It looked at a number of issues related to the way employers perceive the labor market. This chapter draws from this study, particularly about competency mismatches that exist between the needs of employers and the skills of technicians and specialists. The latter two groups were chosen because they seem to indicate as being most qualified to find work in the business services sector.

The results obtained in the Human Capital in Poland study were analyzed in conjunction with information collected in interviews with employers from the business services and IT sectors. The chapter then goes on to present information about the difficulties faced by employers in the search and selection process, first showing which occupational categories cause employers the greatest problems during recruitment, and then describing the competencies that are most commonly found to be lacking in applicants for particular roles.

Competency Mismatches

Research reported in the Human Capital in Poland study shows clearly that 75% of enterprises that wanted to hire people experienced a number of difficulties in finding appropriate candidates. The greatest problem was experienced by firms that wanted to employ middle-level professionals and qualified manual workers. According to data from 2014,[3] shortage occupations in Poland include:

- middle-level medical personnel
- middle- and junior-level IT professionals
- office management professionals
- call center and administrative services support staff.

These results concur with research carried out by the European Commission, which shows that by 2020 the highest demand for labor will be for specialists in IT and new technologies and for occupations related to care for the elderly,[4] and that demand for people in these occupations will continue to grow. Occupations in which

1 https://bkl.parp.gov.pl/

2 The Human Capital in Poland study was conducted between 2010 and 2015, but the component which focused on employers was completed in 2013.

3 *Zawody deficytowe i nadwyżkowe w 2014 roku [Shortage and Surplus Occupations in 2014]*, Warsaw, 2015.

4 *New Skills for New Jobs: Anticipating and matching labour market and skills needs,* Brussels, 2008.

there is significant oversupply include food technologist, agriculture technician, and mechanic, and there is also a surplus of graduates in philosophy and politics. The primary research confirms the above findings; business services sector employers reported that finding people with these IT skills is very difficult.

A major recruitment challenge in the business services sector was already evident in 2011 in connection with finding middle-level professionals: 25% of employers were looking for someone in this category. This is confirmed by international research carried out by the World Bank, which has shown that this problem is most apparent in certain countries including Poland, the Czech Republic, Austria, and Germany.[5]

Specialists in sectors such as IT, communication, accounting and personnel services, and technical and IT support were found to be in particular demand, and it was the shortfalls in these areas that were most acutely felt.

Besides the need to employ people with particular specializations, employers highlighted competencies that make it much easier to find work. The results both of the Human Capital in Poland study and the interviews show that good knowledge of a foreign language is very highly valued, followed by previous work experience, job skills useful for work in a particular role (such as knowledge of the right software), and soft skills. Another factor that was important to employers was the level of education achieved. One factor that employers said is of no significance during recruitment is the sex of the candidate.

5 *Matching Skills and Labour Market Needs,* Davos, 2014.

Language Skills

Language skills are very important in the business services sector. Business services centers support the business processes of firms throughout the world, so a command of at least one foreign language at level B2[6] is an essential requirement. During interviews, employers said this continues to be a major problem. In the recruitment process, it often becomes apparent that despite claiming to be able to use a particular language, candidates are not sufficiently proficient in it, often not knowing how to write a formal email or being unable to respond adequately to a particular situation. It is also important to note that people who speak another foreign language in addition to English have a significant advantage. The most highly valued are Scandinavian languages, followed by German, French, Italian, and Spanish. However, any language that is not widely known in Poland, including a language such as Arabic or Turkish for example, is of interest to employers. Language skills are so highly valued by employers that if a candidate can speak two foreign languages, requirements for other skills are generally relaxed. While employers realize that it is not possible to learn a language very quickly, in many workplaces classes are provided to help staff improve their language skills, often in areas directly related to particular jobs, such as English for accounting.

Job Skills

Results from the Human Capital in Poland study show that regardless of the occupation concerned, employers

6 CEFR, the Council of Europe's Common European Framework of Reference for Languages, describes foreign language proficiency at six levels: A1 – Breakthrough, A2 – Waystage, B1 – Threshold, B2 – Vantage, C1 – Effective Operational Proficiency, C2 – Mastery. Level A1 represents the lowest level of proficiency, and C2 the highest.

often report that employees lack essential skills needed to carry out specific tasks, such as not knowing a particular software or the basic concepts needed to perform a job. During the interviews, business services sector employers often reported that people who claim to have a good knowledge of Excel do not in fact know how to use the program's basic mathematical functions, and that many candidates who apply for jobs in finance and accounting do not understand basic concepts in these areas. Employers also said that candidates and current employees do not know the fundamentals of project management or how organizations operate, and in particular that they do not understand the specific nature of the business services sector. The employers said they usually try to make up these deficiencies in internal training programs after candidates are hired.

Relevant Experience

According to the results of the Human Capital in Poland study, a significant difficulty in recruitment identified by employers is the lack of suitable experience in applicants for particular positions. A suitably experienced employee is considered to be someone who has already worked in a particular position for at least two years. This problem was mentioned mainly by employers who wanted to hire people for jobs with low-level educational requirements and were most often looking for machine operators, fitters, and qualified manual workers.

Analysis of jobs advertised by business services centers confirmed the above conclusions. These advertisements usually specified two years' relevant experience as an important criterion for successful applications. However, the interviews with employers revealed that a candidate's experience is becoming less important as a recruitment factor from year to year. Employers are aware that the demographic crisis and rising demand in the sector are making finding an employee with relevant experience increasingly difficult. Some employers also said frankly that a candidate's experience is not important, because in any case successful candidates will have to learn new procedures and processes after they are hired.

Soft Skills

The results of research conducted as part of the Human Capital in Poland study showed that job candidates are lacking in soft skills, including motivation, initiative, ability to meet deadlines, and ability to cope with stress. These shortcomings were cited as a significant problem by one-fourth of employers. In addition, the lack of interpersonal skills often encountered among potential employees, including inability to work in a team and poor handling of contacts with clients, were problems for one in seven recruiters surveyed.

Soft skills also include the broad concept of analytical thinking skills. It is important to note that the results of the international Survey of Adult Skills[7] place Poles lower than the EU and OECD average in tests of skills such as problem solving, literacy, and numeracy at work. For example, the average level of digital skills for EU countries is 33%,[8] whereas for Poland it is 28%, and the average reading literacy score for OECD countries is 273 points, while the average for Poland is 267.[9] The

7 *The Survey of Adult Skills (PIAAC)*: http://www.oecd.org/site/piaac/.

8 Measured as the percentage of people who can perform five or six out of six Internet-related tasks: using an Internet browser, sending e-mail attachments, using forums and discussion lists, making Internet telephone calls, and peer-to-peer file sharing.

9 Reading literacy is defined as understanding, using, reflecting on and engaging with written texts, in order to achieve one's own goals, to develop one's knowledge and potential, and to participate in society.

reports which present these results emphasize that these skills should be developed and maintained over a lifetime and that it is important to create opportunities for this.

The interviews conducted with employers as part of NESsT's research confirmed this problem. Almost everyone interviewed said that job candidates do not have soft skills such as communication skills, ability to work in a team, and engagement. According to employers, there is also an evident lack of analytical thinking skills and ability to analyze information and draw conclusions. These skills are very important during the recruitment process and are often the factors that determine whether or not a person is hired. Employers say that soft skills are generally a good indicator of a person's potential for further professional development and their usefulness to the firm. On the other hand, it is clear that many employers think these skills can be learned, because they provide training in soft skills once candidates are hired.

Higher Education

An analysis of job advertisements in the business services sector shows that the majority of employers prefer people with a higher education, including when recruiting junior- or middle-level professionals. Employers assume that finding someone with a degree is relatively easy, because most young people study at university.

The interviews with employers show indirectly that at the beginning of the recruitment process they often do not fully realize that tasks related to a particular position can be learned and skills applied by people who do not hold a master's or bachelor's degree. In the recruitment process, employers were ready to lower their expectations regarding education when they realized that a particular candidate was in other ways suitable. This provides indirect evidence that employers learn during recruitment and revise their earlier expectations. It may be that if employers could specify their requirements appropriately and this information could be incorporated into the design of formal education and/or additional vocational courses, it would allow better matching of the supply of qualifications to demand.

Some employers also clearly stated that they do not treat higher education as a key factor in deciding to employ a candidate. In their opinion it is more important for applicants to have the right job skills, which can then be developed after a successful candidate is hired. Employers are aware of the growing difficulties in finding suitable personnel. Many of them said that during recruitment they pay more attention to a candidate's predispositions than to education and experience.

Preference for Employees of a Particular Sex

On the question of specifying a requirement for employees of a particular sex, this is not permissible under Polish law, and requirements of this kind were not found in the job advertisements studied. However, during the Human Capital in Poland study, there were some cases where employers said they were more interested in appointing men to IT-related positions, and women to jobs in accounting services.

In NESsT conducted interviews, employers for the most part said that the sex of the candidate is not relevant when making hiring decisions. Some of them, particularly in the IT sector, said they would prefer to hire women but that they tend not to receive many

applications from women. Although this is substantiated by statistics showing that less women pursue careers in IT, it is important to ensure that there are no other factors preventing employers from hiring women, such as their need to balance work with their roles as childcare providers.

Summary

Although the Human Capital in Poland study was conducted several years ago, its results were for the most part substantiated by the interviews in the NESsT study. Finding qualified employees in the Polish labor market is very difficult, and in the next few years this situation will probably get worse.

Employers have a problem finding personnel who meet their requirements. Unfortunately, they are short of ideas on how to target the right people with their job advertising. During the interviews, employers reiterated that they are ready to reduce formal requirements, such as those concerning education, if they have a candidate who demonstrates the expected level of job and/or interpersonal skills.

Employers also mentioned cases where a candidate did not meet the requirements of the position applied for, but was offered another job for which recruitment was planned but had not yet begun. One problem identified is that recruitment processes tend to overstate the qualifications needed for positions as a way to attract candidates with greater levels of skills. Under the current situation where employers are facing difficulties meeting their talent needs, this tendency should be reassessed. Being specific on what is minimally needed for the job and what can be learned while on the job, would no doubt increase the pool of qualified candidates.

Vocational Education in Poland

THIS CHAPTER DESCRIBES POLAND'S VOCATIONAL EDUCATION SYSTEM. IT DISCUSSES CORE CURRICULA AND THE OPPORTUNITIES TO CONTINUE IN EDUCATION AFTER COMPLETING STUDIES IN A VOCATIONAL SCHOOL. AND IT ALSO EXPLAINS THE OPTIONS FOR VOCATIONAL EDUCATION OPEN TO ADULTS AND THE OPPORTUNITIES THAT EXIST FOR STUDENTS AND ADULTS TO UPGRADE THEIR QUALIFICATIONS THROUGH INFORMAL EDUCATION.

Figure 1 (page 32) provides a summary of the formal school structure in Poland as it was in December 2016. The figure helps illustrate how vocational education relates to this structure.

The chapter also includes the qualification requirements that are in greatest demand by the business services sector and whether the current vocational education system is responding to them.

Under Article 70 of the Constitution of the Republic of Poland, all people are entitled to education, and the public authorities have a duty to ensure that all citizens enjoy equal access to education. The Constitution also requires that education in public schools be provided free of charge. Compulsory education for children starts at the beginning of the school calendar year in which they turn 6 or 7 years of age, continues through middle school (ages 13-16), and ends when a student turns 18. If students complete middle school before turning 18, the duty to continue in education until the age of 18 can be met by attending a public or non-public post-middle school or by participating in vocational training delivered by an employer. In the Polish education system, students can elect to follow a vocational path only after successfully completing middle school.

Under rules brought in by the Act Amending the Education System Act and Certain Other Acts of August 19, 2011 (*Dziennik Ustaw 2011*, No. 205, Item 1206), as of September 1, 2012 vocational education in Poland is provided in the following types of school:

- Three-year basic vocational school. Successful completion of this kind of school entitles students to take a vocational examination and obtain a diploma in vocational skills. Completion of a vocational school does not mean that a student has completed secondary education, and does not entitle a student to take the high school diploma examination. Students can achieve these goals by continuing their education at another school.
- Four-year technical school. Successful completion of this kind of school entitles students to take a vocational examination and obtain a diploma in vocational skills. It also means that students have completed secondary education, and entitles them to take the high school diploma examination. A pass in this examination gives students the opportunity to continue their education at a university level.
- Three-year special school for disabled students. This type of school prepares students with moderate and severe intellectual disabilities and students with multiple disabilities for employment. Students who complete this kind of school can gain a certificate that states their readiness for employment, but does not qualify them to work in a specific occupation.
- Post-secondary school. This is a school for people who have completed secondary education. Education in these schools lasts for up to two and a half years, after which students can take a vocational examination and obtain a diploma in vocational skills.

Core Curricula

Study in schools that provide vocational education is based on two core curricula: the general education curriculum and the vocational education curriculum. The core curricula are intended to specify the learning outcomes that should be achieved by students who complete a full school program. The extent to which students have gained the knowledge and skills specified in the core curricula is assessed by teachers as the program proceeds. The core curricula also determine the range of knowledge and skills that will be tested in terms of general education in the high school diploma examination and in terms of vocational education in the vocational examination.

General Education: Core Curriculum

In the Polish education system, the program of general education followed in middle school (including subjects such as Polish, mathematics, history, physics, chemistry, and biology) is continued in every type of school at post-middle school level, i.e. high school, technical school, and basic vocational school. High school students follow courses at a basic level for the first year, and then continue with some subjects at a more advanced level in subsequent years. The program in technical schools is similar except that courses at a basic level are taken for two years. In vocational schools, courses are at a basic level for the entire period of study (i.e. three years). This allows graduates of basic vocational schools to complete their secondary education if they wish to do so by continuing to study in adult high schools, starting in the second year of the program.

As mentioned above, one difference between the different types of post-middle school is seen in the subjects taught at advanced level. High school students choose from two to four subjects in the core general curriculum and study them at advanced level. Technical school students can choose two subjects in the core general curriculum for study at advanced level. In practice, a decision to choose humanities or science subjects has a great effect on a student's subsequent career. It is therefore very important to give appropriate support to students at this stage so that the choices they make are on the one hand in line with their predispositions and on the other hand give them greater opportunities to find work. In many situations young people, and girls in particular, may succumb to societal pressure, and their choices are not carefully considered or even made consciously (girls, for example, are afraid to choose science and technical subjects).

Vocational Education: Core Curriculum

The core vocational curriculum specifies the learning outcomes expected in terms of knowledge, vocational skills, and personal and social competencies. These outcomes can be divided into two categories:

- Learning outcomes needed in all occupations. These include areas such as occupational safety and health, starting and running a business, vocationally-oriented language learning, personal and social competencies, and organizing work in small teams (in technical schools and post-secondary schools).
- Learning outcomes needed for particular occupations. These depend on the occupation concerned. The core vocational curriculum also specifies conditions to be met by schools preparing students for particular occupations, including recommended teaching aids and equipment and the minimum number of hours of vocational instruction.

Practical Vocational Training

Practical vocational training can take place at continuing education facilities, at practical training centers, during school training sessions, in school workshop areas, on employers' premises, and on agricultural smallholdings.

In the case of vocational schools and technical schools, it can also take the form of practicum or temporary placement in a job to gain practical work experience while studying.

Basic vocational schools give special emphasis to practical training. Practical training takes up to over 60% of the total time in a three-year program and is designed to give students the vocational skills necessary to find work in a particular occupation. In technical schools and post-secondary schools, a total of 50% of all class contact time has to be used for vocational education, split between theoretical and practical aspects.

Practical vocational training organized by employers takes place on the basis of an agreement made between the employer and the school. This can be done under sponsorship arrangements, in which an intake of students to a particularly vocational program is linked to a sponsoring employer who commits to hiring a certain number of graduates upon successful completion of their education.

An important feature of partnerships of this kind is the inclusion of employers in the process of developing educational programs for the occupation concerned, in particular in terms of practical vocational training. The school itself decides which occupations are taught, but this is done by agreement with the school's governing body (e.g. the local municipality) and after consulting the District and Regional Employment Boards[1] about needs in the labor market. We will learn more about these types of sponsorships in the Chapter on Innovative Models.

Centers for Vocational and Continuing Education

Centers for vocational and continuing education are a combination of technical school, basic vocational school and post-secondary school. The role of these centers is to enable both young people and adults to prepare for the high school diploma examination and to gain vocational qualifications. They deliver vocational training courses for particular vocational qualifications and organize vocational examinations, and they also provide career advice. In many cases they work in partnership with employers. An example of this kind is the partnership established between the Strzelce Opolskie Center for Vocational and Continuing Education and local plastics manufacturer Pearl Stream S.A.[2] Pearl Stream had always found it difficult to find qualified electrical technicians in the local labor market. The firm now works together with the Center in a number of different ways. These include the involvement of Pearl Stream employees in designing the Center's educational program, organizing practicum placements for students from the Center in Pearl Stream's manufacturing facility, and providing support to Pearl Stream employees to facilitate their work with practicum trainees.

Vocational Education for Adults

Changes were introduced to the vocational education system to make it easier for adult learners to gain qualifications, complete and extend their education, or retrain for a different occupation. These changes allow adults to continue their education by attending what are known as Vocational Qualifying Skills Courses. Adult learners can complete several of these courses. Each course is based on a core curriculum, focuses on a specific vocational skill, and prepares learners to take an external examination in that skill. By completing several courses a learner can gain all the skills needed to qualify for work in a particular occupation.

1 Advisory bodies that support the Marshal of a Voivodeship.

2 Pearl Stream is a Korean- and German-owned international company. It produces plastic components, mainly for the motor industry (including parts for bumpers and doors) and the electronics industry (television housings and stands, etc.).

People who have gained vocational experience at work or have been through basic vocational school, and who would like to obtain formal recognition of their skills, re-qualify to work in a different occupation, or upgrade their qualifications, can take an external vocational examination. Adults can also receive practical vocational training on the same basis as people under 18 who gain on-the-job experience as employees. The period of learning can, however, be shorter, if they have gained prior work experience.

Classification of Occupations Taught in Vocational Education

Vocational education in schools is governed by the Classification of Occupations in Vocational Education, compiled pursuant to regulatory law promulgated by the Minister of National Education on the basis of proposals received from Ministers with responsibility for specific occupations. For example, a proposal concerning the occupation of advertising technician would be submitted by the Minister of the Economy. The classification lists different occupations and designates the type of school that can offer education in each one. It also specifies the official names of occupations and the separate qualifying skills that are needed to work in each one. The classification also states whether training in a particular skill can be provided in non-school settings in the form of Vocational Qualifying Skills Courses, in areas such as:

- administration and services
- building and construction
- electrical installations and electronics
- mechanical installations, mining, and metallurgy
- agriculture, forestry, and environment protection
- tourism and catering
- medical and social services
- creative arts.

For purposes of this study, Table 2 (page 29) lists the skills needed for employment in business services centers. Passing examinations in a full set of skills leads to the award of a diploma qualifying the holder to work in one of the following occupations: IT technician, digital graphics printing technician, economics technician, advertising technician, office management technician, bookkeeping technician, and ICT technician.

Informal Education

In Poland, alongside formal education it is also possible to access education on an informal basis. It is very difficult to describe the structure and objectives of informal education, because it is not subject to supervision from a national authority. It may take the form of trainings, workshops, conferences, seminars, correspondence courses, or, as is increasingly popular in Poland, e-learning courses. The criteria for recruitment to education of this kind are set by the establishments that offer the education, and are usually directly related to the learning objectives of each particular event. The costs of informal education are usually covered by the participants themselves, although there are situations in which the costs are paid, in full or in part, by participants' employers. Examples of informal education provided to participants free of charge include trainings funded by the European Social Fund and trainings for the unemployed paid for by Poland's national Labor Fund. This type of education is very often organized by trade organizations, employers' associations, and businesses that decide to do this because in many cases it is the only way to fill a gap in the competencies of potential employees. An example of this type of education is the academy organized by the Association of Business Service Leaders, which enables people to acquire the competencies necessary to work in BPO centers.

Table 2: Skills Taught in Vocational Education Institutions for Different BPO Occupations

Occupation	Skills Required
IT Technician	• Assembly and use of personal computers and peripheral devices • Design and administration of local networks • Creation of Internet applications and databases • Database administration
Digital Graphics Technician	• Creation and presentation of multimedia projects • Preparation of graphics materials for printing • Digital printing
Economics Technician	• Planning and implementation of economic activity in an organization • Keeping books of account
Office Management Technician	• Performance of office tasks
Bookkeeping Technician	• Keeping books of account • Reconciliation of payroll and public dues
ICT Technician	• Deployment and maintenance of terminals and subscriber connections • Construction and operation of large-scale networks

Source: The Order of the Minister of National Education of December 23, 2011 on the Classification of Occupations Taught in Vocational Education (*Dziennik Ustaw 2012*, Item 7).

Other Opportunities to Upgrade Vocational Qualifications

The institutions that are primarily responsible for organizing additional training in Poland, particularly for groups that are marginalized in the labor market, are the District and Regional Labor Offices. These offices receive money from the Labor Fund every year to pay for this training, and the number of courses held depends on the budget set by the Government. The level of funding is therefore dependent on the economic situation each year, and on other State income and expenditure.

Non-school vocational education is organized by Continuing Education Centers, Practical Education Centers, and Training and Vocational Training Centers. Training offered by Continuing Education Centers consists mainly of Vocational Qualifying Skills Courses that prepare participants to take a vocational examination. Participants receive a certificate of completion, and this allows them to take an external examination organized by a Regional Examination Board. Courses are provided free of charge, although sometimes partial charges are made to cover the cost of course materials. These courses are funded directly from the State budget or European Funds. Practical Education Centers provide vocational training under youth and adult practical vocational preparation programs financed by local government and the centers themselves.

In addition to the institutions discussed above, vocational training can also be provided by private-sector institutions. Institutions of higher education often organize courses of this kind, which participants pay to attend. These courses may be classroom-based, or they may be correspondence or e-learning courses. EU funds are also used to organize trainings, courses, and seminars on a local basis for a variety of target groups. These events are often held in halls, community centers, and on the premises of non-governmental organizations. In view of their local character, it is difficult to determine the scale on which these events take place or what real social impact they have.

Vocational Education in Numbers[3]

Official statistics relating to vocational education show the level of popularity of particular types of school and subjects of education in Poland, and how this has changed in recent years.

Basic Vocational Schools and Special Schools

Basic vocational schools are not very popular as a form of education. In the school year 2014/2015, there were 1,721 basic vocational schools in operation in Poland. This represented a reduction of 67 (3.7%) compared to the previous year. The vast majority of basic vocational schools were schools for young people (77.4%), while the proportion of special schools was 22.1%. These schools were attended by a total of 190,100 students, of which 93.1% were students in basic vocational schools for young people, 6.8% in special schools, and 0.1% in basic vocational schools for adults. The proportion of students aged 16-18 enrolled in basic vocational schools out of all young people aged 16-18 in Poland was 13.4%.

Four-year Technical Schools

In the 2014/2015 school year there were 2,023 technical schools in Poland, attended by 511,700 students. In comparison with the previous school year, the number of technical schools fell by 2.9% and the number of students by 1.2%. Technical schools represent an educational path usually chosen by men. For years, technical schools have had many more male than female students. In the 2014/2015 school year, women accounted for 40.3% of students enrolled in technical schools. There is a marked division in these schools between subjects related to occupations that are thought to be either masculine or feminine. In 2014/2015, occupations requiring engineering

3 The statistics are taken from *Oświata i wychowanie w roku szkolnym 2014/2015 [The School System and Education in the School Year 2014/2015],* Warsaw, 2015, and from information compiled by the Central Statistical Office in 2014 and 2015.

and technical skills and ITC-related occupations were chosen much more often by men (95.0% and 90.4% respectively). Women most often chose occupations related to services for the public, such as hospitality and tourism services (76.4%), veterinary care (76.1%), and social work and social welfare (75.1%). This trend has continued for years, and has very clear consequences for the labor market in Poland. The occupations typically chosen by women offer fewer opportunities for employment and career development, and are generally associated with lower wages.

Post-secondary Schools

A gradual reduction in the number of post-secondary schools in Poland has been in evidence for some years. The total number of schools of this type went down from 2,467 in the 2014/2015 school year to 2,382 in 2013/2014, which was a drop of 3.4%. The vast majority of post-secondary schools (77.4%) are run by the private sector or third sector organizations. The rest operate in the public sector and are under local or central government control. This situation represents a major barrier to easy access to post-secondary education, because privately run schools charge for the education they provide. This charge usually amounts to around zł100 (US$24) per month. Most people attend post-secondary schools as part-time students. In the 2014/2015 school year, 81.4% of post-secondary school students attended on a part-time basis, a figure which has remained constant for years.

Vocational Qualifying Skills Courses

In the 2014/2015 school year, a total of 520 Vocational Qualifying Skills Courses for young people were held, with a total of 13,500 participants. In addition, 750 courses for adults were held, with over 20,000 people attending. Vocational Qualifying Skills Courses are more popular among men than among women. Women accounted for 31.7% of students on courses for young people, and on courses for adults they made up 33.3% of students. Over half (56.2%) of all women attending Vocational Qualifying Skills Courses chose courses at post-secondary schools for adults, where women accounted for 92.2% of students.

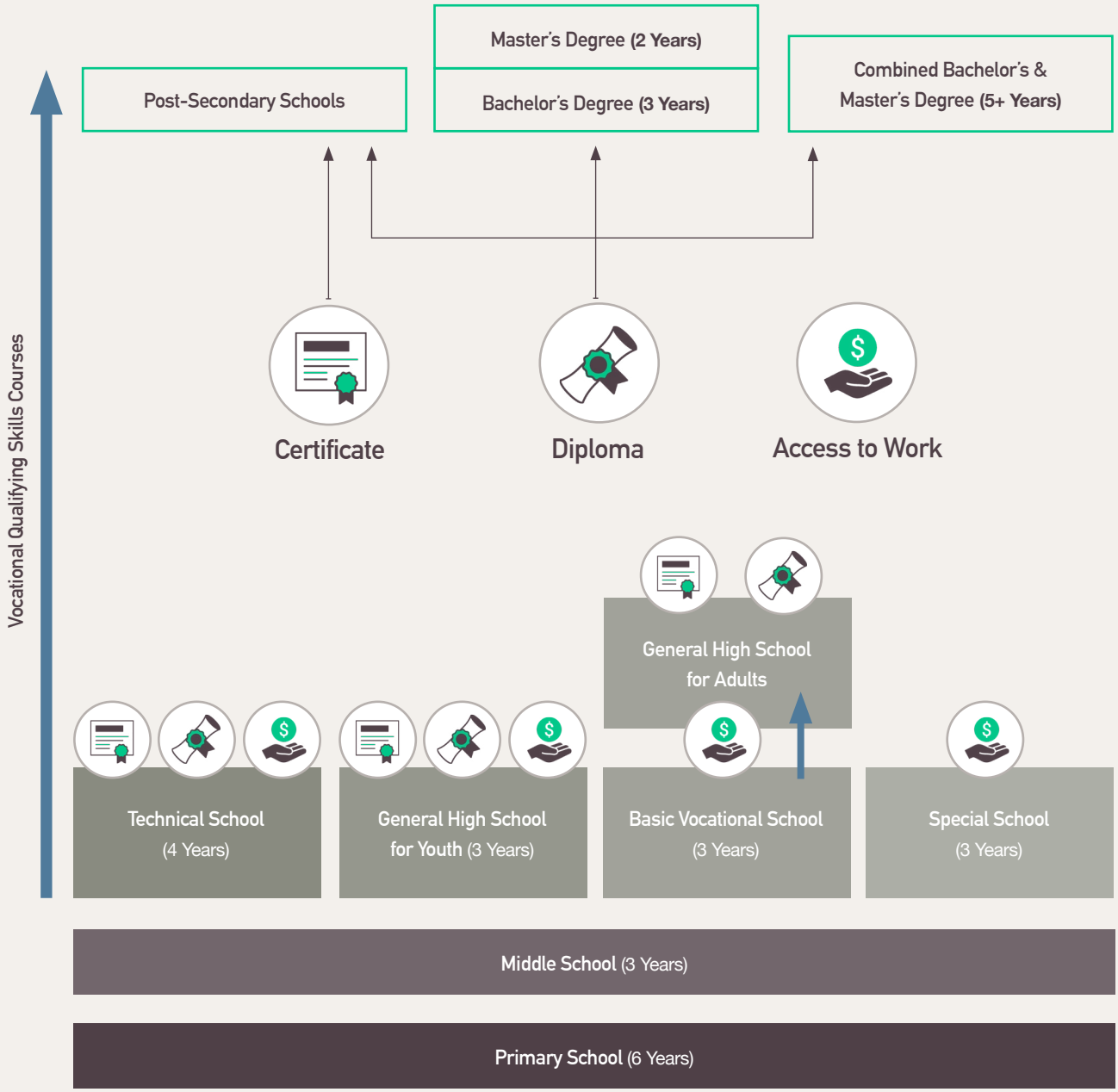
The most popular courses of this type, if we consider schools and schools for adults together, were courses in agricultural production (17.1% of all participants on courses of this type). Also very popular were courses in underground mining (14.8%), where almost all of the students were men.

Vocational Qualifying Skills Courses were introduced as part of the educational reforms made in 2012, and not enough time has passed to be able to observe changing trends in these figures. What may be seen as disturbing, however, is the popularity of courses that do are less sought out by the labor market. For example, for at least two years now the demand for people with specializations in agricultural production has been lower than the number of people educated in these areas.[4]

These data show that vocational education in Poland is actually declining in importance. It is difficult here to foresee how this situation will develop in the future, because the effects of the 2012 reforms will become clear only in several years' time. It would appear, however, that in light of the situation in the labor market, it will be necessary to devote more attention to promoting vocational education for occupations associated with the rapidly expanding BPO sector in order to increase the supply of people with the required qualifications. With this in mind, the next chapter will contain a detailed discussion and analysis of qualifications sought by BPO organizations that can be obtained at different levels of the vocational education system.

4 *Zawody deficytowe i nadwyżkowe w 2013*, [Shortage and Surplus Occupations in 2013], Ministry of Labor and Social Policy, 2014.

FIGURE 1: FORMAL EDUCATION SYSTEM IN POLAND



Opportunities in the BPO Sector

THIS CHAPTER ANALYZES THE OPPORTUNITIES TO FIND WORK IN THE BPO SECTOR THAT ARE AVAILABLE TO GRADUATES OF DIFFERENT TYPES OF VOCATIONAL SCHOOL. THE ANALYSIS WILL ONLY CONSIDER OCCUPATIONS THAT ARE NEEDED BY BPO ORGANIZATIONS.

It will give details of business services sector employers' requirements, particularly with regard to the soft skills and specific learning outcomes that graduates of courses in different subjects need to achieve in order to comply with these requirements. It will assess to what extent these soft skills conform to the learning outcomes that are sought by specific educational programs. In addition to the type of school attended, opportunities for entry to an occupation will be considered in terms of place of residence and the different needs of the BPO sector in different regions of Poland. Finally, it will also look at these opportunities in relation to gender.

Technical Schools and Post-secondary Schools

There is particular demand in the BPO sector for junior-level professionals in finance, accounting, bookkeeping, IT, data management, sales process support, marketing, event organization, and electronic customer service. The skills needed to work in these occupations are probably found more commonly in graduates of technical schools and post-secondary schools. These schools provide education for entry into the following occupations: IT technician, digital graphics printing technician, economics technician, advertising technician, office management technician, bookkeeping technician, and ICT (Information and Communication Technologies) technician. Table 3 (right) lists processes managed by services centers and the occupations involved.

Table 3: Business Processes and the Occupations Required

In 2016 the Polish Marketing Association formally applied for the occupation of electronic customer service representative to be added to the list of occupations. If this move is successful, this occupation will become one of those taught in technical schools and on vocational courses.

Processes Managed by Services Centers	Occupations Taught in Vocational Schools
Finance and Accounting	Bookkeeping technician, economics technician, office management technician
IT Services	ICT technician, IT technician
Customer Operations	Commerce technician, office management technician
Marketing	Advertising technician, digital graphics printing technician

Source: Authors.

The specializations that can be chosen in different types of vocational schools are to a large extent those that are needed in the business services sector. For example, these schools train people to work as ICT technicians, IT technicians, economics technicians, bookkeeping technicians, and office management technicians, and this matches the needs of firms in the sector, which usually manage accounting, financial, banking, and IT processes. On the other hand, the educational programs taught in these schools are not developed in consultation with representatives of these firms, and detailed analysis shows that the skills acquired by graduates in each of the specializations mentioned do not fully meet the sector's requirements. For example, when they graduate from vocational school, most bookkeeping technicians do not know very much about bookkeeping methods used in other countries.

In addition to specific learning outcomes required for particular occupations, the core curriculum also defines outcomes that are needed in all occupations. Alongside knowledge of occupational safety and health issues, general business skills, and foreign language skills, these also include what are known as soft competencies. In the core curriculum, these include personal and social skills that prepare students to professionally handle the more human-oriented and self-motivational aspects of their jobs. The intention is that after completing their education students will have the ability to conduct themselves in a respectful and ethical manner, be creative, proactive and consistent in performing their work, foresee the results of their actions, be open to change, and be able to cope with stress. They also will want to acquire teamwork skills and will be interested in opportunities to update their vocational skills. As was highlighted in Chapter 3, the Human Capital in Poland study and the interviews with employers showed that these kinds of skills are very important to employers, but often note that they are lacking among their employees.

An assessment of how the supply of the occupations in the BPO sector is distributed across the country, shows the extent to which employers' recruitment needs are met in different regions.

According to data compiled by the Central Statistical Office (Table 4 on page 35), the highest numbers of technical schools are found in the Voivodeship of Mazovia, the Voivodeship of Silesia, and the Voivodeship of Greater Poland. These regions also have the highest numbers of post-secondary schools. As a result, the ratio of schools to BPO firms seems to be quite balanced.

However, in the Voivodeships of Lesser Poland, Cuiavia and Pomerania, and Lower Silesia, where BPO firms are growing very rapidly, there are relatively fewer technical schools. In Lesser Poland for example, the ratio of firms to schools is 100 to 190. Unless this trend changes, there will continue to be a large gap in suitable qualified job candidates for business services centers.

As it is, the figures in Table 5 (page 35), drawn from the Ministry of National Education, Department of Vocational and Continuing Education, show that on average, only 26% of students that graduated from technical schools in these regions are qualified in subjects related to IT, bookkeeping, economics and office management. The figures are shockingly low for IT and ICT technicians, averaging about 13% for all students and about 1% for women. And no one graduated as a bookkeeping technician nor as an office management technician.

Table 4: Regional Distribution of Technical Schools and BPO Firms

Region	Ratio of Technical Schools to BPO Firms
Mazovia	284:80
Silesia	280:45
Greater Poland	250:40
Lesser Poland	190:100
Cuiavia	129:56
Pomerania	162:67

Source: Central Statistical Office

Table 5: Graduates with BPO Occupational Skills in Key Regions

Occupation	All Graduates	Women Graduates
IT Technician	4,463	249
ICT Technician	363	7
Digital Graphics Technician	520	236
Economics Technician	4,346	3,306
Office Management Technician	0	0
Bookkeeping Technician	0	0
TOTAL GRADUATES IN TECHNICAL VOCATIONAL SCHOOLS	37,474	16,461
% WITH BPO SKILLS	26%	10%
% WITH IT & ICT SKILLS	13%	1%

Source: Ministry of National Education, Department of Vocational and Continuing Education

Vocational Education in Relation to Gender and Age

Hiring managers in the BPO sector are not interested in recruiting people who only have a basic vocational school education. As has already been said, these schools do not equip students with the necessary competencies. To acquire these skills, vocational school graduates need to continue their education in a general high school and on vocational courses of the right kind. However it is mostly men who are interested in skills related to IT. Women comprise just under 30% of students in these areas at technical schools and post-secondary schools.

In addition, research shows[1] that men who complete a basic vocational school education have fewer problems in the labor market, because they choose vocational school programs that prepare them for technical occupations (mechanic, machine operator) in which it is relatively easy to find work. Women, on the other hand, often pursue basic vocational courses that are more traditional in nature. It is therefore important to give special encouragement to female vocational school students to continue their education in high school and in vocational courses so that they can acquire skills related to occupations that carry greater prestige and are in greater demand in the labor market.

One study found that 30% of women under the age of 30 do not participate in the labor force, while this was the case for only 14% of men in the same age group.[2] This probably results from the different life roles of women and men, the decision to have children, the greater involvement of women in caring for them, and the strong influence of social and cultural factors. In addition, the data shows that low levels of participation among women continues beyond the age of 30. This indicates that the decision to not participate in the labor force reduces their chances of employment in the future and points to a need to help women re-enter the labor force through additional training and educational opportunities.

In relation to young people overall, when interviewed, many said that the problems they experience in finding formal employment was a lack of experience and in general a poor knowledge of labor market opportunities. Helping people in this group to improve their qualifications and gain experience, and supporting them in the search for work, can significantly increase their chances of success, and this in turn will give them a greater sense of security. It is also important that these people know which firms are looking for workers and what the requirements are.

The situation of young people is also strongly dependent on the region where they live. Conditions in the labor market are particularly difficult in regions such as the Voivodeships of Sub-Carpathia (28% youth unemployment), Varmia and Masuria (25%), and Lublin (24%).[3] The Sub-Carpathia and Varmia and Masuria regions also have high rates of labor force non-participation among young people. These are regions where the supply of jobs is low and where BPO centers are not growing. This points to the need to help young people pursue additional education and increase their mobility so that they can find work farther from home.

Career opportunities for graduates of post-middle schools also differ according to the subjects studied. The highest levels of youth unemployment are seen in the group of graduates of technical schools who followed

1 *Human Capital in Poland*, 2013.

2 *Młodzi na rynku pracy – pracownicy, przedsiębiorcy, bezrobotni [Young People in the Labor Market – Employees, Businesspeople, Unemployed]*, Warsaw, 2015.

3 *Młodzi na rynku pracy – pracownicy, przedsiębiorcy, bezrobotni*, Warszawa, 2015.

programs related to services and office skills. Although office management skills are needed in the BPO sector, graduates of this type of school have a problem finding work. The interviews with employers showed that the educational content of vocational school programs and the way in which it is delivered does not match the expectations of recruiters in the sector.

People with a higher education in a technical subject are in a much better position, while degrees in areas such as administration, political science, or sociology offer fewer opportunities in the labor market. People with degrees in humanities often find work in a different area than the one they studied, and it is often a job below their qualifications, particularly at the beginning of their career.

The research[4] also reveals an interesting phenomenon related to the effort people make to raise their qualifications. The results suggest that a desire to learn is very important in terms of giving better chances of employment. People who said they had done something to improve their qualifications in the last 12 months are much more likely to be in work than those who did not do this in the past year. After completing their formal education, young people continue to look for ways to learn and to gain work experience, because knowledge, skills, and experience give them a competitive advantage in the labor market.

Summary

Overall these statistics indicate that there are few people who choose to learn competencies related to digital technologies, bookkeeping, and economics. If this situation does not change, and if additional training options are not made available to help people acquire the necessary skills in these areas, employers in the expanding BPO sector will face increasing problems finding suitable candidates.

Vocational schools (technical schools and post-secondary schools) should aim to work together with BPO organizations to shape their educational provision in response to the needs of employers in the sector. This would significantly improve graduates' chances of finding steady and well-paid work.

Their offer needs to include soft competencies that teach students how to cope with stress, adapt to different situations, work in teams, and work in a multicultural and diverse environment. More opportunities for internships and practical work experience while going to school are also key. The offer also needs to be available in all regions including Lesser Poland and Pomerania.

Adaptations to the current system need to be made to overcome gender-related, and educational barriers that impede young people's access to the labor market. An example would to encourage women that are not participating in the labor force to pursue education in technical subjects, and in particular IT. One way to do this is to make vocational education courses accessible to women in a way that allows them to balance childcare responsibilities. Employers also need to ensure that they hire women and facilitate their ability to work through more flexible and family friendly working schedules and environments.

Attention should also be given to the unemployed and to people who do not participate in the labor force. Helping people to improve their qualifications at the start of their working life would enable them to avoid being excluded from the labor market and give them the opportunity to develop their career, particularly in the BPO sector.

The next chapter presents the kind of skills employers look for in employees, the range of these skills, and what candidates need to know. It also discusses competency gaps, or skills that people applying for work in business services centers often do not have, but are crucial for the efficient operation of the sector.

4 *Młodzi na rynku pracy – pracownicy, przedsiębiorcy, bezrobotni*, Warszawa, 2015.

Competencies Needed by Employers

INFORMATION GATHERED DURING INTERVIEWS WITH EMPLOYERS ALLOWED IDENTIFICATION OF THE COMPETENCIES THAT ARE MOST IN DEMAND IN THE BPO AND IT SECTORS.

If people have these skills, it gives them a better chance of employment and boosts their long-term career prospects. The competencies that employers said are crucial for the sector cover a number of different areas of knowledge or skill. They differ in terms of how difficult it is to acquire them. Some of them involve knowledge of concepts and procedures, while others concern behaviors that are useful in the working environment. In order to systematize the information obtained in the interviews with employers, it has been organized under the categories of hard and soft competencies.

Hard competencies include knowledge of specific areas and related concepts and issues, the ability to use this knowledge to carry out specific tasks and work-related functions, and understanding the tools necessary to work in a particular position. Examples of hard competencies include knowledge of e-marketing or a specific area of law, and the ability to speak a foreign language or use a piece of computer software. Different hard competencies are closely associated with different occupations, often in a very specific manner, and in general if people have not acquired them they are not able to perform the tasks required in a particular job.

Hard competencies can be divided into specific and generic competencies. Specific competencies involve the performance of complex tasks, and acquiring them takes a lot of time, money, and effort. It is often the case that acquiring them requires specific predispositions and abilities. This means that people with this knowledge and these skills are in the most demand in the labor market.

Examples of specific competencies are programming skills and knowledge of advanced statistical methods. Generic competencies involve less complex issues. In general they are easier to acquire, and can often be achieved in only one short training session. Examples of generic competencies are the ability to use office applications and knowledge of basic bookkeeping. Candidates who have one or more of these competencies also enjoy better employment prospects, particularly if they have several.

Soft competencies chiefly encompass psycho-social skills, relationships with other employees, the ability to learn new things, and how work-related tasks are performed. Although in theory it is possible to carry out certain tasks at work without having soft competencies, in the long term having them has a significant impact on an employee's individual effectiveness as well as a member of a team. Soft competencies also give the person concerned better opportunities for career development. The need to have specific soft competencies may be very closely associated with a particular job (communication skills are essential for customer service, for example). However, soft competencies are not attached to a particular occupation or position. They are a set of general attributes needed for the performance of a wide variety of tasks.

The following tables show different competencies and learning outcomes that need to be achieved by people interested in acquiring them. Also listed are employers' expectations concerning the competencies under discussion, information about the sectors in which each one is useful, and information about the current situation and the extent to which candidates have acquired them. The table also shows the opportunities available for acquiring these competencies in the vocational education system, as well as suggestions on how to include them in additional training provision.

Table 5: Specific Hard Competencies

Knowledge of Programming Languages and Web Application Development Tools

Learning Outcome	Employer Expectations
In view of the nature of IT tools and the type of programming they require, two categories of developer are usually distinguished: Back-end developers,[1] who need to know the basics of PHP, how to use a debugger, the basics of database management systems such as MySQL, and the basics of object-oriented programming (OOP), REST architecture, and the MVC design principle. It may also be useful to have a basic knowledge of JavaScript/jQuery and Symfony2 framework. Front-end developers,[2] who need to have knowledge of a markup language such as HTML5, CSS, or JavaScript. It may also be useful to know Gulp, Sass, WordPress, and the basics of PHP. 1 This term usually refers to console applications, i.e. applications that run in MS-DOS. 2 This term usually refers to modules that enable the creation of a graphical or textual interface.	IT development skills are currently very much in demand in the labor market. Thirty-three percent of people employed in business services centers work in areas related to IT services. It is thought that this demand will rise in the next few years. The programming languages that are most in demand are Java and MySQL. The demand for developers also affects firms operating in other sectors. The interviews with employers showed that they are increasingly hiring people who do not have any experience in programming given the lack of qualified candidates. Although large IT firms with an established reputation still expect candidates to have a higher education in IT or perhaps another scientific discipline, in other firms this requirement increasingly does not apply. Employers are more interested to hire people who have knowledge of a particular programming language or languages. The interviews with employers produced another interesting observation. Several years ago employers expected programmers to have certain social competencies (i.e. ability to work in a team and interpersonal communication skills). Today, the difficulties with finding employees who have knowledge of programming languages mean that additional requirements are becoming less important or are completely disregarded. In vocational schools students can acquire programming competencies during their training to become IT or ICT technicians. The employers interviewed said that the structure and content of courses leading to these qualifications are in line with their expectations, and that the only thing that graduates of these courses lack is experience of working in a team. However, given the lack of qualified candidates, employers do hire computer scientists who do not have experience of work in a team, expecting that they will gain this experience once employed. The demand for programming skills is so great that people could also learn these skills outside of formal education. This could be done by providing intensive courses tailored to employers' requirements.

Theoretical and Practical Knowledge of E-marketing

Learning Outcome	Employer Expectations
Knowledge of: • Digital marketing - basic concepts: models of buying and placing Internet advertising, communication channels. • Display advertising - knowledge of basic concepts: basic characteristics of display advertising formats, basic issues in creating online advertising. • Search engine marketing - knowledge of factors that affect organic positioning, understanding of the nature of link building, knowledge of AdWords optimization techniques, choosing keywords using the Google Keyword tool, concepts and models related to positioning (SEO) and types of pay-per-click (PPC) advertising. • Video advertising - type and format of advertisements, video product placement, the nature of hybrid television. • Social media and content marketing - knowledge of the most important social media platforms, network advertising, knowledge of analytical tools, the nature of native advertising. • Mobile marketing - knowledge of basic concepts, mobile website optimization, basic knowledge of mobile application development, understanding of the Internet of Things. • Mechanisms of RTB and programmatic buying - knowledge of basic concepts such as: DSP, SSP, DMP, AdExchange, and passback). • E-mail marketing - data collection techniques, newsletters and mailshots, knowledge of basic tools, basic knowledge of spam and filters. • E-commerce - basic concepts of internet commerce, the role of mobile commerce, the ROPO effect. • Internet analysis - knowledge of basic concepts and general architecture of the Google Analytics tool, such as bounce rate, traffic, and traffic source. • Legal issues surrounding the Internet.	Recent years have witnessed a growth in the importance of Internet communication, with almost every firm now maintaining an Internet presence. This means there is an increasing need to target clients effectively and understand their Internet usage habits. This in turn means greater labor market demand for people who have skills in this area. The employers said that the requirements for knowledge of issues related to e-marketing will increase, particularly in firms that offer their products and services on the Internet. Despite the fact that the knowledge required is not very complicated, it is not taught as part of the vocational education system. It can currently be acquired by attendance on paid courses delivered by private-sector firms and on university post-graduate courses. In Poland, skills in this area can be demonstrated by passing an exam organized by the advertising industry organization Interactive Advertising Bureau Poland. Passing the exam provides the person with the digital marketing qualification DIMAQ.

Theoretical and Practical Knowledge of Digital Data Protection

Learning Outcome	Employer Expectations
Knowledge of digital data protection - such as issues related to processing personal data. Knowledge of Polish and international law on personal data protection including judgments of the Court of Justice of the European Union. Knowledge of specific data protection systems, such as Kaspersky, Network Access Control, Fortinet, and Oracle.	Business services centers use different kinds of databases in their work. It is therefore becoming increasingly important to manage them, store them safely, and ensure their protection. Knowledge in this area is going to take on increasing significance, not just in the IT industry, but also in all firms operating in the business services sector. It is important to stress that not even vocational education programs preparing students to become IT technicians give sufficient attention to these issues, and that programs preparing students to become economics and bookkeeping technicians only teach legal issues related to this area, such as legal aspects of personal data protection.

Table 6: Generic hard competencies

Good Knowledge of Microsoft Office (particularly Excel)

Learning Outcome	Employer Expectations
Ability to use Microsoft Office, including: • Word – formatting text, creating a table of contents, using the review feature • PowerPoint – designing presentations, slides, and animations. • Excel – creating graphs and macros, using standard functions (mathematical, logical, textual, etc), preparing forms, checking data integrity, using pivot tables, using sorting techniques, finding and replacing data, formatting, conditional analysis, using different types of filter	Knowledge of this office software is required in all candidates who will have to carry out office work, and this is usually checked by testing. Employers stressed that the knowledge of MS Office shown by most candidates is limited to basic skills. The biggest weaknesses concern Excel skills, as candidates usually have a poor knowledge of spreadsheet formulas and how to use them. Advanced knowledge of Excel is particularly in demand by firms in the business services sector that provide support for finance and banking processes. The employers said that job candidates often do not know how to use this tool at all, and that they do not even know where to find information about it. The ability to create PowerPoint presentations is a very important skill in the business services sector. The interviews revealed that it is required chiefly in large IT sector firms with an established reputation; giving a presentation is an essential part of the recruitment process.

Knowledge of Basic Concepts in Economics and the Economy

Learning Outcome	Employer Expectations
Knowledge of balance sheet structure, understanding of concepts such as assets, liabilities, balance, profit, rate of profit, financial year, GDP, net, gross, bonds, interest rates, export, import, securities, the stock market, credits and loans, and supply and demand curve.	Twenty-two percent of people working in BPO centers provide support for processes related to finance and accounting. It is therefore expected that candidates for jobs will know and understand basic concepts in these fields. The employers said that while students in vocational schools with economics and bookkeeping streams do learn about these issues, they are not taught the details of financial processes typically handled by business services organizations, and candidates who have qualified in other specializations do not even have a basic knowledge of these issues.

Knowledge of Foreign Languages

Learning Outcome	Employer Expectations
Knowledge of English at level B2 and a second foreign language at B1.	The international character of firms in the business services sector means that knowledge of languages is crucial. Employers highlighted knowledge of English as a fundamental criterion for evaluating candidate applications. However, there is particular demand for candidates with knowledge of a second foreign language, with the most important being Scandinavian languages, German, French, Italian, and Spanish. The language requirements for people working in the IT sector are not so high. If the work does not involve contact with customers, knowledge of English at level B1 (including knowledge of programming terminology) is sufficient. Vocational school programs include classes in only one foreign language, which includes a focus on the language of business. It would seem, however, that school language provision is inadequate. Many employers said that during recruitment candidates have difficulty writing a formal letter or email, and their knowledge of foreign languages needs to be improved during practicum placements and additional training.

Basic Knowledge of Project Management

Learning Outcome	Employer Expectations
Understanding of the basic concepts of project management, such as project, SMART objective analysis, objectives, activities, products, project results, timeframe, risk analysis, project stakeholders, budget, and cost categories.	Project management methodology is widely used in the business services sector for a variety of tasks. This means that knowledge of the relevant concepts and of how work is organized in this approach is extremely important. A different project management methodology is used in the IT industry, where it is very important to be familiar with the Agile method.[3] Almost every firm in the IT sector has adopted agile principles. The employers said that the Agile method almost never features in educational curricula, and when students graduate – not only from vocational and secondary schools, but also from university – they are not ready for work in agile environments.[4]

3 Agile software development describes a set of principles for software development under which requirements and solutions evolve through the collaborative effort of self-organizing cross-functional teams.

4 In this context it is worth noting the Education by Work Experience Program initiated by Invest in Pomerania and the Gdańsk Economic Development Agency, the main purpose of which was to give high school students a better understanding of how businesses operate, including how project management works. Eighty students from four schools took part in the program.

Basic Knowledge of Commercial Law

Learning Outcome	Employer Expectations
Understanding of basic concepts in commercial law, including the construction of contracts, rights of client and offeror, structure of invoices and bills, liquidated damages, enforcement of debts, trader, freedom of commercial activity, principles of property protection, and principles of economic freedom.	Business services centers operate in a complex network of relationships with customers and public partners. This means that employees need to know and understand the legal aspects of these relationships. An advanced level of knowledge is not required, but a basic knowledge significantly helps employees understand the processes of buying and selling that take place in the firm. In the opinion of employers, this improves the efficiency and speed with which certain tasks are completed, because employees are able to see what they do in the context of a greater whole. Knowledge of commercial law forms part of the curriculum for future economics and bookkeeping technicians at both secondary and post-secondary vocational school, where the legal aspects of the course content for these specializations are of a fairly advanced nature. A basic knowledge of these issues forms part of the curriculum at all secondary vocational schools as part of classes on the formal and legal basis of commercial activity, but these issues are only treated generally, with no specific reference to the business services sector. For example, firms in this sector often work with firms from other parts of the world, but educational programs do not often give attention to the legal situation that exists in these other countries, and employers pointed out that graduates of vocational schools in Poland do not know how to make payments using checks, which in many other countries is standard procedure. Another problem is that students are not taught the vocabulary for talking about legal matters in English.

Basic Knowledge of How Organizations Operate (n Particular Knowledge of the Specific Nature of the Business Services Sector)

Learning Outcome	Employer Expectations
Basic knowledge of legal and business aspects of organizational structures, the role of managers, the organizational life cycle, and the operation of enterprises. Understanding of organizational culture, mission, vision, and strategy. In relation to the business services sector, it is important to understand concepts such as outsourcing, shared services centers, business process outsourcing, information technology outsourcing, research and development, and the processes supported in the sector.	The programs of vocational schools include almost nothing about the operation of organizations. Some issues relating to organizations in the context of economics and bookkeeping are included in the curricula for economics and bookkeeping technicians. Issues specifically related to the business services sector do not feature in school programs at all. Employers often stressed that most candidates do not know anything about the sector, and in particular about its global nature and the way it provides services for firms in other countries. This means that new employees are introduced to the sector, what it does, and how it works, only after starting their job.

Basic Knowledge of Mathematics and Statistics and their Applications

Learning Outcome	Employer Expectations
Understanding of basic mathematical concepts such as function, root, power, and interest calculations. In statistics it is important to understand concepts such as arithmetical mean, variance, mode, median, aggregate variables, dependent and independent variables, measurement scales, random sample, and statistical error.	Math is part of the curriculum in every school, so graduates should be familiar with these concepts. However, they are often not able to apply these concepts in specific situations. The employers said that during job interviews candidates often do not know how to calculate percentages and are unable to perform simple mathematical operations. Educational programs in vocational schools include statistics only in courses leading to qualifications involving bookkeeping, such as bookkeeping technician. Other students have practically no opportunity to acquire this knowledge in school, and as a result they usually do not have even a basic understanding of descriptive and inferential statistics. The employers said this is a significant problem, because without this knowledge people are unable to work with the information contained in material such as reports or analyses. This problem was mentioned in particular by employers representing centers that provide support for research and development processes.

Basic Knowledge about Other Cultures and Multiculturality

Learning Outcome	Employer Expectations
Understanding of basic concepts concerning the cultures of other countries and ethnic groups, and the main religions and their customs. Understanding of the problems caused by stereotypes and prejudices. Basic knowledge of migration.	The people who work in business services centers represent a variety of nationalities, ethnic groups, and religious communities. It is very important that employees have a basic knowledge of cultural differences and that they approach these issues with respect, because according to employers this helps people work effectively. There is an increasing need in Poland for people to understand these issues, but vocational education programs do not include classes in this area, nor is it taught in other subjects such as history or civics.

Ability to Communicate Using New Technologies

Learning Outcome	Employer Expectations
Skills necessary to be able to use the basic features of ICT equipment, such as computers, laptops, and cell phones.	The employees of business services centers use email, advanced email features, and instant messengers on a daily basis. These skills are not usually learned in school, but candidates do generally have a basic knowledge in this area. However, they often do not know how to use more advanced features that are useful in a work setting, such as maintaining a calendar or a to-do list. Candidates also do not know how to use programs like Skype for work purposes.

Table 7: Soft Competencies

Analytical Thinking Skills

Learning Outcome	Employer Expectations
Ability to draw logical conclusions based on information provided. Ability to view a problem from multiple perspectives. Ability to perform tasks that require the processing of large amounts of information. Ability to identify possible relationships based on a set of data.	According to almost all employers interviewed, analytical thinking skills are crucial at work, so almost every business services organization checks these skills with a test at the recruitment stage. According to employers, this test presents a considerable challenge to candidates. In many cases they are unable to complete simple tasks, solve a deductive reasoning task, or identify a relationship based on a set of data. Employers see the source of this problem in the fact that during their education students usually only have to use formulas to solve set question types, without having a deeper understanding of what they are doing. It would be difficult to expect that developing these skills should be taught as separate subjects in vocational schools. Analytical thinking can be learned in a variety of classes, particularly in the exact sciences, but this depends in large measure on the method of instruction and the extent to which teachers encourage students to analyze the material more deeply and reach conclusions independently. This is recommended in the curricula for certain subjects, but it is difficult to say if analytical thinking is developed effectively during vocational education. Analytical thinking skills should be seen in connection with training in other skills. It is not necessary to offer separate courses in analytical thinking. However, it may be that additional training courses in a variety of areas should be taught in a way that also allows the participants to develop their analytical thinking skills. To this end, it may be helpful to use case studies, specific examples, problem-solving, simulations, role-playing, and exercises in drawing conclusions based on analyzing and comparing specific data. Analytical thinking skills should be taken into account when planning individual career paths for specific people. If a competency-based interview shows that a person has highly developed analytical thinking skills, it would be a good idea to offer them specialist training in areas such as programming or statistical methods.

Active Engagement and Perseverance when Working on Tasks Related to the Firm's Operations (Including the Ability to Concentrate on the Task in Hand)

Learning Outcome	Employer Expectations
This is a skill that requires employees to be highly mature and to understand the purpose of their work. It is important that people have the ability to plan individual stages of their work, adopt a strategy that minimizes the likelihood of error, and make sure that any deficiencies are properly rectified.	Many employers stressed that work in business services organizations often requires people to focus on completing a specific task. This involves carrying out each stage of the work with precision and paying attention to detail. The aim is to achieve high-quality results, and according to the employers this is one of the most important skills needed, particularly by firms that provide support for finance, accounting, and banking processes. The most effective way to acquire this skill is during practicum placements with a potential employer or possibly as part of the onboarding process for new employees. The employers said they try to show work experience trainees (or employees) the context of the work being done, how it relates to other operations of the firm, and the specific nature of the business services sector, all of which is intended to help people plan their work better and adopt the best strategies for working effectively. During their vocational education, students have limited opportunities to acquire this kind of competency. This means that during additional training participants should be introduced to the organization of business services centers so they can gain a better understanding of the processes these centers support. During practicum placements participants could be taught the same issues as they apply to a specific firm.

Interpersonal communication

Learning Outcome	Employer Expectations
Ability to state things clearly, adapt the form and content of what is said to the people being addressed, listen to others carefully and pay close attention to what they say, start a discussion or conversation without being prompted, and encourage others to express their ideas. Communication skills also include writing letters and emails addressed both to other employees and to customers.	Work in services centers is in large part based on working together with others, and on exchange of information and ideas. According to the employers this is an important skill, which people do not acquire sufficiently during their school education. Although it is included to a certain extent in vocational school programs (as part of classes on “correspondence with the customer” and “communication with the team”), this is not enough. This is chiefly because the education system never provides students with the opportunity to apply this knowledge in practice. According to the employers, new employees often find it difficult to write a clear email or communicate effectively with the team. Communication skills are particularly important for employees who interact directly with customers – it is estimated that they make up 15% of people working in the business services sector. This is a competency that should be taught as part of additional training programs. It is very important that this be done not just by presenting theory, but through practical training. For example, simulations can be arranged around situations that are similar to those that employees often encounter at work. This should be done with the help of a professional trainer in this area. It would also be helpful for additional training to include analysis of specific cases, practical advice, and practice of tasks such as writing formal letters.

Teamwork

Learning Outcome	Employer Expectations
Ability to develop solutions in partnership with others, which includes listening to others and taking on board suggestions made by different members of the team. Ability to act in the interests of the team, avoid conflict, and strive to resolve any disputes that do arise.	Work in business services centers is primarily work that is carried out as part of a team, which means that employees are expected to be able to work actively together with others to achieve assigned objectives. Teams are often composed of people working in different locations and time zones, and their work has to be coordinated. Teamwork of this kind ensures greater effectiveness, increased motivation, and mutual inspiration. With good communication and exchange of ideas and information, work in teams provides greater opportunity for developing better and more innovative solutions. The ability to work in a team is not learned as part of the educational process. This approach to performing tasks and carrying out projects is not often used for teaching in schools or during practicum placements, and individual performance is preferred instead. The employers said that working in a team is a challenge for new employees and in the first few months of work they have to learn how to work in this way. So it is important that this approach be included in vocational training, with projects that have to be completed by groups of participants, and joint analysis of problems that occur during work. It is important that after completing these tasks each person is given feedback and advice that will enable them to understand the nature of teamwork.

Resistance to Stress

Learning Outcome	Employer Expectations
Knowledge of techniques for coping with stress.	Stressful situations occur on a regular basis in business services centers. Employees often have to work on several tasks at once and complete them under time pressure, and they often work in open-space offices, where some people find it difficult to concentrate. The employers said it is important for employees to be able to concentrate on their work, including when working in difficult surroundings. It is also important that people are able to control their emotions and cope with criticism. Despite the fact that vocational school programs do include techniques of coping with stress, this is definitely a skill that should be taught in workshops and other training settings which deal with real work situations.

Ability to Self-organize Work to the Best Effect (Enabling Timely Completion of Assigned Tasks)

Learning Outcome	Employer Expectations
Ability to break tasks down into simpler steps, prioritize them, monitor the time involved, plan individual tasks, and make allowances for any delays that may occur.	Skills related to work organization and time management are important in most firms in the market. Future employees have to know how to organize their work in a way that allows them to complete tasks within a deadline. It is also important to be able to estimate risk. If an employee realizes there is a real risk of delay, they should inform their colleagues immediately, ask for their help, and suggest an alternative plan of action. It is also important to be able to complete tasks in the right order depending on their importance, and in coordination with others. It should be noted that the ability to organize work also includes using the right tools, such as computer applications. The employers stressed the importance of this, saying that if employees do not have this skill it may cause the firm to become dysfunctional. Vocational school programs do not include classes on the subject of organizing work, and it is not usually mentioned in other classes. In view of the importance of this skill, it would be desirable for it to be taught, at least to a certain extent, as part of additional training provision, such as workshops.

Ability to Solve Problems

Learning Outcome	Employer Expectations
Ability to look at a problem from different points of view and find a solution, perhaps after asking other people.	Work in rapidly expanding enterprises is not just a matter of carrying out tasks in predefined ways, as it also requires people to be flexible in their reactions to problems that occur. Many employers stressed that employees usually adopt a passive attitude in these situations, with people expecting that someone else will find a solution, which makes the work less effective. Analysis of vocational school programs shows that the school system does not afford many opportunities to develop this skill in students. It is undoubtedly acquired to a great extent by experience, and problem-solving is often made easier when people understand the context in which a problem occurs. People who carry out different tasks in different firms will encounter different problems. This means it is hard to expect that this skill can be learned just by attending additional training. However, additional training should include this skill, at least to a certain extent. The best way to help people acquire this kind of skill is by using case studies, in which the training participants are set a problem similar to one that may occur at work and are encouraged to suggest and analyze solutions as a group.

Awareness of the Need to Extend and Continuously Update Personal Knowledge, and Ability to Adapt to a Changing Environment

Learning Outcome	Employer Expectations
Continuous improvement of knowledge and acquisition of new skills. Ability to plan this process, including finding resources, people, or courses that may be helpful in learning new things.	During the interviews employers stressed the importance of this competency, and said that work in business services centers is not about routine performance of the same tasks. The work done in these centers often has to be modified according to the needs of individual clients. This means that the type of workers needed are those who are keen to extend their knowledge, who see this need themselves, and who are not afraid to take on new and difficult challenges. This competency is not easy to learn, because it requires people who are self-starters, capable of making mature decisions, and with a desire to take control of their own development. Vocational school programs make clear that after completing their education students should possess the competencies needed to work in the specialization in which they have qualified and should also be aware of the need to continue to develop and improve their skills. In practice, however, the question of further development is usually limited to directing students to resources that may be of use. However, it is important to show employees the opportunities and long-term benefits they can gain by improving their skills. The participants of vocational training programs should be shown tools that enable them to extend their knowledge, the options open to them for planning this process, and different strategies they can use to improve their skills. This should be adapted to the age and predispositions of the people concerned. For example, some people prefer to learn from books and magazines, while others prefer workshops and industry conferences. It is also important to show people that taking the initiative in learning new things allows them to treat their job as a hobby, makes it more interesting, and gives them better opportunities for promotion.

Proactive Approach and the Ability to Suggest Ideas that Can Improve How the Organization Works

Learning Outcome	Employer Expectations
Sense of responsibility for the good of the firm; engagement; independence; readiness to suggest ideas.	Many employers said that engagement and showing an interest in how the firm works are very desirable characteristics. Employees should see their work in the context of other things that are done in the organization. It is important that they understand this process and are able to see when there is a need for modifications that may improve the organization and its work. This ability is particularly important in large organizations, because optimizing and coordinating what is done allows these organizations to improve their operation. This competency requires people to be mature and have a sense of responsibility for what they do. It is hard to expect that it can be learned quickly. During training it is important to point out the positive aspects of such attitudes, and to show employees that they can have a real impact on how the firm works and that employers value engagement. The importance of this competency should be emphasized during training programs for other skills. It would be a good idea to show course participants that knowledge and skills gained during training can be helpful in formulating suggestions for improving the work of the firm. A very good method, which stimulates creativity and develops the skill of finding optimal solutions, is known as design thinking. It enables the analysis of a particular process or task from a number of different aspects, creating better understanding and opportunities to see ways in which modifications could be made to improve the solutions being considered.

The tables on the previous pages show the range of knowledge, skills, and competencies that are currently in particular demand by employers in the business services sector. These include knowledge of particular areas and procedures, general and specialist knowledge, and the ability to carry out analyses and use specific tools. Most currently available vocational training programs concentrate on developing this type of skill (i.e. foreign languages, programming, use of office software). The table also lists soft competencies, including communication skills, the ability to work in a team, and the ability to self-organize work. These skills are important to be able to work in the business services sector, but the employers interviewed said that many candidates do not have them.

In the words of one employer: "Many people in Poland think that all you need is to learn a trade, but that's not really what counts these days. It's very important to be able to work in a team, to be open to learning, and to express opinions clearly. That's extremely important." This makes it important for vocational training, workshops, and practicum placements to help people acquire specific knowledge and skills, but also to develop competencies such as communication, teamwork, and problem-solving.

Including soft competencies in training programs will help participants realize that success at work may be determined by skills that are not related to their specific profession. Vocational education programs, as well as organizations and social enterprises that are preparing candidates for employment would do well to use competency based interviews and information on the predispositions and interests of these candidates to help them decide how to develop potentially useful hard skills. This would include helping them to plan their training and to decide, for example, if they should learn programming languages or accounting. Courses in these areas should also include work on soft competencies, such as teamwork and the ability to solve the problems that typically occur in a particular sector, and discussion of other relevant topics. The integrated teaching of hard and soft skills would probably be more effective than teaching them separately. These training programs will act as a springboard for people to develop these skills further during practicum placements and after starting work, when the employee's development needs are better understood.

The acquisition of soft competencies is particularly important for young people and women who do not currently participate in the labor force. In many cases their skills are limited to those acquired during their school education, and are often obsolete and need to be brought up to date. The employers said that people who do not have work experience usually have poorly developed soft competencies, such as having problems with communication and organizing their work. It is also the case that people who have been out of the labor force for a long time need to update their knowledge and vocational skills and learn new things, and if they can do this, they will be better prepared to work in business services centers.

Innovative Models to Increase Levels of Employment

ACCORDING TO A REPORT PUBLISHED BY MCKINSEY, POLAND NEEDS TO GENERATE 400,000 NEW JOBS OVER THE NEXT DECADE TO MAINTAIN ITS CURRENT PACE OF DEVELOPMENT.[1] IT IS ESTIMATED THAT IN THE NEXT FEW YEARS THE BUSINESS SERVICES SECTOR ALONE WILL NEED 250,000 NEW EMPLOYEES. GIVEN THE DIFFICULTIES THAT FIRMS IN THE SECTOR ARE ALREADY FACING IN FINDING QUALIFIED CANDIDATES, IT IS EXTREMELY IMPORTANT TO FIND INNOVATIVE SOLUTIONS TO CLOSE THIS TALENT GAP.

As already shown, vocational education in its current form does not provide students with skills that fully meet the requirements of the business services sector. Steps are already being taken to change this situation. The Polish Government's Center for Education Development[2] initiated a project in 2016 aimed at adapting vocational education programs to the needs of the labor market by involving employer and employee representatives.

Public-private partnerships such as this ensure that each party is bringing their expertise and unique experience to best train and support young people in starting and growing their careers. Public agencies and educational institutions contribute specialized knowledge in training methodology and support of at-risk communities, while private companies, such those in the BPO sector, are able to offer the real-world experience and engagement with mentors that are so vital to ensuring young people are ready for jobs in the sector.

The good news is that there are a range of innovative models that have emerged both in Poland and in other parts of the globe that are specifically aimed to address the issue of employability. These models are designed in particular to help people who have or may potentially have problems in accessing the labor market and securing long-term formal employment. NESsT researched seven of these models to better understand their attributes and be able to make recommendations on the best practices that need to be adopted in order to address the skills training and placement needs of at-risk youth and women as well as the talent and employment needs of IT/BPO industry. To follow is list of these models as well as a summary of key attributes and challenges.

- Grupa Azoty Puławy and the Puławy Technical School Complex – sponsored class training for current and future employees. See Appendix 2.
- Infosys Campus, Łódź – sponsored training for future employees. See Appendix 3.
- ABSL Academy – courses run by industry organizations. See Appendix 4.
- Coders Lab – a private-sector firm delivering vocational training courses in cooperation with employers. See Appendix 5.
- Geek Girls Carrots – a social enterprise that offers skills courses for young women and links them with employers. See Appendix 6.
- Laboratoria – a social enterprises offering training and job preparation for at-risk women. See Appendix 7.
- Siedlisko - a social enterprise offering training and placement for at-risk youth and the long-term unemployed. See Appendix 8.

1 *Poland 2025: Europe's new growth engine*, McKinsey & Company, Warsaw, 2015.

2 The Center for Education Development is responsible for the content of vocational education in Poland. Until June 30, 2016, this function was fulfilled by the National Center for Supporting Vocational and Continuing Education, which the Minister of Education has now incorporated into the Center for Education Development.

Sponsorship Arrangements Matching Employer Needs with Educational Offer

In this model, the intake of students to a particular vocational offering is linked to a sponsoring employer with interest in employing those students. Key to the success of these programs is that the educational offer is able to provide the high quality education needed and that the sponsoring firm will hire a certain number of graduates on successful completion of their education. The nature of the cooperation can take different forms, and is determined by negotiation and formalized in an agreement made between the parties.

One case of this kind of sponsorship is the partnership established between the chemical company Zakłady Azotowe Puławy and the Puławy Technical Schools Group in Puławy, eastern Poland. The company provides sponsorship for classes in which students are training to be analytical technicians and chemical process technicians. It also organizes practicum placements and offers jobs to graduates.

Another case of this is Infosys BPO Poland in Łódź, a subsidiary of the Indian company Infosys Ltd, which is a global supplier of integrated business consulting, technology, outsourcing, and IT services. Infosys BPO Poland provides free training for future employees, delivered by its Infosys Campus.

The strong aspect of this model is that there is a reciprocal supply and demand relationship. However, the potential to replicate this model in Poland and in other industries needs further assessment. What motivated Azoty and Infosys to invest in this model? Would other IT/BPO firms be willing to invest in the training of their current and future employees? And to what extent are these firms interested to employ at risk communities that have not necessarily completed higher education or high quality technical education. At the moment the programs researched are not focusing on at- risk individuals or those without some level of education. Finally, if these firms are not willing to fully fund these programs, is there a hybrid model that could be developed between the industry and social enterprises?

Organizations that Offer Courses to Improve the Skills of People who May in the Future be Employed by Firms in the Sector

A case such as this is the Association of Business Service Leaders, an organization that gathers 400 firms from the business services sector and organizes the ABSL Academy, which runs courses preparing candidates to work in BPO centers. The Academy uses diversified sources of funding to sustain itself including the dues paid by its members, trainee fees, university in-kind contributions, as well as donations and grants.

The model stands out due to the high quality training that is offered by the Academy and the commitment of the member firms to belong to the Association and the engagement of employees to offer some of the training. However, the model is still not consolidated and that BPO member firms are not necessarily willing to pay for the training that is being offered. In addition, the interest of industry organizations such as ABSL, and its members, to incorporate a social focus to its training offer needs to be assessed. How can ABSL refine the Academy's business model targeting at risk women and youth. Can it create a course offering affordable to low-income groups? What will be the role of member firms in this new model?

Private-sector Training Firms that Deliver Vocational Courses in Cooperation with Employers

Another model is comprised of private training companies that provide very specific high quality training in a specific sector and also have a track record in helping graduates to find employment upon completion of their training.

One of the cases studies is Coders Lab, which runs boot camps – twelve-week paid programming courses where participants can learn coding skills in a relatively short space of time. The company sells services directly to participants at a mark-up from the actual costs. The prices are maintained relatively accessible by lowering costs through sponsorships from company partners. The participants of the training are people who don't have formal education and are in immediate need of employment. And the company places 80% of its graduates.

The model is successful in that Coders Lab places a great deal of emphasis in offering coding courses that are in very high demand by IT companies in Poland. And the fact that participants of the courses are willing to pay for them knowing that they are highly likely to find employment. Through the research, Coders Lab became interested in developing a soft skills curriculum for at-risk individuals and NESsT is currently helping the enterprise to develop a business model that will make these courses accessible to this target group. And it will be important to see if they are ultimately successful at placing these graduates. One constraint is whether they will be able to address the lack of English language capacity among this new target group.

Non-governmental Organizations and Social Enterprises that Offer Training and Employment Support Services to At-risk Individuals

One case of this is the social enterprise Geek Girls Carrots (GGC), which holds programming workshops in Poland for women and then helps them to access potential employers. GGC has trained over 2,000 young women through their educational offer. Their selection process allows the team to select young women who are strongly motivated and would greatly benefit from participation in the trainings. GCC sells services to business partners in areas such as recruitment, promotion and business consulting. The organization is based on the commitment of volunteers including the young women who gain their first employment experience helping with events or as course mentors.

Another case is Laboratoria, also a social enterprise that trains and prepares young women in Latin America for employment in the IT industry. The intensive training program that lasts five months includes Web design (HTML, CSS, JavaScipt) and personal development that includes workshops and mentorship, provides students with soft skills and helps to develop their self-esteem, leadership and creativity. The enterprise provides its graduates with an opportunity to work in its own Web Shop before placing them with local companies. To help with placement, Laboratoria prepares the young graduates for the recruitment process through mentoring, interview practice, web portfolio development, among other activities. The educational offer is accessible to at-risk individuals as the costs of the course and accompanying services is paid back once graduates are placed with employers. By 2020, Laboratoria expects to reach and train 10,000 young women as coders, across 10 major cities in Latin America.

A final case that was researched is Siedlisko, a social enterprise that trains youth with intellectual disabilities and people with low skills in specific vocational areas. The enterprise then employs the graduates as caretakers in its nursing home as well as to work in its catering and laundry operations. Siedlisko runs all three units as commercially viable businesses. It charges fees to the residents of the home and the clients of the other two services. By leveraging its infrastructure during idle time, the enterprise increases revenues while employing youth in a variety of occupations. The enterprise is currently expanding its vocational education programs and aims to replicate its model to other locations.

The key advantage of these social enterprise models is that they exist specifically to provide training to at-risk individuals and provide them with soft skills, job preparation, and job placement services needed to find employment and to pursue careers in specific industries. The training and support services they provide are of high quality and succeed at placing their target groups. However, a key challenge for them is finding a business model that is sustainable. The costs of training and support are high and the target groups are only able to pay a small percent of their real value, and only in some cases are future employers willing to pay for them. As a result, the enterprises supplement the revenues with other business lines or subsidize the costs with philanthropic support. The result is that the models are difficult to scale.

Best Practices of Social Enterprises

Based on the research of these seven cases and NESsT extensive experience working with social enterprises, a set of best practices emerge demonstrating how these enterprises are working to prepare at-risk communities for meaningful employment as well as specific recommendations on how these enterprises could do so in the case of Poland:

Social enterprises promote the need for additional vocational education among people who find themselves outside of the labor market, both in local and regional communities.

Many social enterprises are specifically set up to provide rehabilitation and training to communities who are excluded from the labor market. Since they are locally based, they have an established local presence in socially excluded and low-income communities and a strong knowledge of and empathy towards at-risk youth and women, which provides an advantage in developing successful recruitment and training activities.

Social enterprises identify the skills gap of people who have problems finding employment, and create programs to strengthen the soft and hard competencies of these people while providing them with practical work experience and ongoing employment support.

Social enterprises approach their work with at-risk youth and women holistically, seeking to strengthen life skills alongside traditional cognitive and technical skills to improve learning outcomes and increase workforce readiness. They may also have experience incorporating internships, job placement services, administration of public programs benefitting women and youth, English language training and career counseling support into their employment programs.

Those providing placement services will often accompany the newly employed during their first year of employment to ensure that they are receiving continued support as they adapt to their new work environment and employer demands. Others also provide trainees their first opportunity of employment in the social enterprise itself. This is the case of Laboratoria and to a certain extent Siedlisko. In Romania, the social enterprise Concordia trains and employs homeless youth in their bakery before they search for outside employment.

Social enterprises offer training adapted to the financial and paying capabilities of participants, particularly of at-risk young people and women.

People who have problems in accessing the labor market do not usually have the financial means to pay for training and placement services, and banks do not consider them sufficiently creditworthy to give them an education loan. Social enterprises develop business models that provide training and educational support services in accessible manner. These business models include:

- The option for the trainee to make repayments in low, ongoing installments or to defer payments until the person has obtained employment.
- Training fees that are subsidized by external sources, including funds from public grants, such as the European Social Fund Knowledge–Education–Development Operational Program (Priority 2.1), or from local government sources.
- Training financed by employers, who then employ graduates of these training programs who meet their skills and talent needs.
- Training financed with funds obtained from commercial activities of the social enterprise undertaken for employers, such as providing employers with employment placement services.

Social enterprises monitor and measure the social impact their work has on the people they support.

In addition to accompanying new employees during their first year of employment, social enterprises continue to monitor the work conditions and career development of employees, to ensure that the employment is having a positive impact on their lives. They also seek feedback from the graduates on the effectiveness of the training and placement services received and how this could be improved, in order to benefit future trainees and clients of their services.

Social enterprises involve employers in the preparation of training programs and work together with them at every stage of the training as it proceeds.

Involving employers in creating programs, developing training modules or monitoring their content ensures that the subject is relevant to labor market needs. Azoty, Infosys, ABSL and Coders Lab, all involve employers or potential employers in different aspects of their training. Given the rapid growth and changes of the business services sector, it's very important to involve firms in the development and whenever possible the delivery of the training, preferably in their own centers. This allows the course participants to test their skills in practice and get used to working in a real workplace environment. This also allows employers to become acquainted with the profile of future job prospects, enabling them to become more effective in recruiting and selecting candidates that are best suited to their requirements.

Social enterprises that conduct training for adults use the latest communication technologies, including online training.

In order to be relevant to both the at-risk communities they serve as well as to employers, social enterprise deliver effective training and high-quality courses, applying active teaching methods adapted to the predispositions and capabilities of participants. In order to ensure that the format of courses does not exclude people because of their family situation, place of residence, or time constraints, social enterprises are increasingly offering this training on an Internet platforms or using different internet tools to make them more accessible. This is particularly important for women with childcare responsibilities who

need flexible class, and also for people who live in remote areas, don't have access to transportation and cannot access in-person classes.

Social enterprises validate courses and training by specifying the skills and competencies that should be demonstrated by people who complete them.

Social enterprises seek to develop a unique range of courses that provide successful participants with specific skills. Acquisition of these skills should be confirmed by a certificate awarded by an external institution such as Microsoft or the Interactive Advertising Bureau.

Social enterprises foster cooperation with businesses and labor market institutions in Poland to enable continuous monitoring of employers' needs for specific competencies, and also to collect information about efforts to bring people into the labor force being made by other organizations.

Social enterprises gather information about demand for specific skills from employers on a regular basis. In the case of Poland, social enterprises could access this information by doing the following:

- analyzing information provided by Labor Offices, including data contained in the regular Survey of Shortage and Surplus Occupations reports. These reports are published twice a year by Regional Labor Offices, and are based on the same methodological principles throughout the country.
- maintaining cooperation with the Labor Market Analysis Units of Regional Labor Offices. These units have knowledge of local authority workforce readiness programs that are already in operation or are planned for introduction, and they know the context as well as the results of the measures taken. It should be said that this cooperation needs to be based on a continuous exchange of information and not be restricted only to reading official documents. As a result, the work done by social enterprises will complement that undertaken at local level, and this will ensure that the enterprise does not duplicate existing programs.
- working together with industry organizations, including the Association of Business Service Leaders, the Polish Marketing Association, the Foundation of Women Entrepreneurs, and the Interactive Advertising Bureau. These organizations are in constant contact with business services sector employers, are in touch with the changing situation in different sectors, and understand employer demand for specific skills. The cooperation could include joint seminars to enable exchange of information and establishment of shared goals for bringing young people and women into the labor force.
- building a network to partner with businesses that are operating in the market and offering jobs, in order to support the employment of people aged under 30 and women, and also to help arrange practicum placements or training in one of these firms.

Conclusion

THE MAIN OBJECTIVE OF THIS RESEARCH WAS TO IDENTIFY SKILLS THAT INCREASE CHANCES OF EMPLOYMENT FOR YOUNG PEOPLE WITHOUT WORK EXPERIENCE AND WOMEN WHO ARE NOT PARTICIPATING IN THE LABOR FORCE.

Unemployment levels among Poland's youth under 30 is at 20% and the number of people classified as NEET (not in education, employment, or training), is at 22.7%. 41.6% of women under 30 have been searching for a job for more than a year.

In order to identify the most needed skills for employability of these groups, the research sought to assess high growth industries and the specific skills gaps that they currently need to fill. The research found that the business services sector is expanding at a particularly high rate. It is estimated that in Poland between now and 2020 this sector will create 250,000 jobs, and the employers are worried if they will be able to fill these jobs. Therefore, NESsT decided to concentrate the research and report on this sector, examining the directions in which it is developing and its fastest-growing areas, which are mainly services in accounting, finance, and IT.

The research showed what BPO employers expect of future employees, and the competencies candidates need to have to help them to become employable. Among the most important competencies are a good knowledge of foreign languages, financial and programming skills. In addition, employers are becoming increasingly interested in soft competencies, such as analytical thinking, teamwork, perseverance, and interpersonal communication.

Very relevant for the purpose of the research, is the fact that the acquisition of these competencies does not require many years of study; but rather a short to medium period of relevant, high-quality vocational training. Also important is that employers in the BPO sector are already starting to hire people who are not necessarily formally trained in business processes. They feel that employability has less to do with being formally trained but rather with a willingness and ability to learn and perform on the job.

The research then analyzed the extent to which the vocational education system is meeting the needs of this sector and found that there are gaps in relation to the education that is being offered as well as the extent of coverage. The course offering is not only not meeting the need to strengthen soft competencies, but also skills directly related to performing specific tasks in the business services sector, such as skills related to accounting and IT, as well as knowledge of the organizational structure of the centers themselves.

The report also assessed additional opportunities for improving skills or acquiring new ones in order to more easily find work in the BPO sector. At present there are mainly vocational courses delivered by public institutions, industry organizations, non-governmental organizations, and private-sector firms. Given the current skills gaps, some BPO firms are developing and offering courses of this kind for future employees to prepare them for the tasks they will have to do when they start work.

Interestingly, the research showed there are major gaps in

the provision of formal vocational education and additional training provision in relation to certain geographies of the country; particularly where there are more BPO firms. And there are significant deficits when it comes to preparing at-risk communities who have difficulties finding long-term, stable employment offering a livable wage, particularly youth and women. The training is not set up in way that could more easily develop the capacities of these individuals. It is often not accessible, either in terms of schedules or costs, nor does it address other barriers to labor market entrance such as having a clear understanding on the best ways to secure employment in the BPO sector.

To counteract these findings, the research found a number of models and best practices in the country that are already providing training and placement services on behalf of employers. Among these are social enterprises specifically set up to train, prepare and place at-risk youth and women for employment (although not necessarily in the BPO industry). These best practices demonstrate that social enterprises are well-positioned to address this situation, given their commitment to comprehensively train, prepare and place these communities while working to meet the real needs of employers. Their value proposition is to base these services on a sustainable business model. And although none of the models have all of the components needed, together they show that if strengthened and expanded, they can go far to address the talent gaps of not only the BPO sector, but that of other high growth sectors in the country.

In sum, there seems to be a tremendous opportunity in Poland to bridge the divide that currently exists between the BPO sector's need for job candidates and the need for low-medium skilled employment among young people and women who are not in the labor force. The skills that are needed are not relatively complex and can be gained through well-structured, relevant and accessible vocational education courses; and complemented and supported with practical work experience, and support in the recruitment process and initial phases of work.

To make this happen, there is an urgent need to develop close partnerships between BSC firms, vocational education providers and social enterprises that understand individuals who are at risk of unemployment or who have part of the long-term unemployed.

NESsT hopes to continue to work with JPMorgan Chase Foundation to strengthen the models identified through the research, and to foster others. Through NESsT Empowers, we plan to engage with stakeholders so that they begin to work together to address the talent gaps, not only in the BPO industry, but other high growth industries. And we plan to invest in social enterprises committed to train and support youth and women not only to enter the labor force, but to begin a career path in dignified and meaningful employment.

Appendix 1: Methodology[1]

THE MAIN OBJECTIVE OF THE RESEARCH CONDUCTED AS PART OF THE NESsT EMPOWERS PROGRAM WAS TO IDENTIFY COMPETENCIES THAT INCREASE CHANCES OF EMPLOYMENT FOR YOUNG PEOPLE WITHOUT WORK EXPERIENCE AND NON-PARTICIPATING WOMEN. A PARTICULAR OBJECTIVE WAS TO IDENTIFY THE SKILLS THAT ARE IN DEMAND IN THE HIGH-GROWTH INDUSTRIES THAT ARE CREATING JOBS IN POLAND.

Specific objectives of the research included:

1. Identification of opportunities for people who face difficulties finding work, particularly women and youth, to improve their competencies or learn an occupation.
2. Identification of the competency pool that exists in the Polish labor market among youth and women.
3. Identification of the areas of vocational education and training that offer the greatest benefit in helping people acquire competencies that increase their chances of finding employment in the fastest-growing sectors of Poland's economy.
4. Identification of the branches and sectors of the economy that offer the most jobs and that will probably continue to do so in the future.
5. Identification of innovative ways for partnering with employers and educational institutions to deliver training tailored to the needs of young people and women who have difficulties finding work.
6. Specification of the competencies (hard and soft) that employers most often look for (broken down by geographic region and industry sector).
7. Evaluation of the potential of training institutions.
8. Determination of the willingness of employers to become involved in improving the skills of people who face difficulties finding work, particularly young people and women.
9. Diagnosis of competency gaps in people who have difficulties finding work, particularly women and youth, and comparison of the skills they lack with the skills expected by employers.
10. Assessment of social enterprises best practices in providing vocational training for youth and women and preparing for long-term, dignified employment with firms operating in Poland's fastest-growing industry sectors.

The research was conducted in two phases: desk research to get a deeper understanding of the above issues; followed by primary research based on interviews conducted with employers to get a deeper understanding of their talent needs and how to overcome barriers. The desk research made use of the following materials:

- Information collected for public purposes and made available through internet databases, such as the Local Data Bank of Poland's Central Statistical Office.
- Data from the Human Capital in Poland project of the Polish Agency for Enterprise Development.
- Data provided by Eurostat, the European Union statistical authority.
- National studies on selected aspects of economic growth and vocational education, and reports on labor market opportunities in relation to at-risk groups, including women and young people in particular.

1 The methodology used in this research was reviewed by an expert who confirmed its importance and provided input on its structure. This peer review was provided by Ewa Bogacz-Wojtanowska, organizational and management researcher, PhD, Associate Professor at the Institute of Public Affairs Jagiellonian University in Cracow, Poland. Ms. Bogacz-Wojtanowska's areas of research include nonprofit and social enterprise management, as well as cooperation among public and non-governmental organizations and civil society.

The results of the desk research were discussed with labor market experts, including specialists working for public institutions and representatives of non-governmental organizations. A total of nine interviews were conducted at this stage.

A tool was also constructed for conducting unstructured interviews with employers at the primary research stage, and these interviews were then conducted with a total of 18 people from organizations operating in the business services and new technologies sectors. It was important that the people interviewed had knowledge and experience of the skills employees need in order to contribute to development of the firm, so interviews were conducted with people from human resources departments and people with responsibility for training. The research included firms from Warsaw, Łódź, Cracow, the Tricity area, and Wrocław – cities where the business services and new technologies sectors are growing fastest.

To overcome challenges in accessing representatives of these firms, interviewees were selected for interview by snowball sampling, where the people interviewed put forward the names of other people who could be interviewed, whose knowledge and opinions about the labor market might help further the research objectives. This involved non-random sampling, and meant that the subject group might include too many people with similar characteristics. Therefore, additional selection criteria were also used. It was decided that the people interviewed should represent firms from different cities, and from both the business services and IT sectors. It was also important that the firms chosen were different in terms of the numbers of people they employ.

Information obtained during the interviews was used to confirm and reinforce the conclusions reached in the first phase of the research. In addition, the information obtained in both phases of the research – the desk research and the interviews – was used to identify best practices, i.e. examples of initiatives whose objective is to improve the skills of at-risk people and support them in the labor market. The research assessed the following components of these initiatives: target group; educational provision; business model; social impact; and challenges that exist in relation to each model. Through this analysis, as well as NESsT's own 20 year track record of working with social enterprises, the research revealed a set of social enterprise practices and stakeholder collaborative strategies that are best-suited to prepare and place at risk communities in meaningful employment.

Duration of Research

The research was conducted under the NESsT Empowers program from February 1 to June 30, 2016.

Participating Firms and Institutions

- Association of Business Service Leaders
- Broad Alliance for Digital Skills established by the Ministry of Administration and Digitalization and Poland's Digital Champion
- Clear2pay
- CodersLab
- Codilab
- Cracow Regional Labor Office
- Efektum
- Euro AGD
- E&Y
- Fundacja Perspektywy
- Geek Girls Carrots
- GFT Poland
- Hays Group
- Infosys
- Interactive Advertising Bureau Poland
- Microsoft
- Multimedia
- National Center for Supporting Vocational and Continuing Education
- Office of Electronic Communications
- Orlen Upstream
- Pragmatists
- Polish Marketing Association
- PwC Gdańsk
- PwC
- Santander Geoban
- SkillHunt
- Zakłady Azotowe Puławy

Appendix 2:

Grupa Azoty Puławy & Technical School Complex

GRUPA AZOTY PUŁAWY IS A POLISH CHEMICAL COMPANY BASED IN PUŁAWY, IN LUBELSKIE VOIVODSHIP, EASTERN POLAND. IT HAS PARTNERED WITH THE TECHNICAL SCHOOL COMPLEX TO OFFER A UNIQUE TRAINING PROGRAM FOR CHEMICAL TECHNOLOGY TECHNICIANS.

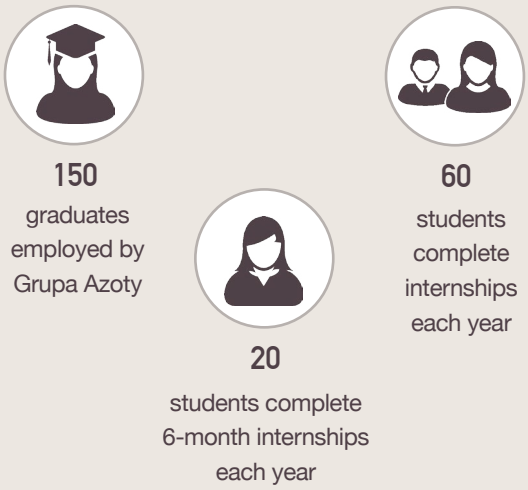
ZA Puławy focuses on two business segments: chemicals for various industries and fertilizers for agricultural producers. The company is the largest producer of nitrogen fertilizers in Poland, the second largest producer of nitrogen fertilizers in the European Union and the third largest global producer of melamine. Its products are sold in Poland and in 50 other countries around the world – from Europe to Brazil and China. The company currently employs 3,300 people and is the biggest employer in the region. Grupa Azoty Puławy is a subsidiary of Grupa Azoty, one of the largest chemical conglomerates in Europe, offering customers a diversified product portfolio - from mineral fertilizers and engineering plastics through OXO alcohols and plasticizers to pigments.

The Technical School Complex in Puławy was founded in 1964 and since its beginnings has been cooperating with Zakłady Azotowe Puławy. The school offers education in the following professions: environmental protection technician, electrical technician, chemical technology technician, analyst technician, mechanical technician, teleinformatics technician, and informatics technician. The school is cooperating with numerous companies from the region, offering its students the opportunity of internships, fellowships and employment.

Target Group

The main target group for Grupa Azoty are students of the Technical School Complex in Puławy that are choosing chemical fields of study (i.e. chemical technology technician and analyst technician).

SOCIAL IMPACT



In addition, the School Complex opened vocational courses for adults. The school offers classes in the profession of chemical technology technician and the majority of the participants are current employers of Grupa Azoty. These courses are fully-paid and they are the additional source of income for the school.

Educational Offering

The partners signed a cooperation agreement in 2011 based on newly instituted legislation encouraging companies from the special economic zones to cooperate with vocational schools. Both partners created together the so-called “class under the patronage” (klasa patronacka), which prepares students for the occupation of

chemical technology technician. They cooperate closely in the implementation of the educational process by:

- Taking into account the expectations of employers when creating a curriculum for education in a given occupation/qualification – in this case the curriculum for chemical technology technician has been designed in accordance with Grupa Azoty needs and expectations.

- Upgrading and modernizing the school's didactic equipment and facility – Grupa Azoty equipped the school's laboratory in accordance with the technologies that are used in the company. As a result, students have the opportunity to learn using the newest equipment and they are well-prepared to start working in the company.

- Organizing practical classes and apprenticeships in cooperation with employers – part of the practical education at school is organized and conducted by Grupa Azoty employees (i.e. classes at the laboratory). Also students have the opportunity to complete an internship in Grupa Azoty.

- Conducting open classes with active and passive participation of employees - the school is hosting lectures, workshops and trainings conducted by Grupa Azoty employees.

- Organizing additional classes for students on new technical and technological solutions in cooperation with employees – Grupa Azoty shares its know-how and technologies with students.

Additionally, Grupa Azoty Puławy employs the 10 best graduates of the Technical School Complex each year. After five years of running the programme, 150 of the school's graduates are working in the company—tripling the number of placements the company originally committed to offering.

Challenges

Both partners believe that the decision to join forces was a very good decision and that cooperation has been a win-win situation. With support from ZA Pulawy, the school is able to invest in its facility and quality of education, the company receives well-prepared candidates to employ and provides volunteer opportunities for its employees. Both partners declared that this cooperation shall be continued. This is also the model to be implemented in other industry lines of the company. The main challenge is being able to navigate changes that take place at a policy level that would disincentive investing in this type of program.

Further Assessment

Important to understand the potential of replicating this model to other companies and industries in Poland. Could a similar model be developed by the IT/BPO Industry? Would the industry fund it? How do we ensure that at risk, low income individuals are also able to access these types of opportunities? Is there a hybrid model that could be developed between the industry and social enterprises?

Appendix 3:

Infosys Campus

INFOSYS BPO POLAND IS PART OF INFOSYS BPO, A SUBSIDIARY OF THE INDIAN COMPANY INFOSYS LTD – A GLOBAL SUPPLIER OF INTEGRATED BUSINESS CONSULTING, TECHNOLOGY, OUTSOURCING, AND IT SERVICES.

It currently employs around 2,000 specialists in Łódź, who deliver BPO and IT services to customers in 48 countries around the world in 24 different languages. Working in partnership with the University of Łódź, Infosys Poland launched the Infosys Campus in 2014, which aims to provide preparation for employment in the company by intensive vocational training in finance, accounting, and taxation.

Target Group

The target group are mainly students at the University of Łódź taking courses in law, administration, economics, social sciences, management, and languages. However, training delivered by the Infosys Campus is open to students in all faculties and university graduates in any discipline who demonstrate the right motivation through the interview process.

Education Offering

Courses usually last for six weeks and cover two subject areas:

Finance and accounting:

- Basic information about finance and accounting.
- Use of software (Excel, SAP), and in particular features related to finance and accounting.
- Soft competencies, focusing mainly on communication and teamwork.

SOCIAL IMPACT

140
participants in 10 full-course cycles

2,160
hours of training provided in three cities

90%
of graduates subsequently employed by Infosys

The course objective is to develop the above skills in a practical context. The instructors, who are employees of Infosys BPO Poland, build classes around case studies. This enables discussion of each issue in the context of situations encountered at work. Classes also include work on accounting tasks similar to those that participants will have to take on when they start work.

Taxation training:

- Theoretical instruction in tax law.
- Practical training based on case studies, enabling practical application of the material presented in theory classes.

The training makes use of practical methods of instruction intended to confront participants with the real challenges and problems they will meet in the BPO sector, and includes job shadowing workshops, where participants work alongside Infosys employees to process authentic documentation and complete tax declarations.

Both training programs – in finance and accounting and in taxation – end with an exam. All participants who pass the exam are offered a job with Infosys.

The cost of training one person is around zł3,000–5,000 (US$770–1280.), which is borne in full by Infosys.

Challenges

The Infosys Poland Campus is one of only a few initiatives where a business services sector employer has decided to conduct training for future employees. This training is provided free, and is aimed at students in higher education and university graduates. No similar initiatives exist that are aimed at vocational school graduates who would like to adapt their skills to labor market demands.

Further Assessment

What motivated Infosys to develop this model and how can other companies in the industry adopt it? What would motivate these firms to expand the training to youth who have not had the opportunity to go to university? How can social enterprises partner with these types of programs so that they can best prepare at risk individuals for the training and eventual employment?

Appendix 4:

Association of Business Service Leaders

WITH ITS HEADQUARTERS BASED IN WARSAW, THE ASSOCIATION OF BUSINESS SERVICE LEADERS (ABSL) IN POLAND ENGAGES 180 COMPANIES IN THE BPO SECTOR, INCLUDING ACCENTURE, ARVATO SERVICES, CAPGEMINI, CARLSBERG, GEOBAN, GOOGLE, HEWLETT-PACKARD, IBM, AND INFOSYS. FOUNDED IN MAY 2009, THE ORGANIZATION CURRENTLY HAS OFFICES IN ALL OF THE BIG CITIES OF POLAND WHERE BPO CENTERS ARE LOCATED: GDANSK, WROCLAW, KATOWICE, POZNAN, LODZ, AND KRAKOW.

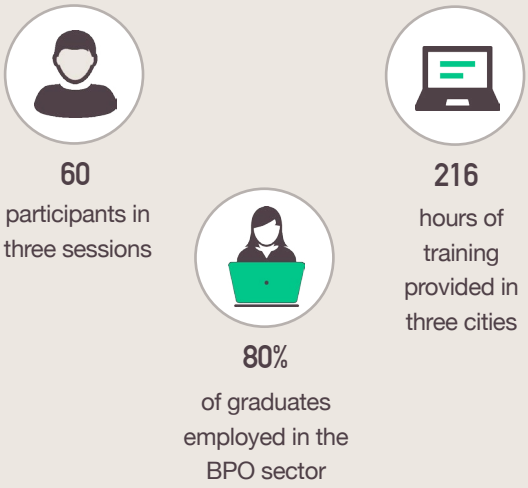
Launched in 2015, the ABSL Academy is a demand-led initiative of the presidents of companies operating in the BPO sector. The Academy's aim is to provide professional training and support skills-development relevant to BPO, which employs 170,000 people and has a potential to generate 20,000 jobs per year. Those companies are offering increasingly complex services, thus are in need of professionally trained staff. The competencies most in need are:

- Language skills, especially fluency in English;
- Education aligned with the area of work: finance, accounting, law, specific programming languages for IT specialists.

Target Group

ABSL Academy's training offer targets especially graduates and students, as well as other people who want to retrain and start a career in the BPO sector. Since the courses are in English, one of the main conditions of participation is at least B2 level of English. The overall motivation and knowledge of candidates is tested during an interview. ABSL has high standards for candidates: to obtain a certificate, an 80% score is required. In general, 70-80% of participants complete the Academy and receive certificates.

SOCIAL IMPACT



www.absl.pl →

By using an e-learning platform, the target group of ABSL Academy is not limited to those living in the largest cities of Poland. Participants who live in smaller cities have the chance to study and after graduation to meet potential employers during on-line interviews, without having to relocate.

Educational Offering

In May 2015, ABSL Academy implemented its pilot session in Warsaw. Currently further sessions are underway in Katowice and Tricity. ABSL is planning to expand and provide courses in other cities where BPO centers are located, including Wroclaw, Lodz, Krakow and Poznan.

The Academy offers training courses divided into three blocks:

- 1st Block - 100 hours of e-learning courses on BPO sector skills and knowledge, provided by CIMA.
- 2nd Block - 56 hours of practical workshops based on case study analyses. Employees of ABSL member companies deliver the workshops.
- 3rd Block – 56 hours of workshops to develop soft skills, including teamwork, negotiations, professional communication skills, internal management of business services sector.

Each graduate receives:

- ABSL Certificate proving they acquired competencies needed for the BPO sector.
- CIMA Certificate in Shared Services – a global certificate confirming qualifications in shared services and outsourcing, issued by CIMA.
- Certificate issued by the academic partner.
- At least two recruitment interviews with ABSL member companies.

Partners

- Representatives of member companies, including Cooper & Standards, Capgemini, Rockwell Automation, IBM and PwC.
- Chartered Institute of Management Accountants (CIMA), which provides the e-learning platform to deliver trainings and substantial support on training curriculum (see Educational Offer below). It charges £ 50 per student.
- Academic partners that are providing, free of charge, rooms and resources in the locations where ABSL Academy is operating, including the Business School of Warsaw University of Technology, University of Economics in Katowice, Silesian University of Technology and University of Gdansk – Faculty of Economics.

Business Model

ABSL Academy uses a nonprofit model of diversified funding to sustain itself. The total cost of the course - which is USD1,080 - is covered by the participants. The fee covers access to the e-learning platform, materials and exams. Face-to-face learning is organized in cooperation with collaborating universities, which are covering the costs of the in-person training and providing other resources such as training rooms, teachers, materials, catering, etc. Member company employees deliver trainings on a pro-bono basis. Some of the Academy's costs are financed with EU grants, obtained together with collaborating universities.

Challenges

Although the Academy has developed a professional development curriculum and has strong relations with companies, local governments and universities, the organization believes that BPO companies are not ready to pay for such courses. Because the fees for the course are high, ABSL is facing difficulties recruiting participants. The Academy currently does not offer courses for at-risk groups to prepare them for entry-level, low-skilled jobs in the BPO sector. Currently courses are designed to develop competencies for mid-skilled and high-skilled jobs.

Further Assessment

Explore ABSL interest in incorporating a social focus into the current model. How can ABSL refine the Academy's business model targeting youth and women outside of the labor force or at-risk? Can it create a course offering affordable to low-income groups? What will be the role of member firms in this new model?

Appendix 5:
Coders Lab

Coders Lab is a private company set up in 2013 in Warsaw. It runs intensive coding courses in Warsaw, Krakow and Katowice in Poland. Coders Lab was created on the basis of models used by American short-term training schools (e.g. Dev Boot Camp in the USA) that aim to prepare participants to change their professions in a short time and without enrolling in long-term academic courses. The leadership team founded Coders Lab when they realized that software developers had become one of the most sought after specializations needed by the market, but in Poland there were no opportunities to obtain such qualifications other than formal education.

SOCIAL IMPACT

650
people trained

80%
of graduates
are employed

www.coderslab.pl →

Target Group

People who want to learn programming and cannot afford a formal education and/or who have an immediate need for employment. Although students have to pay for the courses, the advantage of Coders Lab is that they offer employment opportunities and/ or they link the participant directly with the employer.

Educational Offering

Coders Lab offers two tracks: a 9-weeks, full-time program, and a 16-weekends, part-time courses in front-end and back-end development. In both courses, students will learn selected programming languages, web application frameworks and database management systems, such as PHP, Python, Ruby, HTML, CSS, JavaScript, Ruby on Rails, JQUERY, AngularJS, Symphony and MySQL. Basically these are software skills and tools most demanded by the market.

Applicants do not need to have experience but must show a positive attitude towards learning and dedication to hard work. Applicants must participate in an interview, as well as complete an English test to ensure that they can communicate, and a test to measure logical and mathematical thinking.

Coders Lab does not guarantee job placements but assists participants in getting a job once they're finished with the program. As the enterprise has a lot of links with the business sector, they are able to make these links with employers.

Participants have to pay about 9,000 PLN (approximately $2,450) for the courses. Although the price may seem high, they are fully booked. Also, thanks to a partnership with Santander Consumer Bank, their trainees can apply for preferential loans to cover the fees. Although Coders Lab doesn't offer discounts to any groups, people at-risk of unemployment can apply to the Labor Office to subsidize the training fees. To date, they haven't been focused on working with disadvantaged groups, but their clients are mostly young people without higher education.

Partners

Coders Lab partners with most of the IT companies operating in Poland: Appcodes, Asseco, BL STREAM, Cisco Systems, Daftcode, General Assembly, Infoss, Intel, Netguru, Singha. Partnerships with companies are a way to provide course participants with employment opportunities.

Challenges

Coders Lab is a very well-recognized company in Poland. Their financial condition seems to be very good as they are able to cover their costs from the sales of the courses. They are able to reach a large number of people and they are effective in providing job opportunities. The disadvantage is that they don't have experience in working with marginalized groups and they are not focused on a social mission.

Further Assessment

Assessing their model in terms of how they work with the corporate sector and develop business partnerships. And to better understand how they monitor labor market needs and create curriculum.

As an outcome of the research, Coders Lab became interested in developing a soft skills training for at-risk individuals, and NESsT is currently helping them to develop a business model that will make these courses accessible to this target group.

Students work together on projects as part of their training in front-end and back-end development at Coders Lab.

Appendix 6:

Geek Girls Carrots

Geek Girls Carrots is a social enterprise founded in 2011 in Warsaw by Ms. Kamila Sidor. The social enterprise trains young women and girls to use digital technologies efficiently. The organization offers trainings and consultancy within the area of software development, database management, graphics design, etc. In addition, the organization links women participating in its trainings to potential corporate and small and medium enterprise (SME) employers.

Founded 5 years ago, GGC is currently a global organization:

- Operates in 13 countries: Poland, Germany, USA, Luxembourg, France, Ireland, UK, Japan, Portugal, Gibraltar, Israel, South Korea and Czech Republic.
- Has a network of 90 local leaders committed to developing the community of women in digital technologies.
- Engages over 100 experienced mentors who teach programming in the workshops.

The mission of GGC is focused on three areas:

- Networking - Open meetups for women interested in new technologies.
- Education - Free of charge workshops and trainings in programming skills.
- Promotion - GGC promotes women in IT through media outreach and industry events.

Target Group

Women who want to learn programming.

Educational Offering

GGC organize courses in the following computer programming languages and tools: Python, JavaScript, HTML & CSS, SQL SEM, Google AdWords Scrum, UX.

SOCIAL IMPACT

1,270
participants in 31 special events

2,288
attendees of 147 workshops

255
regular GGC meetings with 551 speakers and 12,000 participants

www.geekgirlscarrots.org →

The GGC is organizing free of charge workshops and community meetings in more than 30 cities, including:

- Poland: Warsaw, Wroclaw, Poznan, Szczecin, Tricity, Torun, Bialystok, Lublin, Rzeszow, Kielce, Lodz, Katowice, Cracow and Bydgoszcz
- Europe: Berlin, Dresden, Luxembourg, Dublin, Gibraltar, Lisbon, London, Paris, Bucharest
- North America: Seattle, New York
- Asia: Tokyo, Tel Aviv, New Delhi

Partners

Most of GGC partners are business sector representatives: Polidea, Facebook, Daftcode, Netguru, Infoss, Citybank Swiss, Intel, Cisco Systems, NOKIA, Coders Lab, Singha, Marcin Kunysz Dishydesign, Appcodes, General Assembly, BLStream.

GGC sells services to business partners in areas such as recruitment, promotion and business consulting. The organization is based on commitment of volunteers.

GGC partners pay for:

- GGC community sponsorship of their events;
- Job advertisements across GGC media channels;
- Partnering with GGC's special events (meetings, hackatons, workshops, panel discussions);
- Participation of GGC speakers in partner industry events;
- Receiving expertise, consultancy or advisory services.

GGC has trained over 2,000 young women through their educational offer. Their selection process allows the team to select young women who are strongly motivated and would greatly benefit from participation in the trainings. Also, the young women who volunteer to support GGC by organizing events or participating in courses as mentors, gained their first professional experience and were better positioned to secure a job in the labor market.

Challenges

Although the enterprise has an important mission, high quality services, and has grown very quickly, it has not been able to build a sustainable business model. As a result, it relies mostly on volunteers and does not have permanent staff. It also lacks resources to track its social impact which in turn effects its capacity to attract new clients.

Further Assessment

Assess the potential of this model to develop the right cost-revenue structure that will allow it to be sustainable in the future. Important to build a small team, strengthen its client base, and develop systems that track sales, customer satisfaction and future market needs. This will contribute to validating the business model.

Appendix 7: Laboratoria

Laboratoria is a technology social enterprise based in Lima, Peru, that empowers young women from low-income back¬grounds by giving them access to education, work and job placement in the digital sector. Laboratoria recruits women with promising talent and offers them an immersive coding and personal development program. The program is free of charge and includes five months of courses in web development, technical entrepreneurship, personal development and English. Upon graduation, Laboratoria hires a number of women to work as developers in the enterprise's web shop, eventually connecting them and other graduates to companies in need of talented coders.

Due to inequalities in access to quality education and employment, more than 22 million young people in Latin America and the Caribbean are not able to go to school or find work. Seventy percent of these young people are women. Interventions usually focus on building low-skill capabilities that do not necessarily guarantee sustainable employment. Meanwhile, the growing technology sector offers untapped employment opportunities and needs gender diversity. According to a Mozilla study, less than 7% of Peruvian web developers are women. Laboratoria's goal is to kickstart its graduates' careers as developers, increasing their income and enabling them to build better futures for themselves, their families and their communities.

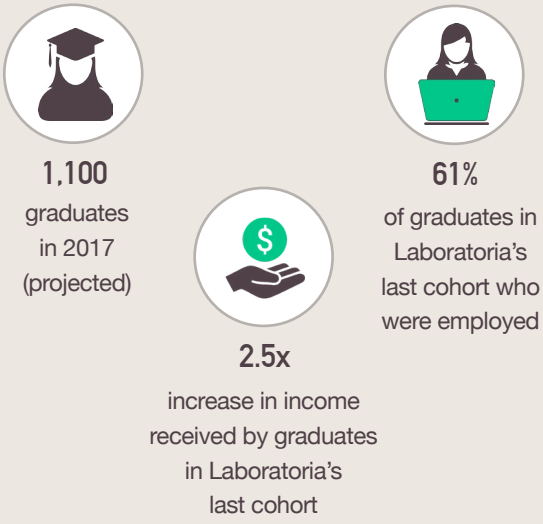
Target Group

Young women – between the age of 18 and 35 years – from low-income backgrounds.

Educational Offering

Laboratoria is offering vocational training to low-income women in Peru (Lima and Arequipa), Chile (Santiago) and Mexico (Mexico City). The intensive training program that lasts five months includes:

SOCIAL IMPACT



www.laboratoria.la/en/ →

- Web design component: HTML, CSS, JavaScipt
- Personal development component, that includes workshops and mentorship, provides students with soft skills and helps to develop their self-esteem, leadership and creativity

After completing the course, the women are ready to work as front-end developers. To help with placement, Laboratoria mentors the young graduates throughout the recruitment process, helping them with interview practice sessions and to develop their portfolio of web development projects.

Laboratoria is employing some of their graduates in the enterprise's own web shop and is helping to place others with companies in need of talented coders. To help with placement, Laboratoria prepares the young graduates for the recruitment process through mentoring, interview practice, web portfolio development, among other activities.

The educational offer is accessible to at-risk individuals as the costs of the course and accompanying services is paid back once graduates are placed with employers.

Partners

- Clients of web development services: Telefonica Perú, Claro Perú, Inter-American Development Bank
- Companies providing employment to graduates: over 25 such as IBM, Grupo La Republica, Universidad del Pacifico, Wunderman Phantasia, and Belcorp.
- Companies or universities providing trainers, mentors, rooms or equipment: Google, IBM, Microsoft, SAP, IDB, Lenovo, Telefonica, Innova Schools (Interbank), IPAE, among others.
- Donors and supporters: Concytec, Google, IBM, LinkedIn, Inter-American Development Bank, Kunan, Telefonica Perú, Grupo Breca, NESsT

Business Model

Laboratoria has three revenue streams. First, it sells web development services to companies employing graduates of its training program. Clients include Telefonica Perú, Claro Perú and the Inter-American Development Bank, among others. Its profits fund the academy. Second, graduates who secure jobs pay back 12% of their income to Laboratoria for three years after employment. Finally, Laboratoria sells courses that are more advanced to students via an e-learning platform. Until financial sustainability is reached (expected in 2020), Laboratoria also supplements its sales revenues with donations, grants and corporate partners.

Challenges

South America (excluding Brazil) needs approximatively 30,000 web developers per year, and Laboratoria plans to capture 2% of the market. By 2020, Laboratoria expects to reach and train 10,000 young women as coders, across 10 major cities in Latin America. Despite the potential of the business, the business model entails the high social costs of training and placing the women and is difficult to sustain. The fees paid by the women are supplemented by the web shop and online platform, both of which are business lines that need to compete and capture ongoing clients.

Further Assessment

The validation of the business model is an ongoing process that will require a great deal of support and further assessment. It is important to understand the key drivers of the model and their limits, and explore other business lines used by similar models. There is also a need to track the social impact of the enterprise, including the increase in income and duration of contracts overtime, as well as the percent of graduates that go on to pursue further training in order to improve their career options. And, to assess to what extent employers are willing to fund this.

Appendix 8:

Siedlisko

Siedlisko is a social enterprise based in the Opolskie region of Poland that offers vocational training and dignified employment opportunities to youth with intellectual disabilities and to long-term unemployed people from rural areas. Siedlisko runs a center providing full-time care for seniors and people with chronic illnesses, and delivers catering and laundry services to local companies, individuals and public institutions.

The mission of the enterprise is to help youth with intellectual disabilities and people with low skills to achieve social and labor market inclusion by offering them individually tailored support. With only 0.087% of people with intellectual disabilities currently participating in the labor market, Siedlisko is one of the few opportunities existing in Poland that provides this group with vocational training and jobs while offering special protection and supervision.

The enterprise works hard to maximize its social impact by running its nursing home as well as its catering and laundry operations as commercially viable businesses, while providing high-quality services to its clients. It charges fees to the residents of the home and the clients of the other two services. By leveraging its infrastructure during idle time, the enterprise increases revenues while employing youth in a variety of occupations.

Target Group

The target groups for Siedlisko's vocational education program are:

- youth with intellectual disabilities
- low-skilled people from local rural communities, including people aged over 50 and people who do not currently participate in the labor market

SOCIAL IMPACT

41
young people with intellectual disabilities received vocational training

116
family members of program participants received coaching and assistance

17
young people with intellectual disabilities received employment opportunities

www.siedlisko.org.pl/ →

Educational Offering

Using its vast experience in providing individually tailored support to low-skilled people, Siedlisko has developed a vocational training program for three occupations associated with the different types of services provided to its clients:

- Kitchen Assistant – preparing and serving meals, supporting the chef, and soft competences including working in a team and problem solving.
- Cleaning and Gardener's Assistant – cleaning the facility in accordance with strict hygiene standards, maintaining and developing gardens (growing and cultivating plants), and soft competences such as communication skills.

- Personal Assistant for the Elderly – daily personal care, including dressing, bathing, and feeding, and providing support to the families of dependent persons.

After completing the training, Siedlisko offers participants internship and job opportunities at Siedlisko. All team members currently employed at Siedlisko completed this training before taking up their position.

Siedlisko is currently piloting a placement program that provide vocational training to five young people with intellectual disabilities to work in the kitchen and in the garden. The program includes the following parts:

- five months of vocational training
- five months of paid internship
- employment for graduates as part of Siedlisko's existing operations.

In partnership with the Social Welfare Centre in Łubniany, Poland, Siedlisko has developed a vocational education program for people who do not currently participate in the labor market. Under this program, twelve low-skilled people will receive training to work as Personal Assistants for the Elderly in Siedlisko's nursing home.

Siedlisko aims to document fully the business model of the nursing home as a place of vocational training and work for at-risk communities, and in the long-term perspective Siedlisko plans to replicate its model in other locations. The first location chosen for cooperation is the rural municipality of Łubniany, where Siedlisko is working with local government and the Social Welfare Centre to adapt its social business to the needs of the area.

Partners

Siedlisko works together with local businesses and public institutions including:

- The Local Government in Kolonowskie, Poland
- The School for youth with special educational needs in Kolonowskie
- The Social Welfare Center in Kolonowskie, from where Siedlisko has recruited 80% of its trainees and employees with intellectual disabilities
- The Local Government in Łubniany
- The Social Welfare Center in Łubniany

Challenges

Siedlisko has capacity for growth, and plans to develop vocational education and training programs. However, it requires additional funding to cover the special social costs of the training, including in particular the longer period of training involved and therapeutic support for employees with intellectual disabilities.

Further Assessment

Important to assess the new vocational training programs and their potential for replication and expansion beyond Siedlisko's current facility. Investment in this type of facility is expensive and it could be that its best to partner with existing facilities who would be open to employing graduates of Siedlisko's training and internship program.

Bibliography

Reports prepared under the Human Capital Balance research:

Młodzi na rynku pracy – pracownicy, przedsiębiorcy, bezrobotni, Magdalena Jelonek, Krzysztof Kasparek, Mateusz Magierowski, Polska Agencja Rozwoju Przedsiębiorczości, Warszawa 2015: http://www.uj.edu.pl/documents/102715934/2e0bba6c-e1e6-4248-8a4e-443f8573fca0

(Nie)wykorzystany potencjał. Szanse i bariery na polskim rynku pracy; ed. Jarosław Górniak, Polska Agencja Rozwoju Przedsiębiorczości, Warszawa – Kraków 2015: https://bkl.parp.gov.pl/publikacje-141-artykul.html

Polski rynek pracy - aktywność zawodowa i struktura wykształcenia, Szymon Czarnik, Konrad Turek, Polska Agencja Rozwoju Przedsiębiorczości, Warszawa 2015: http://www.parp.gov.pl/files/74/81/713/20012.pdf

Oczekiwania pracodawców a pracownicy jutra, Magdalena Jelonek, Dariusz Szklarczyk, Anna Balcerzak–Raczyńska, Warszawa 2012: http://www.parp.gov.pl/oczekiwania-pracodawcow-a-pracownicy-jutra-2

Kompetencje jako klucz do rozwoju Polski; ed. Jarosław Górniak, Polska Agencja Rozwoju Przedsiębiorczości, Warszawa – Kraków 2012: http://www.parp.gov.pl/kompetencje-jako-klucz-do-rozwoju-polski

Bilans Kapitału Ludzkiego w Polsce; ed. Jarosław Górniak, Polska Agencja Rozwoju Przedsiębiorczości, Warszawa – Kraków 2012: https://bkl.parp.gov.pl/

Kształcenie po szkole; Konrad Turek, Barbara Worek, Warszawa 2015: http://www.uj.edu.pl/documents/102715934/0a163f21-ceb6-4409-b3f7-da3e562fe9b2

Reports prepared by independent think tanks, consulting companies and international organizations:

Wybór technologii a dynamika nierówności zarobkowych, Jan Witajewski-Baltvilks, Warszawa 2015: http://ibs.org.pl/publications/wybor-technologii-a-dynamika-nierownosci-zarobkowych/

Wybór technologii a dynamika nierówności zarobkowych Poland 2025: Europe's new growth engine, Wojciech Bogdan, Daniel Boniecki, Eric Labaye, Tomasz Marciniak, Marcin Nowacki, Warszawa 2015: http://ibs.org.pl/app/uploads/2016/01/IBS_Working_Paper_15_2015_streszczenie_pl.pdf

Wpływ płacy minimalnej na rynek pracy o znacznym odsetku zatrudnienia czasowego, Agnieszka Kamiński, Piotr Lewandowski, Warszawa 2015: http://ibs.org.pl/publications/wplyw-placy-minimalnej-na-rynek-pracy-o-znacznym-odsetku-zatrudnienia-czasowego/

Zatrudnienie w Polsce 2013 – Praca w dobie przemian strukturalnych, ed. Piotr Lewandowski, Iga Magda, Warszawa 2014: http://ibs.org.pl/app/uploads/2015/10/zwp_2013_pl.pdf

Kobiety na europejskim rynku pracy, ed. Jan Baran, Atilla Bartha, Agnieszka Chłoń-Domińczak, Warszawa 2014: http://ibs.org.pl/app/uploads/2015/10/Kobiety_przyszloscia_europejskiego_rynku_pracy.pdf

In-Work Poverty in Poland: Diagnosis and Possible Remedies, ed. Piotr Lewandowski, Agnieszka Kamińska, Warszawa 2015: http://ibs.org.pl/app/uploads/2015/01/In-Work-Poverty-in-Poland_Diagnosis-and-Possible-Remedies.pdf

Sektor nowoczesnych usług biznesowych w Polsce 2015, Związek Liderów Sektora Usług Biznesowych (ABSL), Kraków 2015.

Sektor nowoczesnych usług biznesowych w Polsce 2014, Związek Liderów Sektora Usług Biznesowych (ABSL), Kraków 2014.

Poland 2025: Europe's new growth engine, McKinsey & Company, Warszawa 2015: http://www.mckinsey.com/global-themes/europe/how-poland-can-become-a-european-growth-engine

Education at a Glance, OECD, Paris, 2010: https://www.oecd.org/education/skills-beyond-school/45926093.pdf

Migracje zarobkowe Polaków, Warszawa, 2014: http://ceedinstitute.org/upload/files/f05865effbdadcc607022ce5d8c0edb2.pdf

Top 100 Outsourcing Destinations 2015, Tholons, 2014: http://www.tholons.com/nl_pdf/Tholons_Whitepaper_December_2014.pdf

Przegląd outsourcingowy no 4, Fundacja Instytut Outsourcingu, Warszawa, 2013: http://www.instytut-outsourcingu.pl/pliki/7321_6_PO_numer04_OEX.pdf

World investment report 2015, United Nations, New York 2015: http://unctad.org/en/PublicationsLibrary/wir2015_en.pdf.

New Skills for New Jobs Anticipating and matching labour market and skills needs, Commission of the European Communities, Brussels, 2008.

Matching skills and Labour Market Needs, Davos, 2014: http://www3.weforum.org/docs/GAC/2014/WEF_GAC_Employment_MatchingSkillsLabourMarket_Report_2014.pdf.

Reports of the European Centre for the Development of Vocational Training (Cedefop):

Europejskie Wskazówki dotyczące walidacji uczenia się pozaformalnego i nieformalnego, Warszawa, 2012 (European guidelines for validating non-formal and informal learning), Fundusz Współpracy, Warszawa 2012: http://biblioteka-krk.ibe.edu.pl/opac_css/doc_num.php?explnum_id=63

Polaryzacja Rynku Pracy i pracownicy przy pracach prostych w Europie, Trend chwilowy czy stały?, Fundusz Współpracy, Warszawa 2012: http://www.refernet.pl/public/publikacje/_38.pdf

Kształcenie i szkolenie zawodowe w Polsce. Raport Krajowy, Fundusz Współpracy, Warszawa 2013: http://cofund.org.pl/pl/publikacje/raport-ksztalcenie-zawodowe-2013

Korzyści ekonomiczne wynikające z kształcenia zawodowego. Raport Badawczy, Fundusz Współpracy, Warszawa 2012: http://www.refernet.pl/public/publikacje/_29.pdf

Polska - Raporty ReferNet 2010 na temat polityki w zakresie kształcenia i szkolenia zawodowego, Ludmiła Łopacińska, Krzysztof Symela, Ireneusz Woźniak , Fundusz Współpracy, Fundusz Współpracy, Warszawa 2012: http://www.refernet.pl/public/publikacje/_10.pdf

Reports prepared for The National Centre for Research and Development:

Analiza zapotrzebowania gospodarki na absolwentów kierunków kluczowych w kontekście realizacji strategii Europa 2020, Warszawa 2012: http://www.uj.edu.pl/documents/102715934/4ed56c05-9e29-4bd5-b220-2c833ce40dda

Analiza kwalifikacji i kompetencji kluczowych dla zwiększenia szans absolwentów na rynku pracy, Warszawa 2014: http://www.uj.edu.pl/documents/102715934/001bcfee-7b59-4983-9eaf-2ca7adbc7ad2

Reports prepared by the National Centre for Supporting Vocational and Continuing Education (KOWEZiU):

Współpraca szkół zawodowych z pracodawcami – przykładowe rozwiązania, Paulina Zaręba, Renata Kępczyk, Jolanta Misztal, Małgorzata Hadrian, Adam Biernat, Warszawa 2013.

Methods, techniques and tools to diagnose competences, ed. Jerzy Bielecki, Warszawa 2013: https://www.ess.gov.si/_files/5433/methods_techniques_and_tools.pdf

Standardy jakości kształcenia zawodowego, Aleksandra Dąbrowska, Hanna Grządziel, Maria Kaczmarek, Izydora Kos-Górczyńska, Alicja Stańczyk, Warszawa 2013.

Stan szkolnictwa zawodowego w Polsce, Elżbieta Goźlińska, Andrzej Kruszewski, Warszawa 2013.

Reports prepared by public institutions:

Zasięg ubóstwa ekonomicznego w Polsce w 2015 roku, Główny Urząd Statystyczny, Warszawa, 2015: http://stat.gov.pl/obszary-tematyczne/warunki-zycia/ubostwo-pomoc-spoleczna/zasieg-ubostwa-ekonomicznego-w-polsce-w-2015-r-,14,3.html

Reforma systemu edukacji, szkolnictwo ponadgimnazjalne, Ministerstwo Edukacji Narodowej, Warszawa, 2000.

Zawody deficytowe i nadwyżkowe w 2014 roku, Warszawa, 2015: http://www.mpips.gov.pl/analizy-i-raporty/raporty-sprawozdania/rynek-pracy/zawody-deficytowe-i-nadwyzkowe/rok2014/.

Szkolnictwo wyższe w Polsce, MNiSW, Warszawa, 2013: http://www.nauka.gov.pl/g2/oryginal/2013_07/0695136d37bd577c8ab03acc5c59a1f6.pdf

Statistical data:

Data of Local Bank Data: https://bdl.stat.gov.pl/BDL/start

OCED data gathered for the programme Higher level vocational education and training (VET): http://www.oecd.org/edu/skills-beyond-school/oecdreviewsofvocationaleducationandtraining-learningforjobs.htm

Data of the Ministry of Education of the Republic of Poland: https://cie.men.gov.pl/index.php/sio.html

High growth enterprises in Poland of The Polish Agency for Enterprise Development (PARP) 2014: https://badania.parp.gov.pl/images/badania/Przedsibiorstwa_wysokiego_wzrostu_w_Polsce.pdf

Innovative entrepreneurship in Poland, The Polish Agency for Enterprise Development (PARP) 2015: https://badania.parp.gov.pl/files/74/75/76/479/22512.pdf

Data of the Central Statistical Office of Poland, in particular data collected for the Labour Force Survey (LFS): http://stat.gov.pl/informacja-o-badaniach-ankietowych/badanie-aktywnosci-ekonomicznej-ludnosci-bael/

ABOUT NESsT

NESsT has been working for 20 years to provide dignified employment to lift people out of poverty in emerging markets. NESsT achieves its mission by raising philanthropic capital to invest in and develop social enterprises that create employment and viable income opportunities for the poorest communities facing isolation, discrimination, lack of job skills and poor education.

NESsT uses an engaged investment approach to accelerate the growth of social enterprises that offer access to dignified employment. In selecting these enterprises, NESsT places less importance on the legal form of the enterprise—nonprofit, cooperative, for profit—and looks for the intent or purpose as the most important element. In other words, does the social enterprise practice what it preaches? Does it try to balance the social, financial and environmental bottom line in its everyday running of the business in order to solve a critical social issue? Setting a broad definition such as this is especially helpful in emerging countries where the sector is still very small, as it provides the space for the sector to grow and include many types of enterprises whose main purposes are to create social impact through a sustainable business model.

Once NESsT completes its due diligence, it invites social enterprises to join its portfolio. By committing to these enterprises for five to seven years, NESsT supports them through the tough transition of moving from start-up to fully scaling businesses. During this time, NESsT provides several rounds of patient capital investments and connects the enterprises with other co-investors. Its team also offers one-on-one business development support to help them consolidate and grow their businesses, and leverages the expertise of more than 200 mentors for specialized support. NESsT contributes to strengthening the ecosystem, working with other stakeholders to ensure that its grantees and the entrepreneurs it supports are equipped with the tools and resources needed to thrive and maximize their impact.

To date, NESsT has invited 167 social enterprises to enter its portfolio providing them with an average of four years of support and investing over US$11.5 million in capacity building and direct funding. More than 31,000 marginalized individuals have attained employment or income opportunities, and more than 509,000 have experienced an improved quality of life.

NESsT