Business in Małopolska

Business Services and IT Sector in Małopolska

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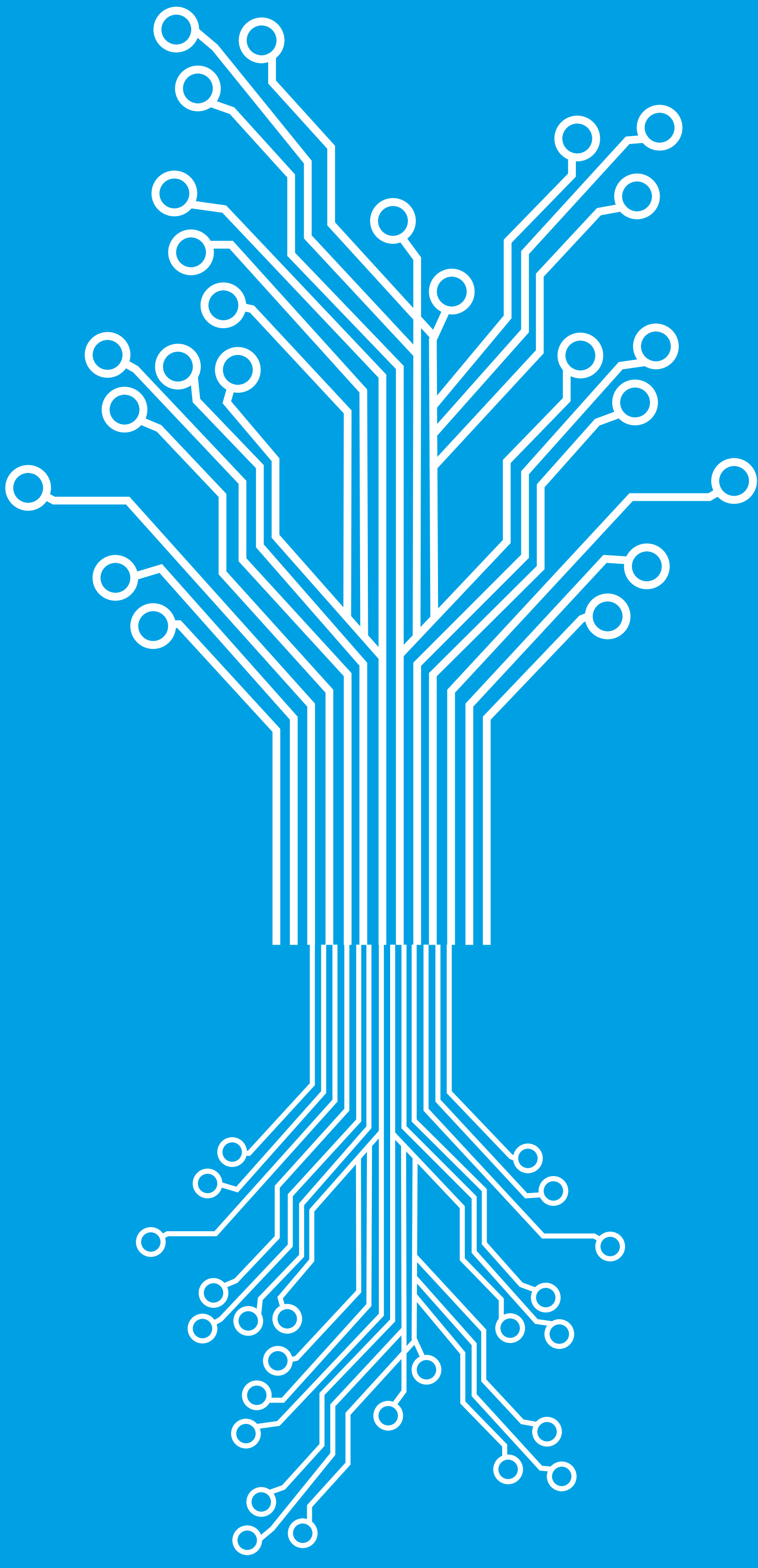

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About Kraków and Małopolska Region

Introduction

Kraków as the capital of the region of Małopolska is the second largest city in Poland and one of the oldest cities in the country and a historical capital of Poland, with a history of over one thousand years. The entire Małopolska Region is one of the most important locations of Poland in terms of economic development, as well as one of the leading centres of Polish academic, cultural and artistic life.

Małopolska due to its high-profile location and significant depth of available high-tech knowledge, is a region with an extraordinary fast growth of specific advanced market industries, such as IT sector, BPO (Business Process Outsourcing), SSC (Shared Service Centers) and R&D (Research & Development).

It should be noted that Kraków since several years is being ranked very high among cities in the world for outsourcing of business services. In the latest ranking "Tholons Top 100 Outsourcing Destinations 2014"[1] Kraków has been promoted to 9th position, ahead of Dublin, thus becoming number one in Europe. It should be mentioned that region of Małopolska is not anymore only a

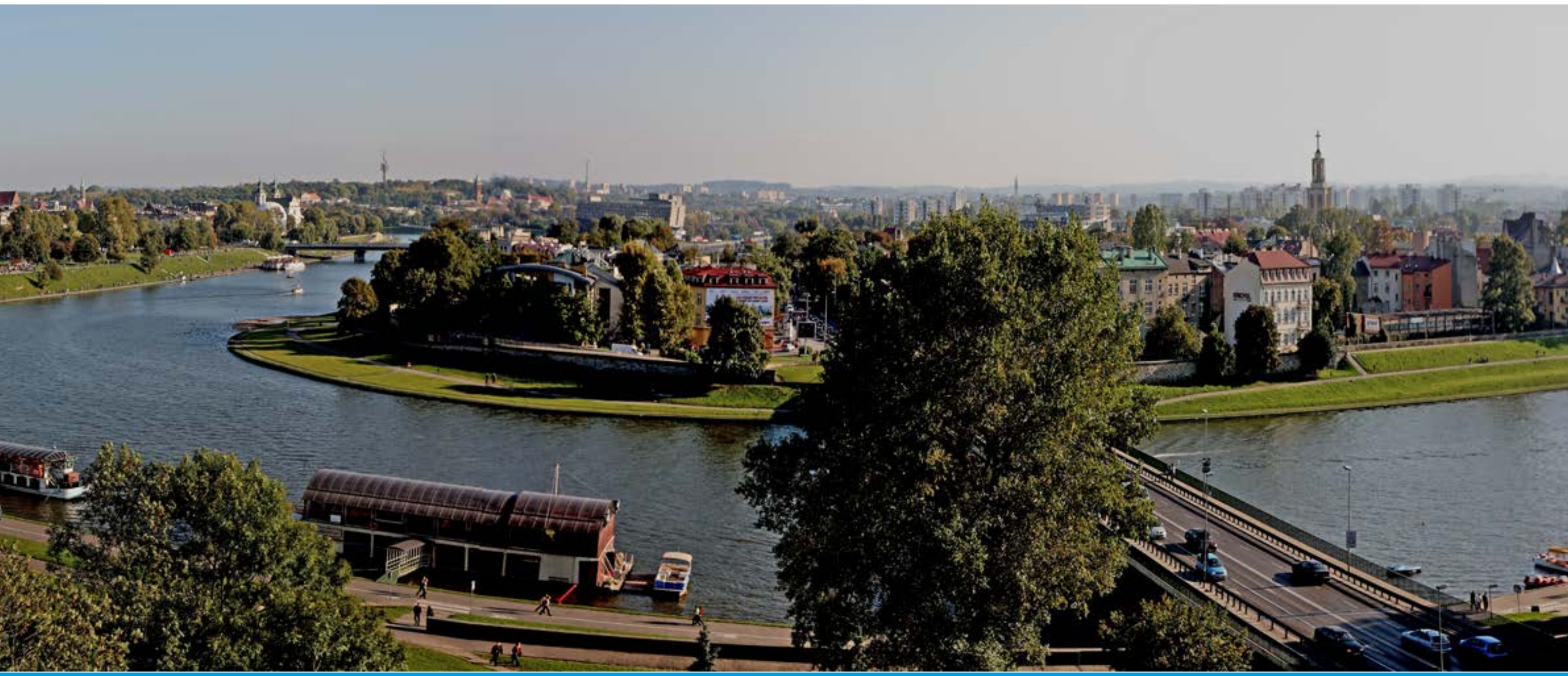
modern business center, fast growing in terms of number of employees, but also of more and more advanced processes and technologies. Currently in Kraków services are provided in 34 languages for 40 countries[2].

Strong position of Małopolska was also highlighted in a popular ranking „European Cities and Regions of the Future 2014/2015"[3]. Data for the report was collected from 468 sites both cities and regions. Categories taken into account encompassed among others: economic potential, human capital and lifestyle, infrastructure and business service and cost effectiveness. The report shows, that Małopolska created a solid, visible by investors brand, as well as recognized in the strategy to attract foreign investors.

[1] http://www.tholons.com/TholonsTop100/

[2] *Raport ASPIRE Market Survey 2014*

[3] http://www.fdiintelligence.com/Locations/Europe/European-Cities-and-Regions-of-the-Future-2014-15



Business Services Sector

Characteristics of the sector in the area of Małopolska

In recent years, the business services sector has grown into one of the most important sectors of the Polish economy. Across the whole country more than 120,000 people are working within this sector. The key market for the SSC/BPO labour was from the very beginning Kraków.

According to the publication „Kraków – city of the modern economy" the two most important factors of locating shared service centers in Kraków are the language skills and low labour costs. Next factors in terms of relevance include: the availability of office space, a good brand of Krakow, a good network of air connections[4].

At present, the Małopolska Region provides services for more than 40 countries in 34 languages.

Since several years, Małopolska is the location most frequently chosen by new investors from the SSC/BPO sector. At the same time it is one of the fastest growing regions in Poland. Investments in the SSC/BPO attract to Kraków both college students from across Poland and from abroad. Eventually, more and more professionals who wish to develop their competences in service centers or in R&D centers decide to relocate to Kraków.

Companies, range of activities, employment

Table 1. List of the largest business services companies in Kraków.

Company	Type	Year established in Kraków (approx.)	Headcount at Q2 2014	Scope
7geo	BPO	-	<200	Call centre
ABB	R&D	-	501-1000	Engineering
Accenture	BPO	2013	<200	F&A
Akamai	ITO	2011	<200	F&A, Financial services, Customer service, HR, IT Tech
Alexander Mann Solutions	BPO	2006	501-1000	F&A, Customer service, HR, ITO, RPO
Amer Sports	SSC	2011	<200	F&A, Financial services
Amway	SSC	2009	200-500	F&A, Financial services, Customer service, HR, IT, ITO

[4] *www.bip.krakow.pl*

Antenna	ITO	-	200-500	IT development
Aon Hewitt	BPO	2005	501-1000	F&A, Financial services, Customer service, HR, IT
Arvato BertelsmaN	BPO	2013	200-500	F&A
Assa Abloy	IT	2013	<200	IT
BNP Paribas	SSC	-	200-500	F&A
Brown Brothers Harriman	Financial Services	2012	501-1000	Financial services
Capgemini BPO	BPO	1999	2001-2500	F&A, Call centre, Procurement
Capgemini ITO	ITO	2003	501-1000	ITO
Capita	BPO	2011	501-1000	F&A, Customer service, HR, ITO, Legal, Pension Fund
CBB Call Center	BPO	-	<200	Call centre
CCA - Contact Center AZSoft	BPO	-	<200	Call centre
CH2M Hill	SSC	2010	<200	F&A, HR, Procurement, ITO, Engineering
Chatham Financial	BPO	2008	<200	Financial advisory, Derivatives
Cisco	SSC	2012	501-1000	IT Tech Support
Clifford Thames	BPO	2006	<200	IT support services for auto industry
Comarch	R&D	1995	>2500	IT development, IT Integrator
Dassault Systems	IT R&D	-	200-500	IT
Delphi SSC	SSC	-	200-500	F&A
Delphi Technical Centre	IT/R&D	2006	200-500	Automotive engineering
Ecolab	SSC	2009	<200	F&A
EDF	SSC	2010	501-1000	F&A, HR, Procurement, ITO, Engineering
Electrolux	SSC	2006	501-1000	F&A, Financial services, HR, IT, ITO, Technical Writing
EPAM	ITO	2011	<200	IT development
Ericpol	ITO	2003	501-1000	Mobile telephony, Software development
Estimote	IT/R&D	2013	<200	IT
Euroclear	Financial Services	2012	200-500	Financial services
Euroscript	BPO	2004	<200	Customer service, HR, IT, ITO, Document processing;

Farnell Element 14	SSC	2012	<200	F&A, Customer service, Sales, HR
FMC Technologies	R&D	2012	<200	Engineering
FQS (Fujitsu)	R&D	1999	<200	IT development
GE Healthcare	IT	2014	<200	IT development
Genpact	BPO	2006	200-500	F&A, HR, Procurement, ITO
Google	IT	2007	<200	Research and Development
Hays	BPO	2012	<200	HR
HCL	ITO	2007	501-1000	Customer service, IT, ITO
HEINEKEN	SSC	2012	501-1000	F&A, Financial services, HR, IT, ITO
Herbalife	SSC	2013	<200	F&A, Financial services, Procurement, Customer service,
Hitachi	SSC	2008	<200	F&A, Financial services
HSBC	SSC	2008	1001-1500	F&A, HR, ITO, Customer service
IBM BTO	BPO	1999	1001-1500	F&A
IBM SWG Lab	ITO	2002	200-500	Research and Development, Software development
International Paper	SSC	2003	501-1000	F&A, Procurement, Customer Service, IT, ITO, Logistics
j-labs	IT	2008	<200	HR, IT, ITO
Kenexa	BPO	2008	<200	RPO
Lufthansa	SSC	2003	501-1000	F&A, Financial services, Customer service, HR, Sales
Lumesse	ITO	2012	<200	IT applications
Lundbeck	SSC	2014	<200	F&A
Lurgi	R&D	2000	<200	Engineering
Luxoft	ITO	2011	200-500	IT applications
Making Waves	IT	2005	<200	IT development
MESP (Mota-Engil SSC)	SSC	2011	<200	F&A, Financial services, HR, ITO, other
Modis	BPO	2008	<200	PRO
Motorola GSC	R&D	1998	501-1000	IT development
Motorola Solutions	SSC	2005	<200	F&A
Nokia Siemens	ITO	2010	200-500	Hardware and Software Development (LTE)

Ocado	ITO	2013	<200	F&A, HR, IT development, ITO
Oracle	ITO	2012	<200	IT development
Perkin Elmer	SSC	2012	<200	F&A
Philip Morris International	SSC	2006	501-1000	F&A, Financial services, Procurement, HR, IT, ITO,
Pliva	SSC	2011	<200	Procurement
Rolls Royce	SSC	2012	<200	Procurement
RR Donnelley	SSC	2008	<200	F&A, Financial services, Procurement, HR, IT
RR Donnelley Technology	IT	2013	<200	IT, ITO
RWE	SSC	2013	<200	F&A
Sabre	IT/SSC	2000	1001-1500	IT development
Samsung	IT	2013	<200	IT development
Sappi	SSC	2012	<200	F&A, Procurement, Logistics, other
Serco	BPO	2008	501-1000	Call centre
Shell	SSC	2007	1501-2000	F&A, ITO, HR, Procurement
Sii	ITO	2011	<200	IT Tech Support, IT development,
Silgan Whitecap	SSC	2013	<200	Sales
Silvermedia	IT/R&D	2005	<200	IT development
State Street	Financial Services	2008	2001-2500	F&A, Financial services, HR
Stefanini	IT	2012	<200	ITO
TAK outsourcing	BPO	2007	<200	F&A, Legal
Teleinvention	BPO	-	<200	Call centre
Tesco	SSC	2010	<200	F&A
UBS	SSC	2008	501-1000	Financial services
UPM-Kymmene	SSC	2008	<200	Customer service, HR, ITO, Logistics
Vesuvius (Cookson)	SSC	2008	<200	F&A
Xerox	BPO	2007	200-500	F&A, HR, ITO, Call centre
Total headcount			35000	

Source: Aspire 2014

Strengths of the region for investment in the SSC/BPO

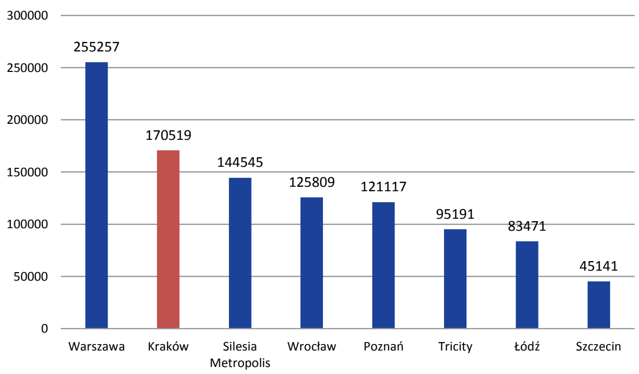
Human resources

The main factors taken into consideration by choosing the location for the investor are primarily: knowledge of foreign languages, professional experience and level of education in the region.

A great asset to the Małopolska Region are young well-educated employees.

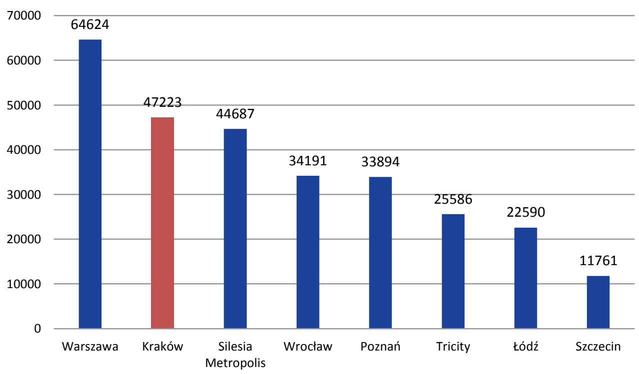
The entire region is one of the largest academic centres in Poland. Currently has over 189 thousand students. In the academic year 2012/2013 53,988 people graduated at universities in the Małopolska Region[5].

Figure 1. Number of university students in 2013



Source: (own work based on the Central Statistical Office of Poland)

Figure 2. Number of university graduates in 2013



Source: (own work based on the Central Statistical Office of Poland)

As presented on the graphs above, Kraków is the second largest, after Warszawa, academic centre in Poland, considering students and graduates. Definitely very important factor for this are prestigious universities, located in the city. They include, among others: Jagiellonian University, AGH University of Science and Technology, Cracow University of Technology.

Higher education institutions in Małopolska Region closely cooperate with the business community, which offers internships, student scholarship programs, and even research grants. Most schools provide information on such projects at their website.

Employees of private companies often give lectures at universities, are mentors of dissertations. At the other extreme are the mature forms of cooperation as exemplified by the agreement of the Jagiellonian University and Motorola[6].

Institute of Computer Science of Jagiellonian University cooperates with Motorola for several years. The course "Programming of mobile devices" is directed not only to the students of the Institute, but to the most talented computer science students from all universities in Małopolska Region. The best graduates may have a chance to be employed in the Kraków branch of Motorola Solutions[7].

The list of companies cooperating on ongoing basis with the Universities is very long. There are not only large scale companies like Microsoft, IBM, Cisco, but as well smaller local firms. Cooperation is rewarding not only for the Universities, but as well for students, who may be given chance to internship in those companies.

The research by Antal International shows, that perfect SSC/BPO candidates screened on the basis of their foreign language skills, as well as experience/ knowledge pertaining to the field of processes that they be responsible for. An ideal specialist-level candidate should have 2-3 years of process

[5] *Higher education in 2013, the Central Statistical Office of Poland*

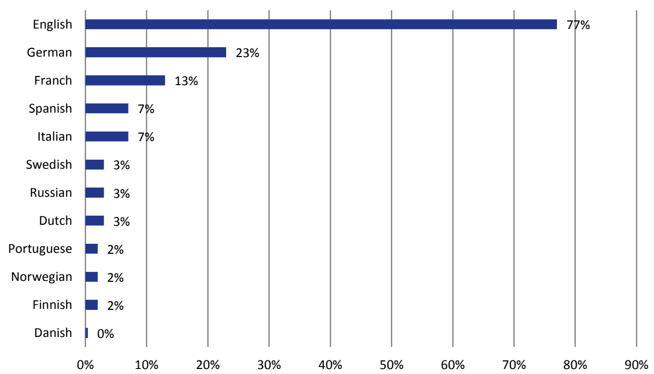
[6] *The cooperation between academic institutions with IT companies – Dorota Konowrocka. http://www.computerworld.pl*

[7] *Labour Market and Human Resources in Kraków and Małopolska 2013 Antal International*

support work experience in a similar position within an SSC/BPO structure. He or she must be fluent in English and an additional foreign language, e.g. German, French, Italian, Russian, but also niche languages: Finnish, Turkish, Hebrew. Depending on the candidate's position, he or she should be familiar with the laws of the country in which the company whose processes will be supported operates, as well as knowledge about any other regulations that have a direct influence on overseeing services. The position of Team Leader or Manager is similar. An ideal candidate should also possess highly developed management, team-leading and process management skills. Candidates whose career paths have been mainly associated with SSC/BPO structures are highly valued.

More than 30 languages are served across Kraków centres. The four of the most commonly used languages are: English, German, French and Italian. Employers also seek individuals who speak Spanish, Czech, Russian, as well as Scandinavian languages: Norwegian, Danish and Swedish. Niche languages such as Hebrew, Arabic, Croatian, Serbian and Lithuanian, are becoming more popular, which is a result of acquiring new customers by companies from different parts of the world.

Figure 3. Knowledge of foreign languages at least at level of B2

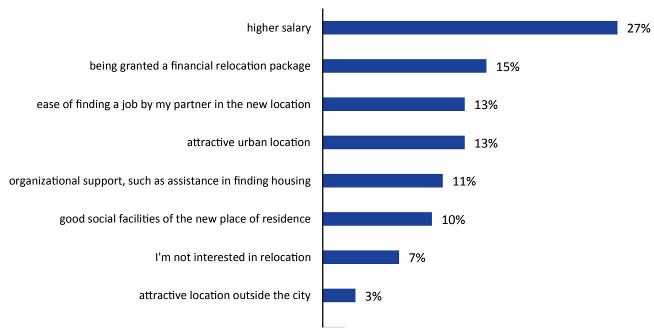


Source: Labour Market and Human Resources in Kraków and Małopolska, Antal International

The most professionals and managers of the SSC/BPO sector proficient knows English (77%). Every fourth respondent knows the German Language. At least 13% of the respondents know French at the B2 level, and Spanish and Italian – 7%. Knowledge of other languages is not common – less than 5% of respondents stated their knowledge. Other languages that were mentioned by few percent of the respondents include: Bulgarian, Czech, Greek, Lithuanian, Romanian, Slovak, Turkish and Hungarian[8].

According to the latest survey Antal International, SSC/BPO sector has a large demand for relocation of professionals and managers. Locations with a large number of shared services centres had their markets drained and therefore a lack of suitable employees is becoming more evident. Employers are trying to meet the expectations of candidates and make efforts to draw in candidates from other regions of the country by offering relocation packages and attractive perquisites. Over a half of respondents (51%)[9] went through at least one work-related relocation. This result is an attest to the high mobility of professionals and managers in Poland. New built shared service centres, interesting processes, that are placed on the Polish market and possibility of development are the most encouraging reasons to change job.

Figure 4. What are the minimum conditions would have to satisfy job offer, that you decided to relocate in the future?



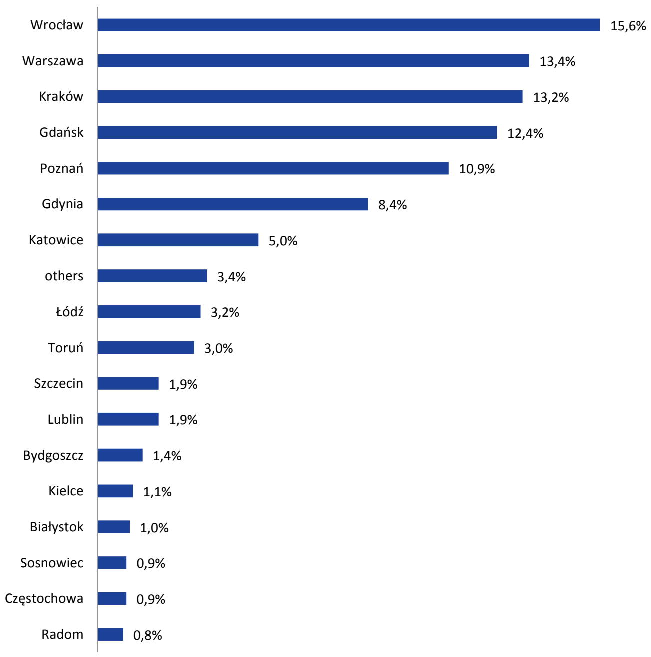
Source: Activity of Professionals and Managers in the Labour Market in Poland, 2014, Antal International

[8] *Labour Market and Human Resources in Kraków and Małopolska,2013, Antal International*

[9] *Activity of Professionals and Managers in the Labour Market in Poland, 2014, Antal International*

The vast majority of respondents would choose to relocate when presented with feasible financial incentives – a higher salary (27%) or being granted a financial relocation package (15%).

Figure 5. Which cities in Poland are the most attractive for relocation?



Source: Activity of Professionals and Managers in the Labour Market in Poland, 2014, Antal International

An attractive urban location is also important. From the employers, especially new investor, perspective is also important to know which cities are considered desirable for relocation by professionals and managers. Kraków is on the third position, behind Wrocław and Warszawa.

Salaries in the sector

The primary factor for the location the shared centres in a specific region is access to qualified personnel. The business services sector is based on knowledge and therefore salaries are dependent mostly on competence, especially foreign language skills. It must be emphasized, however, that a candidate's work experience also plays a large part in determining his or her remuneration. Employees working in the SSC/BPO sector regard salaries and promotion prospects as the most important factors when planning their careers. Raising one's competence opens the door to higher earnings, therefore candidates are increasingly often willing to invest in skill development backed by various certificates[10].

This study confirms **Maciej Wituszyński Recrutiment Manager at Shell Business Service Centre in Kraków** – *Kraków was the first significant place on the map of Europe, where it found its location most companies from the SSC/BPO sector. Importance of Kraków confirmed by studies and analysis of the sector conducted by international consulting firms. The advantage of this region is certainly a large number of students with the knowledge of many languages.*

The highest salaries are currently earned by professionals and managers working in Knowledge Process Outsourcing. The average salary in the SSC/BPO sector is 5,200 PLN gross[11].

The data were presented according to the CEFR[12]

[10] *Salary Report, Salaries offered to Professionals and Managers, 2014, Antal International*

[11] *Salary Report, Salaries offered to Professionals and Managers, 2014, Antal International*

[12] *CEFR – Common European Framework of Reference for Languages*

Table 2. Salary offered according to foreign language proficiency (with work experience)

Language	B1 with experience		B2 with experience		C1 with experience		C2 with experience		Native/Expat with experience	
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
ARABIC	3 300	4 000	4 000	5 000	5 500	7 000	5 500	7 000	5 500	7 000
BULGARIAN	3 300	4 000	4 000	5 000	5 500	7 000	5 500	7 500	5 500	7 500
CROATIAN	3 000	3 500	3 700	4 700	4 700	6 500	5 000	6 500	5 500	6 500
CZECH	3 300	4 000	4 000	4 800	5 000	6 500	5 500	7 000	5 500	7 500
DANISH	3 800	4 500	4 200	5 500	6 000	8 000	6 000	8 000	6 000	8 000
ESTONIAN	3 800	4 500	4 500	6 000	7 000	7 500	7 000	8 000	7 000	8 500
FINNISH	3 800	4 500	4 500	6 500	6 500	8 500	6 500	8 500	7 000	9 000
FLEMISH	3 800	4 500	4 500	6 000	6 500	8 500	6 500	8 500	7 000	9 000
FRENCH	3 000	3 500	3 500	4 400	4 500	6 500	5 000	6 500	5 000	7 000
GREEK	3 300	4 000	4 000	4 800	5 000	6 500	5 500	7 000	5 000	7 000
HEBREW	3 300	4 000	4 000	5 000	5 500	500	5 500	7 500	5 500	7 500
SPANISH	3 000	3 500	3 500	4 500	4 500	6 000	4 500	6 500	5 000	6 000
DUTCH	3 800	4 500	4 500	6 500	6 500	8 500	6 500	8 500	7 000	9 000
LATVIAN	3 500	4 000	4 500	6 000	6 000	7 000	6 000	8 000	6 500	8 000
GERMAN	3 000	3 500	3 500	4 500	4 500	6 500	4 500	6 500	5 500	6 500
NORWEGIAN	3 800	4 500	4 200	5 500	6 000	8 000	6 500	8 500	6 500	8 500
PORTUGUESE	3 000	3 500	3 700	4 700	4 700	6 000	5 000	7 000	5 500	7 000
RUSSIAN	3 000	3 500	3 700	4 700	4 700	6 000	5 000	6 500	5 500	7 000
ROMANIAN	3 300	4 000	4 000	4 800	5 000	6 500	5 500	7 000	5 500	7 500
SLOVAK	3 300	4 000	4 000	4 800	5 000	6 500	5 500	7 000	5 500	7 500
SLOVENIAN	3 000	3 500	3 700	4 700	4 700	6 500	5 000	6 500	5 500	6 500
SWEDISH	3 800	4 500	4 200	5 500	6 000	8 000	6 500	8 000	6 500	8 000
TURKISH	3 300	4 000	4 000	5 000	4 500	6 000	5 000	7 000	5 500	7 500
HUNGARIAN	3 300	4 000	4 000	5 000	4 500	6 000	5 000	7 500	5 500	7 500
ITALIAN	3 000	3 500	3 500	4 500	4 500	6 500	4 500	6 500	5 500	6 500

Source: Antal International

Table 3. Salary offered according to foreign language proficiency (without work experience)

Language	no experience		no experience		no experience		no experience		no experience	
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
ARABIC	3 000	3 500	3 500	4 500	4 000	5 500	4 500	6 000	5 000	6 000
BULGARIAN	3 000	3 500	3 500	4 500	4 000	5 500	4 500	6 000	5 000	6 000
CROATIAN	3 000	3 300	3 200	3 700	3 500	4 500	4 000	5 500	4 000	5 500
CZECH	3 000	3 500	3 500	3 900	4 000	5 500	4 500	6 000	5 000	6 000
DANISH	3 500	4 200	3 800	4 500	4 000	6 000	4 500	6 500	5 000	7 000
ESTONIAN	3 500	4 200	4 000	5 000	6 000	7 000	6 000	7 000	6 000	7 000
FINNISH	3 500	4 200	4 000	5 000	4 500	6 500	5 000	7 000	5 500	7 000
FLEMISH	3 500	4 200	4 000	5 000	4 500	6 500	5 000	7 000	5 500	7 000
FRENCH	3 000	3 400	3 200	3 500	3 800	4 500	4 000	5 000	4 000	5 500
GREEK	3 000	3 500	3 500	3 900	4 000	5 500	4 500	6 000	5 000	6 000
HEBREW	3 000	3 500	3 500	4 000	4 000	5 500	4 500	6 000	5 000	6 000
SPANISH	3 000	3 300	3 000	3 700	3 500	4 500	4 000	4 500	4 500	5 500
DUTCH	3 500	4 200	4 000	5 000	4 500	6 500	5 000	7 000	6 000	7 000
LATVIAN	3 300	3 500	3 800	4 700	5 000	6 000	5 000	6 500	6 000	7 000
GERMAN	3 000	3 300	3 200	3 700	3 800	4 500	4 000	5 000	4 500	5 500
NORWEGIAN	3 500	4 200	3 800	4 500	4 000	6 000	4 500	6 500	5 000	7 000
PORTUGUESE	3 000	3 300	3 200	3 700	3 500	4 500	4 500	5 500	4 500	6 000
RUSSIAN	3 000	3 300	3 200	3 700	3 500	4 500	4 000	5 500	4 000	5 500
ROMANIAN	3 000	3 500	3 500	3 900	4 000	5 500	4 500	6 000	5 000	6 000
SLOVAK	3 000	3 500	3 500	3 900	4 000	5 500	4 500	6 000	5 000	6 000
SLOVENIAN	3 000	3 300	3 200	3 700	3 500	4 500	4 000	5 500	4 000	5 500
SWEDISH	3 500	4 200	3 800	4 500	4 000	6 000	4 500	6 500	5 000	7 000
TURKISH	3 000	3 500	3 500	4 000	3 800	4 700	4 500	5 500	5 000	6 000
HUNGARIAN	3 000	3 500	3 500	4 000	3 800	4 500	4 000	5 500	4 500	5 500
ITALIAN	3 000	3 300	3 000	3 700	3 500	4 500	4 000	4 500	4 500	5 500

Source: Antal International

Investors are not only looking for employees with several years of work experience, but also for the candidates who just starting their career. Employers seeing in them the potential for development are able to invest in appropriate training in order to have in a future professionals in their shared services centers.

The actual salary expected by the candidate is affected by a number of factors:

- years of experience of the candidate,
- experience profile of the candidate (in small or international companies),
- responsibilities (often the responsibility for identically named positions may vary considerably),
- knowledge of foreign languages,
- certificates obtained,
- achieved successes (outstanding achievements beyond the proper performance of duties – such as implementing a new idea to the company),
- soft interpersonal skills.

Remuneration is also presented in the sector in terms of position.

Table 4. Salaries offered in selected job positions

Position	Salary in PLN	Standard in-work benefit
Customer Service Specialist	2 800–4 500	fitness card, private healthcare, additional bonuses
Junior Accountant AP/AR with languages	3 200–4 500	
AP / AR Accountant with languages	3 800–6 000	
Senior AR / AP Accountant	4 500–7 000	
GL Accountant with languages	5 500–7 500	
Financial Analyst / Senior Financial Analyst	5 500–7 500	
Reporting Analyst with languages	5 500–8 000	
F&A Team Leader with languages	7 500–11 000	
F&A Manager with languages	12 000–20 000	
Tax Specialist	5 500–8 500	
Tax Manager	13 000–20 000	
Treasury Specialist / Senior Treasury Specialist	6 000–10 000	
Procurement Specialist (up to 3 years)	5 500–7 000	
Buyer/Senior Buyer (+4 years)	7 500–11 000	
Procurement Manager	15 000–20 000	
Transition Manager	10 000–15 000	
Business Analyst	5 500–8 000	
Fund Accountant with languages	4 000–7 000	
HR Administrator with languages	3 000–4 000	
Junior Admin & Payroll Specialist with languages	3 500–4 500	
Admin & Payroll Specialist with languages	4 500–5 500	
Senior Admin & Payroll Specialist with languages	5 500–6500	
Payroll Team Leader with languages	7 000–9 000	
PA/PY Service Manager	12 000–17 000	
Specialist in NAV Department	3 200–3 500	
Junior Specialist in Transfer Agency Department	3 200–3 500	
Manager in NAV Department	13 000–17 000	

Source: Salary Report, Salaries offered to Professionals and Managers, 2014, Antal International

Real estate offer (office space)

Shared Service Centres and BPO are located mostly in Kraków and its surroundings. Therefore the modern office market in the whole Małopolska Region is concentrated in its capital. Smaller cities rarely attract large investors and available office buildings there are occupied only by local companies.

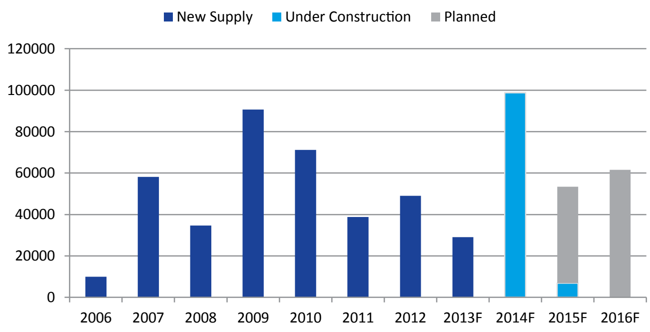
Both SSC and BPO require modern office space. With a stock of modern space of 627,500 sq m, Kraków ranks second to Warszawa in terms of the size of the office market. Due to the fact that office buildings in Krakow are dispersed in different areas of the city, it is difficult to determine a single area which could be regarded as its Central Business District.

Among the most active developers, there are: Avestus, Dyskret, East-West Development, Grupa Buma, GTC, Mix Nieruchomosci, Skanska and TriGranit.

Following the period of strong growth in 2009–2010, when over 150,000 sq m of office space was delivered to the market, the activity of developers decreased noticeably. The situation has improved in the recent quarters. In 2014, the stock of office space in Kraków should extend by as much as 100,000 sq m.

The largest office projects currently being developed in Krakow include Kapelanka 42 (30,000 sq m) by Skanska, Quattro Business Park IV (13,000 sq m) by Buma and the second phase of Enterprise Park (13,600 sq m) by Avestus Real Estate.

Figure 6. Supply of modern office space in Kraków



Source: CBRE, 2014

Kraków is believed to be the most important centre of SSC/BPO activities, not only in the country but also in the whole European region. Owing to the activity in the SSC/BPO sector, take up for office space in Kraków has been steady for years. The service centres in most cases are based in modern offices, flexible and adjusted to their needs. There are small differences between their expectations, as BPO companies usually look for cheaper solutions, however in general the requirements are similar. Below the SSC/BPO major expectations in terms of an office building:

- Average floor size per employee: SSC – 7 – 12 sq m and BPO – 6 - 8 sq m
- Parking place 1/100 sq m. In some cases 4 places per 3,000 sq m.

Table 5. Major office buildings in Kraków

Existing office buildings	sq m	Under construction	sq m	Planned	sq m
Krakow Business Park	60 000	Kapelanka I & II	30 000	Echo Opolska	40 000
GTC Office Park	30 000	Enterprise Park III	13 600	Kraków Business Park 300	20 000
Bonarka 4 Business A-C	24 000	Quattro Business Park IV	12 200	Orange Office Park III	14000
Quattro Business Park I,II,III	36 000	Orange Office Park I & II	22 000	Vistula Business Garden	15000
Green Office	21 000	Bonarka 4 Business E	10 000		
Vinci Office Centre	18 000	Buma Avenue Peace 5	13 000	Bonarka 4 Business F	10 000
		Quattro FIVE	11 000		

Source: CBRE 2014

- Open space – move into agile office trend
- Bike parks necessary
- Very good public transport (buses, trams)
- 2 independent power sources/ UPS
- Power generators/ backup generators
- Business continuity centres / disaster recovery functions
- Canteens/ restaurants/ showers (according to green solutions trends)/ proximity to shopping centre/ kinder garden becoming more popular
- Lease agreements giving flexibility in line with the business requirements

In 2013 over 94,000 sq m of office space was leased in the city, which was a record among Polish regional cities. Among the largest BPO tenants in Kraków there are State Street, IBM, Shell, Sabre, Motorola and Capgemini.

The new demand for office space in Kraków is generated by both companies already present in the city, which are expanding and employing new staff and by new players. Due to the strong performance of the SSC/BPO tenants and a strong position of the city on the outsourcing map of Europe, the demand for modern office space in Kraków should remain strong.

Vacancy

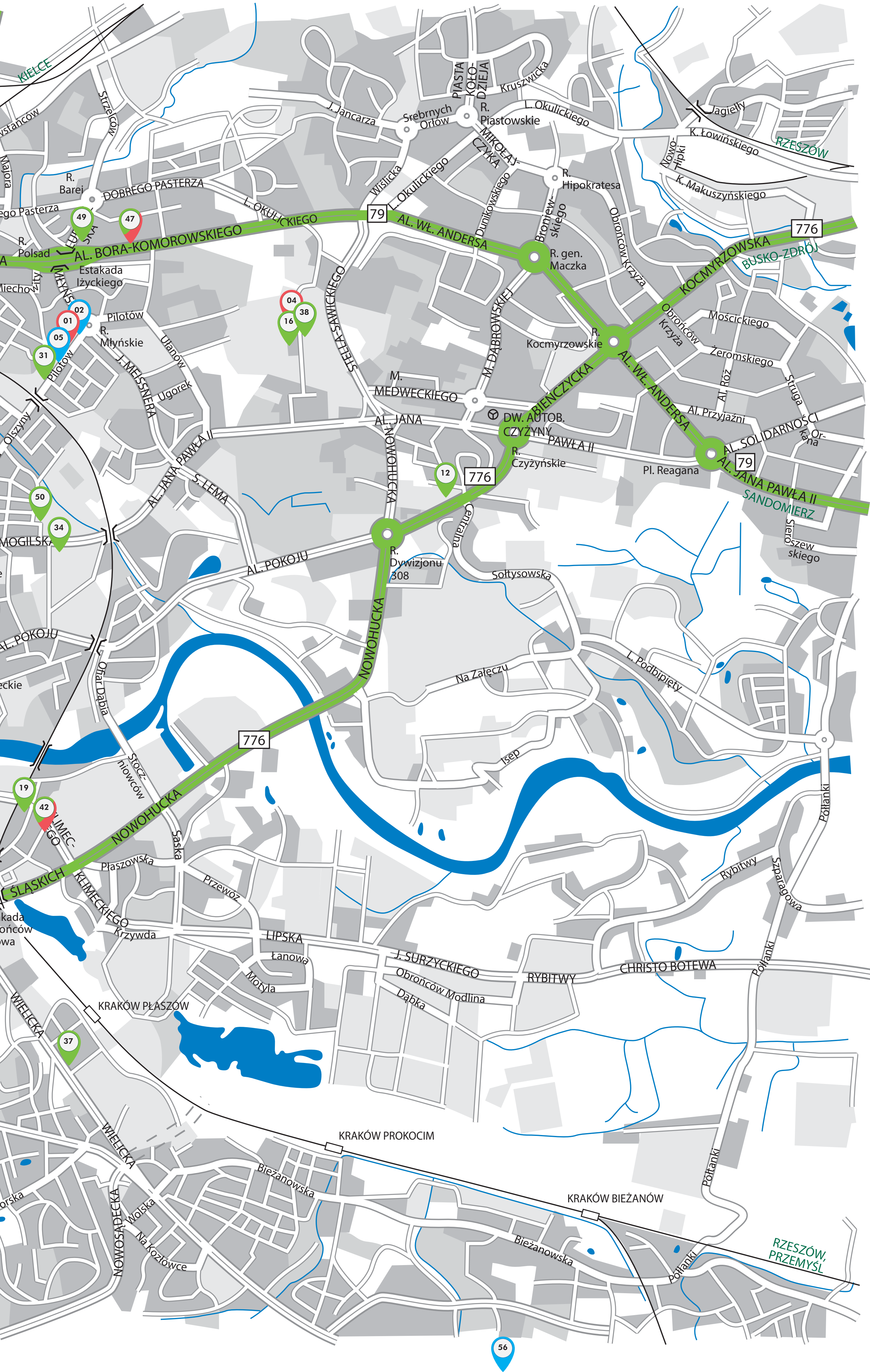
The vacancy rate in all office buildings in Kraków, including owner-occupied buildings, amounted to 4.5% at the end of Q1 2014, which translated into 28,000 sq m available for immediate lease. Taking into account the current high level of absorption and the increased amount of office space planned for delivery in 2014, the vacancy rate should remain competitive to other cities in the near future. However, the potential increase should not be substantial and the new planned space might still turn out to be insufficient in a longer perspective.

Table 6. Summary – Kraków Office Market SWOT analysis from SSC/BPO perspective

STRENGHTS	WEAKNESSES
Mature office market	Undefined business districts
Experienced players on the market, presence of international agencies, developers and investors	Infrastructural problems of some remote locations
Experienced local developers	Bureaucratic barriers
Large number of established SSC/BPO's	Global economic slowdown forcing the companies to look for cheaper locations
Third largest agglomeration in terms of population and second highest availability of students	One of the lowest office vacancy rates in Poland – limited choice of locations for tenants
Average salary lower than in many other cities	
Institutional support for outsourcing enterprises and activities	
International airport and convenient access to public transportation - integrated main railway and bus station, international airport in Balice, A2 highway	
Attractive touristic region, growing cultural and social potential	
OPPORTUNITIES	**THREATS**
Kraków is listed among the top 10 global BPO and outsourcing locations	Landlord market
The highest choice of office developments in the pipeline among Polish regions	Current shortage of office supply
Stable rental levels	Threat of shortage of employees – high rotation ratio increasing the costs of operation
Further development of infrastructure	Growing number of new companies coming to the cities and high number of existing companies, rapidly expanding
Active state and private institutions supporting new and existing SSC/BPO investors such as MARR	

Source: CBRE 2014

51
32
94
OLKUSZ
JASNOGÓRSKA
35
28
13
Ojcowska
7
79
E77
KRZESZOWICE
RADZIKOWSKIEGO
17
J. CONRADA
57
R. Ofiar Katynia
TRZEBINIA
Balicka
Lokietka
WOLBROM
794
H. PACHOŃSKIEGO
BIAŁOPRĄDNICKA
K. WYKI
OPOLSKA
T. Makowskiego
M. Jaremy
Czerwieńskiego
Stachiewicza
07
Władysława
Radzikowskiego
Batalionu „Skała"
Krowoderskich Zuchów
Fieldorfa-Nila
Prądnicka
57
J. Wybickiego
Bratysławska
Doktora Twardego
KRAKÓW ŁOBZÓW
30
Wrocławska
Lokietka
J. Mackiewicza
Siewna
Bocianiа
KIELCE
54
OPOLSKA
41
E77
AL. 29 LISTOPADA
Dobrego
Estakada Rozwadowskiego
LUBLAŃSKA
Wileńska
Czerwonego Prądnika
Brogi
46
PRANDOTY
22
Prądnicka
Chrobrego
Grochowska
Rakowicka
AL. BOLINY PRAŹMOWSKIEGO
Brodowicza
Bronowicka
AL. ARMII KRAJOWEJ
03
23
43
06
Podchorążych
Piastowska
Kijowska
Królewska
AL. J. SŁOWACKIEGO
Długa
Warszawska
STWOSZA
DW. AUTOBUS.
NAWOJKI
CZARNOWIEJSKA
Karmelicka
AL. A. MICKIEWICZA
48
39
53
52
KRAKÓW GŁ.
LUBOMIRSKIEGO
09
15
Lubicz
R. Mogilskie
Basztowa
Dunajewskiego
Pawia
Rynek Główny
Podwale
Westerplatte
Królowej Jadwigi
Piastowska
Al. 3 Maja
AL. Z. KRASIŃSKIEGO
Piłsudskiego
Franciszkańska
Straszewskiego
Zwierzyniecka
Gertrudy
Al. F. Focha
26
GRZEGÓRZECKA
18
10
AL. POWST. WARSZ.
R. Grzegórzeckie
Al. Daszyńskiego
DIETLA
STAROWIŚLNA
Podzamcze
Św. Stradomska
14
Podgórska
KOTLARSKA
Wodociągowa
J. Malczewskiego
780
T. KOŚCIUSZKI
55
Tyniecka
Bałuckiego
KONOPNICKIEJ
DIETLA
KSIĘCIA JÓZEFA
OŚWIĘCIM
ZIELIŃSKIEGO
Praska
MONTE CASSINO
R. Grunwaldzkie
Krakowska
NA ZJEŹDZIE
KRAKÓW ZABŁOCIE
Limanowskiego
20
KAPELANKA
KONOPNICKIEJ
29
Kalwaryjska
AL. POWSTAŃCÓW
KRAKÓW KRZEMIONKI
Estakada Obrońców Lwowa
776
40
R. Matecznego
Tyniecka
11
36
WADOWICE
KAPELANKA
St. Grota-Roweckiego
J. BROŻKA
KOBIERZYŃSKA
TISCHNERA
08
H. KAMIEŃSKIEGO
24
27
45
44
33
KRAKÓW BONARKA
KRAKÓW BOREK FAŁĘCKI
TUROWICZA
A. Fredry
ZAKOPIAŃSKA
OŚWIĘCIM
25
Bobrzańskiego
KOBIERZYŃSKA
Łużycka
Malborska
21


KIELCE
Strzelców
J. Jancarza
Srebrnych Orłów
PIASTA KOŁO-DZIEJA
Kruszwicka
L. Okulickiego
R. Piastowskie
MIKOŁAJ-CZYKA
Jagiełły
K. Łowińskiego
RZESZÓW
Nowo-Lipki
K. Makuszyńskiego
R. Barei
DOBREGO PASTERZA
L. OKULICKIEGO
Wiślicka
L. Okulickiego
R. Hipokratesa
Dunikowskiego
Bronisław-skiego
Obrońców Krzyża
R. Polsad
AL. BORA-KOMOROWSKIEGO
79
AL. WŁ. ANDERSA
776
KOCMYRZOWSKA
BUSKO-ZDRÓJ
Estakada Iżyckiego
R. gen. Maczka
Pilotów
R. Młyńskie
Ułanów
STELLA-SAWICKIEGO
M. DĄBROWSKIEJ
R. Kocmyrzowskie
Obrońców Krzyża
Mościckiego
Żeromskiego
J. MEISSNERA
Ugorek
M. MEDWECKIEGO
BIEŃCZYCKA
AL. WŁ. ANDERSA
Al. Róż
Struga
AL. JANA PAWŁA II
AL. JANA
NOWOHUCKA
DW. AUTOB. CZYŻYNY
PAWŁA II
Al. Przyjaźni
AL. SOLIDARNOŚCI
Orkana
S. LEMA
R. Czyżyńskie
Pl. Reagana
79
AL. JANA PAWŁA II
SANDOMIERZ
776
Centralna
Sieroszewskiego
MOGILSKA
AL. POKOJU
R. Dywizjonu 308
Sołtysowska
AL. POKOJU
NOWOHUCKA
Ofiar Dąbia
Na Załęczu
L. Podbipięty
776
Stoczniowców
Isep
NOWOHUCKA
KLIMECKIEGO
Saska
Płaszowska
Połanki
Rybitwy
Szparagowa
ŚLĄSKICH
Przewóz
Krzywda
LIPSKA
Łanowa
J. SURZYCKIEGO
RYBITWY
CHRISTO BOTEWA
Obrońców Modlina
Motyla
Dąbka
Połanki
WIELICKA
KRAKÓW PŁASZÓW
WIELICKA
KRAKÓW PROKOCIM
Bieżanowska
Połanki
KRAKÓW BIEŻANÓW
NOWOSĄDECKA
Wolska
Na Kozłówce
Bieżanowska
RZESZÓW, PRZEMYŚL
Połanki

Transport

Well-developed highway and road infrastructure is another significant advantage of Małopolska Region. The A4 motorway runs through Małopolska region, linking the region with the western European motorway network (e.g. trip from Kraków to Berlin takes about 6 hours).

Balice Airport plays a key role not only regionally, but also across the country. It is the second largest airport in Poland in terms of size and number of passengers. Its direct coverage includes about 7.9 million inhabitants within a distance of 100 km from Kraków, which equals to the travel time to about 90 minutes from the airport. In the summer time the airport supports 62 stable flight connections. In 2013 more than 3,5 million people were served by the airport of Balice. The Kraków airport offers multiple connections within the country, as well as regional and international, and serve as a transport hub for European, Middle East, Mediterranean, African and transatlantic commuters. In 2013, the most popular destinations were: London (11%), Warszawa (8%), Frankfurt and Munich (6%) and Oslo, with 5% passengers travelling from and to Kraków.

Kraków also offers fast InterCity train connections, which you can use to get to other key cities in Poland. The trip to Warszawa takes around 3 hours, to Poznan approximately 6 hours and 30 minutes, and to Wrocław 5 hours.

More and more popular are also long-distance express bus connections which are an interesting alternative to railways.

Despite the size of the agglomeration, commuting around Kraków for residents and tourists visiting it is not a problem. The city is constantly improving public transportation and investing in the modernization of infrastructure.

In Kraków operates also KMK Bike[13] – Kraków city bike which is for those who appreciate outdoor activities. It is an interesting alternative for private transportation. Citizens of Kraków can benefit from 29 stations and 270 bikes. Their locations can be found on https://kmkbike.pl/lokalizacje4.html

The quality of life

Kraków and Małopolska Region is an area with the highest quality of life in Poland. Once again the data from the study „Social Diagnosis 2013"[14] confirms that the citizens of Małopolska are the most satisfied with the quality of life of all Poland.

High level of education, a significant number of job offers, coming among others from high-tech and modern services sector, as well as attractive real estate offer makes Kraków a very interesting city on the Polish map to live in. Every year the city attracts new masses of students from across Poland and Europe, who often stay in Kraków for much longer than the period of their education. Some of them decide to stay in the city for good.

Companies that decided to open shared services centres in Poland very often encourage executives from their origin country to sign up for a contract aiming to implement high standards and procedures existing in the head office. Kraków can meet the highest requirements of foreigners who come to Kraków expecting high-profile level of life standards in this city. In Kraków, there are several international educational institutions including schools, kindergartens, and nurseries such as the British International School of Kraków and the International Private Primary School. The most popular school is The International School of Kraków, which offers education at the global level for children from 3 years to the end of high school.

Foreigners in Krakow also often form casual communities that meet regularly together to get to know the city and the country and exchange their experiences. One of the most popular organization is the „Professionals In Cracow", where foreigners are mostly involved with SSC/BPO sectors meet.

[13] *https://kmkbike.pl*

[14] *www.diagnoza.com/pliki/raporty/Diagnoza_raport_2013.pdf*

Forecasts and trends

Since last few years there is a visible trend of moving to Poland more and more advanced business processes. Majority of global companies who decide to reduce costs of company operations, outside of its core business, at the beginning decide to migrate simple accounting processes, administration or customer care. Well – educated workforce, successfully completed migrations, numerous enhancements which are introduced to the processes by polish specialists result in more and more advanced processes transferred, also to Kraków. Employees from Małopolska Region often seek for candidates experienced in financial analysis, taxes, procurement audit, logistics, law or compliance. This results in increasing consideration of the region by specialists and managers, who perceive the region as career destination.

It should be also noted, that companies, which invested earlier in Małopolska, eventually decide to migrate more business processes of their companies. Success of previous migration, being possible to happen on the basis of well-trained, innovative and flexible employees encourages also smaller, highly specialized companies taking into account open service centres in Kraków or transfer theirs business processes to the outsourcing center.

There is also interest by investors from banking and investments funds sector. Law simplification and legislative changes can encourage more banking and financial institutions to open business services centers in Poland.

> *Kraków will certainly continue to grow, however, the outsourcing industry is so dynamic that there is a need to look at it closely and be ready to change. I think, that the sector will evolve in Kraków, which requires both companies in the market as well as from the employees more flexibility. The perspective is good, but you cannot relax and admire what is achieved. There is a need to think ahead and try to anticipate changes that might occur in a few years* – **Konrad Kończewski, SSC Head and A&F Operations Lead, RWE Group Business Services Poland**.

The labour market in Kraków is based to significant extent on the offer of employers from modern services and research and development centres. More and more employees decide to constantly improve qualifications through various courses, trainings or post graduation studies. Increasing employees competences convince companies to migrate more complex, complementary and advance business processes to Małopolska.

International outsourcing companies, both new and these operating here for a few years now, plan to expand into new service areas, It means that in the near future in SSC/BPO sector there will be an increase in new job offers.

IT SECTOR / R&D SECTOR

Characteristics of the sector in the area of Małopolska

IT and R&D sector in Małopolska region is one of the fastest growing branches of the market. The main factors which attract international IT and high tech companies to Poland and to this specific region are:

- Travel infrastructure – close range to the airport in Balice and a significant number of flights to European countries and the Middle East,
- IT infrastructure – well developed networks and availability of world class IT infrastructure and equipment,
- human resources and labour market – current high availability of highly-skilled employees at all levels of the corporate structure, exceptional and constantly growing education level in IT field and relatively low employment costs, combined with attractive office space rent and comfortable standard of the offices for specialized IT workforce,
- Market – is the second largest after Warsaw in Poland, among others due to eastern markets .

[15] *Robert Guzik, Krzysztof Gwosdz, Jarosław Działek „Klimat inwestycyjny w województwie małopolskim", 2013*

Companies, sector of the economy, employment

In Małopolska Region the companies employing the greatest number of employees in the IT sector are: Polish Comarch, followed by two USA originating companies: American Sabre and Motorola. Among the companies from R&D sector in terms of volume are among others: Delphi, IBM, Air Liquide.

It is worth noticing, that world class companies tend to locate medium to high scale software development specialized teams, working on advanced solutions in the region. This is due to possibility of aquiring high potential experienced software engineers. Companies like Motorola, Nokia Siemens, Cisco and Google are all well established and with perspectives to grow in the region.

Strengths of the region for investment in the IT/R&D sector

Considering all strengths and opportunities, Małopolska region is very attractive for international companies to invest. Despite the fact of already strong presence of multinational companies such as IBM, Motorola, Cisco, Siemens and fast growing Polish companies: Comarch, Ericpol, not only more and more companies seek opportunities to establish their outpost here, but also currently present companies continue to expand steadily

This is allowed by one, among others of strong points of the region, namely high level of university education in advanced IT and R&D fields. One of the key factors taken into account by current and prospective investors who consider investments in IT/R&D sector is the availability of technical professionals

Table 6. Top 20 IT/R&D companies by headcount

Company	Year of establishment	Country of capital origin	Operations	FTE
Comarch	1993	Poland	IT development, IT Integrator	3759
Sabre Holding	2000	USA	IT development	1500
Motorola GSC	1998	USA	IT development	900
Capgemini ITO	2005	France	IT infrastructure management services	800
Ericpol	1996	Poland	Software development center	700
Dream Lab (Onet)	1996	Germany	Web portal and a number of other internet-related project, own software team	600
Delphi Technical Centre	1991	USA	Automotive engineering	500
IBM SWG Lab	2005	USA	Research and Development, Software development	405
Grupa Interia	1999	Poland	Web portal management	400
Nokia Siemens Networks	2010	Finland	Hardware and Software Development (LTE)	350
HCL Poland	2007	India	ITO	320
Cisco	1997	USA	Global support center	300
Air Liquide Global E&C Solutions Poland	1996	France	Engineering	300
Luxoft	2005	Russia	Software development center	250
ATSI	1998	Austria	Multimedia software based on large dispersed IT systems	200
Antenna	2005	USA	IT development	200
NetArt	1997	Poland	Domain registration, hosting services	200
it Works	2001	Poland	Providing complex IT services in the outsourcing model	200
ABB	1996	Swiss	Engineering	150
Google	1998	USA	Research and Development	100

Source: own work based on company websites, TOP 200 Computerworld ranking and the possibility to implement research and development projects with local academic centers or other organizations supporting the development of Polish science. Which is also important, educational centres of the region are quickly adapting to the most current technologies and adapt student to constant changes and development, which is essential to be successful on high tech market.

Experts from Antal International pointed that the investors by selecting investment in addition to "hard factors" also include "soft" criteria such as: the possibility of investment incentives (Kraków Technology Park – Special Economic Zone) or easy access to training courses. The report created for the Małopolska Region[16] "Raising the IT qualifications of Małopolska's inhabitants" shows that a large part the IT employees know, or train in the direction of the knowledge of programs such as ERP, CRM or Business Intelligence. Certificates are also very important. In Małopolska the most popular certification is ECDL (European Computer Driving Licence), followed by postgraduate studies in IT and Cisco certification CCNA1 and CCNA2. They are recognized throughout Europe, confirm and expand the qualifications the employees and also show, that employees are on par with the most qualified IT staff in the world. According to the report, the best educated students (in terms of contribution to the study and development of an employee) are graduated of the AGH University of Science and Technology. Students are not only prepared to work in international environment and familiar of advanced software and hardware, but also thought how to creatively develop software for advanced platforms and services. Thanks to the cooperation between universities and companies, young employees in the IT sector are well-educated and competitive on the labour market in Poland, but also familiar with the companies that they have to work for during studies and often develop their careers with them.

Human resources

Małopolska with the level of employment in the IT sector at 14,6% is the second highest region in Poland[17]. From the point of view of the employer and employee, Kraków and its surroundings has the most important features such as:

- Large number of companies, with the significant number of well recognized IT brands,
- strong emphasis on the development, with focus on advanced technologies,
- closely cooperation between high grade universities and companies,
- increasing specialization of the region,
- availability of good quality and affordable office space,
- closeness to the airport,
- lower cost of the operation (compared to Warszawa and other capitol cities of the region such as Prague, Bratislava)

The high level of education and prestige the universities makes students more willing to start education in Małopolska.

Table 4. Students andgraduates of public and non-public schools in the Małopolska Region

Type of school	Group	Years	Unit of measure	Number
Public schools	students	2013	person	155923
Non-public schools	students	2013	person	33686
Public schools	graduates	2013	person	43087
Non-public schools	graduates	2013	person	10901

Source: (own work based on the Central Statistical Office of Poland)

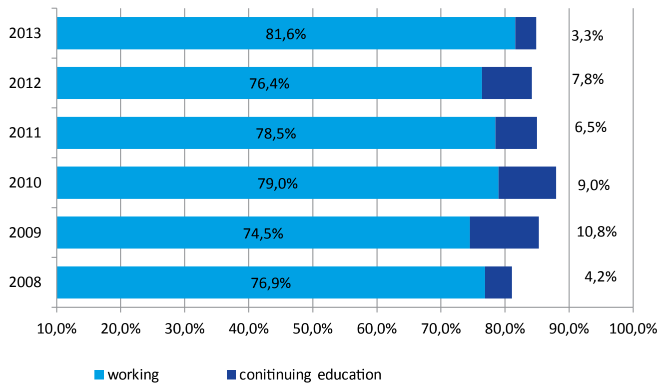
[16] *http://www.kompetencjeit.malopolska.pl/about-project*

[17] *Labour Market and Human Resources in Kraków and Małopolska 2013 Antal International*

In the academic year 2012/2013 in Małopolska Region educated 189.6 thousand of students. 43,087 people graduated at public universities in the Małopolska Region, and 10,901 people graduated at non-public schools. 49% of students were educated at universities and higher technical schools[18].

Study presented below show how the graduates from the AGH University of Science and Technology are professionally active[19].

Figure 7.



Source: http://www.agh.edu.pl/

Summary of study results from the last five years confirm the strong professional position of graduates from the universities regardless of changing market conditions. Stable growth of the industry allows young employees to enter new and challenging jobs, and more experienced employees to continue professional growth within companies.

In terms of the number of institutions of Research & Development, Kraków is among the top Polish cities. Is is a result of before mentioned high level of education of universities and established advanced research institutes such as: Oil and Gas Institute, Institute of Nuclear Physics, Institute of Pharmacology Polish Academy of Sciences, Foundry Research Institute.

Research institutions operating in different industries:

- AGH University of Science and Technology: Research Centre for Neuro-Fuzzy Comutations in Structural and Civil Engineering
- Cracow University of Technology: Telemedicine and Preventive Medicine
- Oil and Gas Institute: Centre of Exellence in Advanced Methods of Physics for Human Health and Reduction of Environmental[20].

In order to ensure an adequate supply of high qualified specialists the Ministry of Science and Higher Education initiated Competence Development Project dedicated to the region.

The EU program planned for years 2014–2020 will be mainly focused on strengthening the competence and qualifications of people who are at the moment unemployed and actively looking for work. It will be also actively supported by modern teaching centres, emphasizing the practical education through workshops and the application of new technologies in higher education[21]. It will help improve the competitiveness of the Polish economy, improve the quality of education and cooperation with employers.

High impact on IT development in the region has Małopolska Information Technology Park, which aspires to be „the centre for developing new ideas and technologies. A cluster of ICT companies. The testing ground for the open innovation ideas. A platform for collaboration of the academic, business, and administration circles".

The investments in new technologies are realized not only directly in Kraków, but also in other part of Małopolska: e.g. Tarnów or Niepołomice. Those smaller cities are often attractive for professionals and managers with experience and employees from internship programs and cooperation between

[18] *Higher Education, the Central Statistical Office of Poland*

[19] *The Professional status of graduates AGH economically active does not include*

[20] *http://businessinmalopolska.pl/strona/nowe-technologie-R-D/*

[21] *http://www.nauka.gov.pl/*

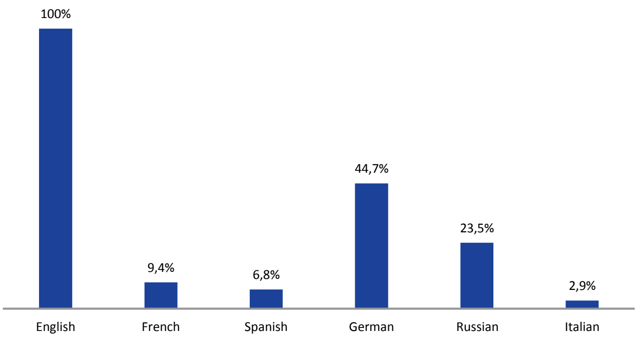
universities and IT companies. A prime example is the involvement of Cisco in projects with the major universities of Kraków. The result of this cooperation is the Cisco Academy at AGH. The adventure with this initiative starts with the competition for internship and at the finish line awaits full-time employment contract for well-trained employees. The cooperation benefits both parties.

In R&D sector the greatest demand is for engineers and designers with different specializations. There is also need of roles educated and experienced with leading and management of the projects and programs. The most popular positions with several years of experience are: Project Engineer, Project Manager, Program Manager and compared to other regions there is no significant difference in the requirements for candidates. The most important factors are the availability on the market and circumstances that prevent candidates to relocate from other cities in the country.

Foreign language skills

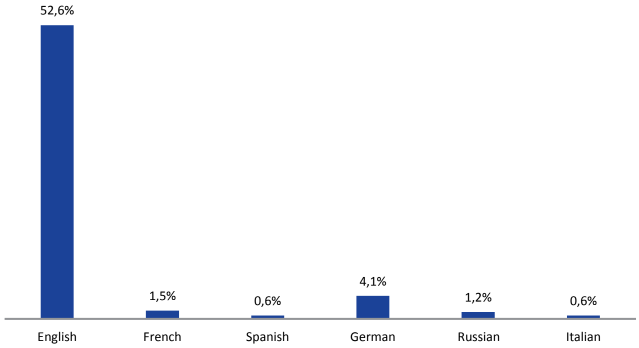
The IT professional candidates' foreign language skills are a quality that significantly influences the value that they present to prospective employers.

Figure 8. Knowledge of foreign languages at any level



Source: IT@PL – the IT Labour Market in Poland, Antal International

Figure 9. Knowledge of foreign languages fluent



Source: IT@PL – the IT Labour Market in Poland, Antal International

Fluent English skills, possessed by 52,6% of professionals who took part in the study, are steadily becoming the market standard, while formerly they were considered to be an additional asset. Currently, fluency in German can significantly increase a candidate's chances as employers need IT specialists who will be able to cooperate with German-speaking clients on a daily basis.

Only 4% of the study's participants admitted to having fluent German skills[22].

Salaries in IT sector in Małopolska region

The salary in the IT sector can be divided into several areas, each of them has different salary scales. It should also pay attention to the employment costs, which are for the investors one of the most important issue. The prepared for Małopolska region employment reports, in respect to quality of employees to employment cost, are very favorable. The level of remuneration depends, as in many other sectors, on the work experience, specialization, responsibilities and many other factors. The market can be divided into 4 sectors:

[22] *IT@PL – the IT Labour Market in Poland 2013, Antal International*

- Technical sector, which includes: developers, system engineers and other directly involved in the development of technology and improvement of existing solutions,
- Sales sector, which includes: sales specialist, sales manager, presales engineer, partnerships specialist. The specialist are engaged in selling solutions to specific business sector, such as ERP system for the banking-financial sector or control panel data for the telecommunications sector,
- Contractors, mostly with technical background, who do not work full time job just projects, there are the engineers self-employed, cooperating with the technical department of the company, e.g. one year contract for implementation a particular system, after the contract expires, an engineer starts work at another contract,
- Managerial positions, which connect all three sectors, it's possible to find both the technical person (technical director, head of a team of developers), sales (sales manager, department manager, managing director) and contractors (project manager).

Differences in salaries are visible both in the vertical and horizontal perspective. The .net developer will earn more than .java developer, because of the language becoming obsolete. The sales system specialist for large corporations will have higher remuneration than a specialist in small and medium-sized enterprises.

Table 7. Salaries offered in selected job positions

		Total monthly salary	Standard in-work benefits
IT SALES	presales	10 000 – 14 000 PLN +30% bonus	laptop, cell phone, optionally company car, family private healthcare
	key account manage	10 000 – 15 000 PLN + 40% – 50% bonus	„laptop, cell phone, wireless Internet access, company car, fuel card, fitness card"
	sales manager	15 000 – 20 000 PLN + 50% – 60% bonus	laptop, cell phone, wireless Internet access, company car, fuel card, family private healthcare, fitness card
IT TECH	jr .net developer / web developer (Łódź, Lublin)	2 300 – 5 000 PLN	insurance
	„junior .net developer / junior web developer Warszawa"	3 500 – 6 000 PLN	private healthcare, fitness card, other forms of insurance, quarterly bonus
	.net developer / web developer (Łódź, Lublin)	4 000 – 8 000 PLN	insurance
	.net developer / web developer Warszawa	6000 – 9 000 PLN	private healthcare, fitness card, other forms of insurance, quarterly bonus
	„senior .net developer / web developer (Łódź, Lublin)"	7 000 – 11 000 PLN	insurance
	senior .net developer / web developer Warszawa	8 000 – 14 000 PLN	private healthcare, fitness card, other forms of insurance, quarterly bonus

Source: Salary Report, Salaries offered to Professionals and Managers, 2014, Antal International

Antal Internationals study follows, that work experience is very important as it determines the candidate's familiarity with the market and his or her ability to tailor solutions to clients' needs. Experience helps in building long-lasting relationships that are essential in keeping sales stable. Individuals who have worked in corporations will fit in better in a similar environment, whereas integrators wish to recruit candidates who work for their direct competition, as they have diverse, less specialised skills. Experience gained within a large company means that the candidate has had a chance to work on bigger projects using the most widely recognized work methodologies. However, employees of smaller companies tend to be more universally skilled. Multinational companies often require candidates to be familiar with working as part of a remote team. SAP specialists are expected to have worked in multinational companies. It should be emphasized that, within the IT sector, the number of years of experience always comes second to competence[23].

Location of the investment / real estate offer

At present, the largest implemented in Kraków Office buildings are Kapelanka 42 (30 thousand sq m), Quattro Business Park IV (12.2 thousand sq m) and the second phase of the Enterprise Park (13.6 thousand sq m). In the near future should start with the construction of such facilities as Echo Investment office buildings at Opolska street (about 20 thousand sq m) and the new Skanska Property Poland at Rondo Mogilska (about 18 thousand sq m).

It is difficult to feature the strict business center, because the office buildings in Kraków are spread in different areas of the city.

The largest office concentration areas are:

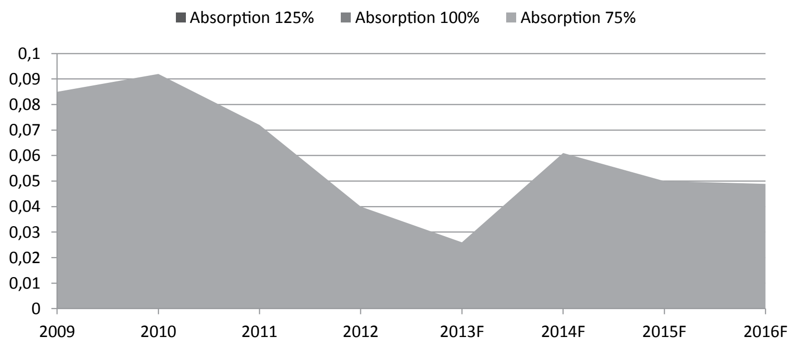
- Eastern outskirts of the city centre near Rondo Mogilskie and Rondo Grzegorzeckie,
- area along Opolska and Lublanska streets,
- area of Lea and Armii Krajowej streets,
- Podgorze district,
- area of Special Economic Zone along Jana Pawla II Avenue and Zabierzow district.

Office space in Kraków is also available in the core centre of the city, in the revitalised tenements offering office modules for minor tenants.

Rental rates and lease terms

As compared to other Polish regional cities, rental rents in Kraków remain at a relatively competitive level. Currently, rents for prime office space range from EUR 13.50 to 16.00/sq m month. The highest effective rents amount to EUR14.00/sq m/month. Operating costs in modern office buildings range from EUR 3,13 to EUR 3,61 /sq m/month. The demand for office space in Kraków is generated mostly by the SSC/BPO sector, which, by definition, is characterised by cost optimisation. Due to this fact and owing to a strong competition from other cities, no rental increase should be expected in the near future

Figure 10. Prognosis of office vacancy rate in Kraków



Source: CBRE, 2014. The chart shows three scenarios: optimistic (the absorption of the new space at the level of 125% of the yearly average), neutral (absorption at similar level – 100%) and pessimistic (absorption at 75%).

[23] *Salary Report, Salaries offered to Professionals and Managers, 2014, Antal International*

Cooperation between the IT sector and universities

The level of cooperation between universities and private companies, which includes internship and training programmes, has been highly rated. According to the Report the employment of Antal International for 2013, there is increasing trend to employ young people trained during the study of solutions to producers. The good example is created in 2000 at the University of Science and Technology, Regional Cisco Academy. The range its activities covers the area of the Małopolska, Podkarpackie and Świętokrzyskie Region. It operates at the Distributed Systems Group, whose employees are trained students of higher years of computer science study. The program specializes in networking, both in terms of programming and hardware, and ha in this area many years of experience. During 13 years of work have been carried out more than 50 editions CCNA (Cisco Certificated Network Associate), more than 30 courses CCNP (Cisco Certificated Network Professional), and nearly 40 instructor courses. The Academy has already trained more than 750 people. Department of Computer Science AGH patronized by 14 local academies .

Through the initiative of Cisco until now courses conducted in accordance with the CNAP (Cisco Networking Academy Program) completed more than 160 000 people around the world .

The second good example is organized competition at Cracow University of Technology, Jagiellonian University or AGH. The grand prize is an internship at companies such as Comarch, Sygnity, SAS, Cisco, Microsoft and Motorola. The winners of these competition have guaranteed training and can acquire new experience of working in the corporate. In addition, very often interns, who fit into the structure and prove themselves in the tasks assigned to them get a job and stop the same employer for a longer period.

There is a large potential among a group of people who are finishing their directions are specialist without experience, but wanting to get to the best organization to be able to develop in practice their skills through years of study. Moreover, the IT and R&D sector is so specific that most of the employees like their work and concider it as a hobby.

In Małopolska region also increases the number of people who decide applying for a grant from the European Union (Innovative Economy) for their projects. An example would be the success ZineINC company which plans to become the leader in business analytics. Company acquired from investment fund Jumperism LTD for the development and acquisition of know-how 1.1 million dollars. It should be noted that the company is on the market less than a year. Similar successes in the IT sector in Małopolska are more and they are worthy of attention.

Forecasts and trends

Antal International study follows, the domestic IT and R&D builds a stronger and stronger position in the international arena. This allows to attract further foreign investment and stops, and even reverses, the unfavorable trend of mass emigration of professionals. These conditions, indicating the stable development of the sector confirmed career paths in IT is a good choice for the future.

Poland is a country which has attracted many foreign investors who have invested in factories. Production companies provide jobs to thousands of Poles, but to keep this trend we need to encourage foreign companies as well as those of the national capital to put up R&D centers. In Małopolska R&D centers have set such well-known companies as Delphi, ABB, Apriso, IBM, Motorola. This centers are a guarantee stabilization of the business, increasing the competitiveness of Małopolska as places new investments and building the region's economy based on knowledge and innovation. This is very important because it directs the region in the direction of the creative process and not merely generic. The direct beneficiaries will be engineers and students of local technical universities. A new R&D center is an opportunity to strengthen relations between science and business and use developed by science solution in the sphere of business. Better quality of engineering education (aim teaching programs at the needs of business, open internship programs in this centres) and new jobs after graduation students.

From 2014, the European Union launched another pot of subsidies and funds for Poland, much of which is meant for technological development which puts the Małopolska in the leading position in the country as the only region built with young computer facilities for many years.

EU programmes planned for the 2014-2020 period, while still undergoing development, will place more emphasis on innovation and modernisation of information technologies than the previous Perspective. The planned programmes will focus on the following areas: innovation, scientific research tied with business activity, development of digitization, environment, transport and safe sources of energy. All of them bode well for the IT sector's future[26].

The start-up's business in Poland is very young and started to develop more intensively in recent years with the advent of EU funds and the National Capital Fund.

The same trend of rapid development of high-tech and start-up's is observed in Małopolska Region. An example of how the product created in Kraków can conquer markets around the world is Estimote. The company was awarded in 2013 the title of best start-up producing electronic devices during TechCrunch Disrupt prestigious conference in San Francisco. The key to success seems to be understanding trends. This allows respond appropriately to changes and adapt appropriate strategy. It successfully manages to IT developers in Małopolska Region.

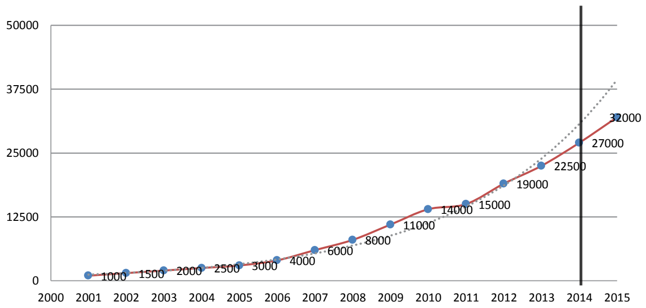
[26] *IT@PL – Poland's IT Labour Market, Antal International*


GALILEO
KPMG
IBM
NEWTON
EDISON
Raiffeisen BANK

Opinions on the Business Services and IT Sectors in regions

According to ASPIRE research, over the past 5 years SSC/BPO/IT sector has growth 20% annually. Is expected to maintain this trend, which allows to create 5,000 new position on the market.

Figure 11. Growth in employment



Source: Aspire 2014

The industry now employs over 35,000 people in the Kraków (one in seven of the total working population), a figure expected to rise to 38,000 by the end of 2014.

Kraków is the most mature market in Poland. The head offices have here more than 100 global brands. A large number of experienced employees – especially managers – makes, that makes companies willing to move here more and more advanced processes. Visible in the recent years is the increasing diversity of business areas centers - they include: F&A, HR, financial services, purchasing processes, logistics, customer service and IT.

ASPIRE research shows the average age of employees in the industry is 29 and 70% of employees are Kraków university graduates. 11% of people working in centres are young foreign nationals.

Kraków is unique because of the ecosystem which has developed to support the growth of the sectors. This is driving innovation and investment and gives us confidence in the future. What we have seen is centres moving from transactional processes to higher value processes. Increasingly they are becoming centres of excellence and strategically important to the business. By operating centres in Kraków, companies are strengthening their global performance **– Andrew Hallam, General Secretary of ASPIRE**

If you open today's edition of the Financial Times, one the last page you will find data, analysis and rates of investment funds that are being developed here in Kraków for global financial markets, investors, regulators and the media **– Scott Newman, Senior Vice President of State Street Services Poland**

BPO'S, SHARED SERVICE CENTRES, FINANCIAL SERICES & IT CENTRES bring organisational and technological solutions which drive progress and innovation. We need to attract skilled students and employees to Kraków so we can climb the value ladder of our parent companies and attract evermore complex work **– Wojciech Burkot, Engineering Director of Google**

SSC/BPO it as an increasingly important sector for the Polish market – giving thousands of jobs, development opportunities. Different locations of shared service centers allow to choose the best place not only to work but also to live **– Daria Stefańska, team manager Antal SSC/BPO**

In addition to standard reasons why companies decide to transfer processes to Kraków such an broad access to a well-educated professionals, it's important for us were also cultural aspects and mentality. We provide services for the European part of Sappi, mainly for the countries of Western Europe, and despite the existing cultural differences, they are relatively easy to overcome. Taking into account the location of our facilities in Europe, from Austria, Germany, Benelux to Finland, Kraków is easy to reach from all these places. Recommendations of companies cooperating with us, which decided to make a similar move, were also very important for us. **– Adrian Marciszewski, Head of Shared Service Center, Sappi Europe (Polska) Sp. z o.o.**

A common factor that is emphasized by investors as a big asset to the region is the highly-skilled professionals as well as large academic background. The SSC/BPO sector is still increasing and not yet saturated.

SSC/BPO sector has very quickly grown, but the potential of Małopolska is not yet fully used. There are many areas for development, especially in more complex business processes **– Konrad Kończewski, SSC Head and A&F Operations Lead, RWE Group Business Services Polska**

Opinions on the development IT sector are optimistic. Comments from the experts show that the time of stagnation ended with the begin of 2014.

The study Antal Global Snapshot covering the whole world, clearly shows that Poland is at the forefront of countries increasing employment. In the IT sector more than 60% of employers have indicated, that over the next quarter will to recruit new specialist[27]. For the Małopolska Region it is very important, because many of the companies, taking part in the study, is located in Kraków or its surrounding.

IT professionals and engineers beginning their careers have 70% chance to find a group of employees and achieve desired salary of 8-10 thousand per month gross (even after 2 years). It can be explain by the scope and quality of education, supply and demand on the local market and an additional factor – determination – **Aleksandra Kujawa, manager Antal IT services**

In summary, Małopolska is very attractive market, attracting investors amenities in the form of: Małopolska Technology Park or communication solutions. Region has still growing number of professionals and managers trained in the IT multinational corporations or with Polish producers and integrators, who do not give way competition from abroad quality of service. Cooperation between universities and corporations brings tangible benefits not only in Małopolska region but the entire country. The engineers trained in Kraków find employment in any Polish city.

[27] *Antal Global Snapshot, 2014*

Public support for investment in the Business Services, Technology and IT Sectors in Małopolska Region

Special economic zones

The special economic zone covering the area of 707 ha and is managed by Kraków Technology Park. Situated in Małopolska and Podkarpacie regions where public aid from the title of investing within special economic zones is highest in Poland. Kraków special economic zone consists of 27 subzones situated in 25 municipalities, where investors are welcome to make use of greenfield areas as well as office space for rent.

A permit to operate in the special economic zone may be acquired by any firm, irrespective of the size and country of origin. Small and medium-size companies receive higher level of public aid.

Kraków Technology Park has issued 190 permits to operate in the zone. The number of businesses present small and medium companies: Fideltronik, Radionika, Unipress, and the large corporations, including Comarch, Brembo, RP Donnelly, Motorola, Shell, MAN Trucks and Capita.

The zone boasts building over 17 000 new jobs, and the total investment outlay of PLN 3.8 billion[28].

The Special economic zone is designed for all business from the traditional industry sector (the exception of products licensed by the country).

Special economic zone also for potential investors offers:

- Public aid
- Service for investors
- Investments areas
- Office space for rent
- Training in fund raising for economic activities
- Training activities in the Special Economic Zone

European Union funds

Polish accession to the EU on 1 May 2004, was associated with a lot of expectations on improving the economic situation and quality of life. Thanks to EU support Małopolska region completed 12,559 investment and financing amounted to 21 883 674 332.31 zl[29].

We can see a very big development in transport and communication, thanks managed to improve traffic in the region, managed to improve traffic in the region.

[28] *http://www.sse.krakow.pl/en/special-economic-zone.html*

[29] *http://www.mapadotacji.gov.pl/en*

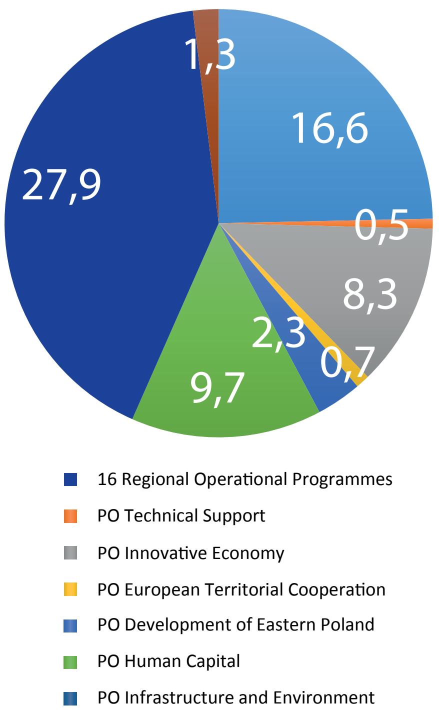
With the grants from the European Union was built bypasses cities (eg Chrzanów, Dobczyce), modernize many parts of rolling stock, as weel as build many kilometres of highways.

Kraków education received funding of 4 billion zlotys. AGH University of Science and Technology built thanks to the money a modern Computer Centre an the Energy Centre is currently under construction. The Jagiellonian University campus created new research centers. And everything is to educate highly qualified specialists.

European funding programs in 2007–2013 included:

- Innovative Economy,
- Infrastructure and Environment,
- Human Capital,
- Development of Eastern Poland,
- Development of Rural Areas,
- European Territorial Cooperation,
- 16 Regional Operational Programmes.

Figure 12. European Funds



Source: http://www.paiz.gov.pl/fundusze

European Union funding within the Regional Operational Programme largely support the economy of these areas in the region which attract many investors.

The main task of the Małopolska Regional Operational Programme is to create the right conditions for growth and employment.

In order to achieve the main tasks MROP in 2007-2013 identified nine strategic objectives:

1. Conditions for the development of the knowledge society.

2. Regional Opportunity Economy.

3. Tourism and culture industry.

4. Infrastructure for economic development.

5. Kraków Metropolitan Area.

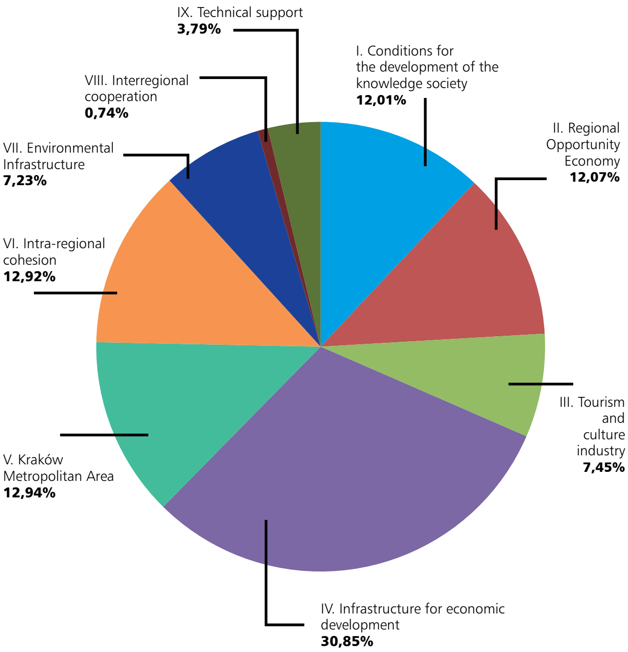
6. Intra-regional cohesion.

7. Environmental Infrastructure.

8. Interregional cooperation.

9 Technical Support.

Figure 13. Allocation in the MROP



Source: http://www.fundusze.malopolska.pl/mrpo

In accordance with the development plan of the region, Małopolska will be a place for a modern economy, the comprehensive development of people, but also maintain the values of national heritage.

Plans for 2014-2020

Poland from the European Funds in 2014-2020 will receive up 82.5 billion euro. These measures will contribute both to achieve the objectives of cohesion and regional policy in the form of implementation of the strategy "Europe 2020".

For years 2014-2020, the European Commission has proposed a simplified framework including two objectives: "Investing in Development and Employment" and "European territorial cooperation". This concept is in accordance with the strategy "Europe 2020", in which all regions are involved in the implementation of the general form of investment in the development and employment, but measures and scope of intervention are diverse on the degree of economic and development of the region. In this time will be placed more focus on the use of territorial potential through integrated interventions targeted at specific areas.

Table 8. The 5 targets for the national strategy „Europe 2020" Poland

1.	Employment	71% of the 20-64 year-olds to be employed (for the EU 75%)
2.	R&D	1,7 % of the GDP to be invested in R&D (for the EU 3%)
3.	Climate change and energy sustainability	reduction of primary energy consumption to the level of 96 mtoe, increasing the use of energy from renewables and the reduction of gas emissions
4.	Education	Reducting the rates of early school leaving to 4,5% (for the UE 10%), At least 45% of 30-34-year-olds coleting third level education (for the EU 40%)
5.	Fighting poverty and social exclusion	Decrease by 1.5 milion of peple in or at risk of poverty and social exclusion

Source:

In 2014–2020 will be implemented 6 national operational programs, including one for cross-regional Polish and Eastern Region, as well as 16 regional programs. The distribution of funds among programs is as follows:

- Around 76.9 billion euros assessible in the operational programs, including more than 252 million euros to support the unemployed and not learning young people,
- Around 700 million Euros will be available within the European Territorial Community
- 4.1 billion allocated under the „Connecting Europe" to the area of transport, energy and information technology
- approximately 473 million Euros from the European Fund for the most in need
- approximately 287 million earmarked for general technical assistance
- approximately 71 million to innovative activities related to the development of urban areas[31].

This appropriation will be able to invest for research, the key road connections, development of entrepreneurship, environmentally friendly transport, digitalization of the country and social inclusion and professional activity.

The division EU funds for regional programs is presented in the table below.

Table 9. Division EU fund for regional programs

REGION	TOTAL ALLOCATION, EURO
Dolnośląskie	2 252 546 589
Kujawsko-Pomorskie	1 903 540 287
Lubelskie	2 230 958 174
Lubuskie	906 929 693
Łódzkie	2 256 049 115
Małopolskie	2 878 215 972
Opolskie	944 967 792
Podkarpackie	2 114 243 760
Podlaskie	1 213 595 877
Pomorskie	1 864 811 698
Śląskie	3 476 937 134
Świętokrzyskie	1 364 543 593
Warmińsko-Mazurskie	1 728 272 095
Wielkopolskie	2 450 206 417
Zachodnipomorskie	1 601 239 216
Mazowieckie	2 089 840 138

Source: Ministry of Infrastructure and Development

Małopolska Regional Operational Programme consists of 13 priority axes - the largest expenses are planned for transport infrastructure, energy policy and entrepreneurship:

1. The knowledge economy
2. The Digital Małopolska
3. The entrepreneurial Malopolska
4. The Regional Energy Policy
5. Protecting the environment
6. Heritage Regional
7. The transport infrastructure
8. The labour market
9. The social cohesive region
10. Knowledge and skills
11. Revitalization of the regional
12. Health infrastructure
13. Technical Support[32].

For the implementation of the Regional Operation Programs for 2014-2020 Małopolska received 2 878 215 972 euros. More funds have only Ślask Region (over 3 billion euros).

[31] *www.funduszeeuropejskie.gov.pl*

[32] *http://www.fundusze.malopolska.pl/2014_2020/Strony/regionalny_program_operacyjny.aspx*

Investment Process

In order to best service investors have been established by organizations such as the State Agency for Information and Foreign Investment Agency (PAIiIZ) or Business in Malopolska, which work closely with local companies in the sector shared services, IT, new technologies.

The above-mentioned organizations helping investors to enter the Polish market and used in the best way, existing opportunities. They help to pass all necessary administrative and legal procedures that occur during the project.

Due to the extensive knowledge of the region, the company also provide economic and legal information concerning the investment. They advise on choosing the right location, suitable partners and suppliers. This support for investors also notes the expert:

Konrad Kończewski, SSC Head and A&F Operations Lead, RWE Group Business Services Polska – *One of the most important aspects of a pro business approach of the autohority to investors and comprehensive assistance in matters relating to cooperation with public administration*.

Investment Process Support

Public institutions	
Ministry of Infractructure and Development	www.mir.gov.pl
The Marshal Office of the Małopolska Region	www.malopolskie.pl
The Voivode Office of the Małopolska Region	www.malopolska.uw.gov.pl
The City of Kraków	www.krakow.pl
Polish Information and Foreign Investment Agency	www.paiz.gov.pl

Regional Development Agency	
Małopolska Regional Development Agency	www.marr.pl
Agencja Rozwoju Małopolski Zachodniej	www.armz.pl

Universities	
AGH University of Science and Technology	www.agh.edu.pl/wspolpraca/programy-miedzynarodowe/
	dpm@agh.edu.pl
Cracow University of Economics	http://nowa.uek.krakow.pl/pl/wspolpraca/akademie-biznesowe.html
	Katarzyna Czeremańska czeremak@uek.krakow.pl
Cracow University of Technology	www.aip.pk.edu.pl/
	inkubator@pk.edu.pl
Jagiellonian University	www.biurokarier.uj.edu.pl/biuro/wspolpraca-z-wydzialami
	Olga Frey olga.frey@uj.edu.pl

Others	
Antal International Executive Recruitment	www.antal.pl
CBRE Poland	www.cbre.pl
Aspire - Association of IT & Business Process Services Companies in Poland	www.aspire.org.pl
Krakow Technology Park – Special Economic Zone	www.sse.krakow.pl
The Cracow Chamber of Commerce	www.iph.krakow.pl/

AUTHORS

MARR

Małopolska Regional Development Agency specializes in providing comprehensive know-how and modern financial solutions to businesses. It helps companies to obtain EU funding and to invest safely in the Małopolska region; plus, it actively supports export activities by offering professional consultancy services and access to an international network of contacts.

The Agency's offer includes the provision of information and advisory services for business owners as well as subsidies for the development of businesses in the Małopolska region and financial products such as loans and guarantees.

The Małopolska Agency for Regional Development creates a network of transfers between science and business; it promotes new technologies and underwrites capital for the business use of innovative solutions. As a recipient of EU subsidies, it implements regional as well as national operating programs.

Together with the Małopolska Region, Kraków Technology Park and Malopolska Industrial Parks , the Agency is involved in the Business In Małopolska Center project. By creating an integrated system of business services, it will have at its disposal the only comprehensive database of investment offers as well as export companies and foreign clients in Małopolska. As part of the whole host of consultancy services offered, business owners will be able to take advantage of professional advice and profiled training sessions, and additionally will receive a marketing package enabling them to gain a competitive position on foreign markets www.businessinmalopolska.com

www.marr.pl

ANTAL

Antal International is a leader in executive recruitment and HR consulting services. The brand is present in 35 countries and has been operating in Poland since 1996. Owing to a strong tradition of narrow specialization, its consultants are experts in specific sectors and disciplines. Antal International provides its clients with high-quality recruitment services for permanent and interim positions, as well as offers a complete portfolio of personnel assessment and development solutions. Antal International offices in Warszawa, Wrocław and Kraków conduct projects across Poland and abroad for biggest global corporations and local businesses operating in all sectors of the economy.

www.antal.pl

ASPIRE

ASPIRE is the Association of IT & Business Process Services Companies in Poland, bringing together major players in the region to pursue a common strategy in promoting and developing opportunity in IT & Business Process Services.

ASPIRE enables the industry to speak with one voice to government, educational institutions and other stakeholders, to highlight the key importance of the sector to the national economy and to local economies.

http://www.aspire.org.pl/

CBRE

CBRE is the world's premier, full-service real estate services company. CBRE offers strategic advice and execution for property sales and leasing; corporate services; property, facilities and project management; mortgage banking; appraisal and valuation; development services; investment management; and research and consulting.

www.cbre.pl/

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