

SKILL NEEDS FORECASTING APPROACHES: Czech experience

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OUR AIM



National

Regional

- Labour Market Research
- Assessment of Quality in Education
- Skill Needs Forecasting
- Development of Labour Market Information Systems
- Innovation & Competitiveness Analyses



12 YEARS OF EXPERIENCE IN FORECASTING



- Since 1999 – development of methodology for labour market skill needs analysis and forecasting
- Inspired by good practice examples in cooperation with experts from other countries
- Combination of qualitative and quantitative methods
- Useful and regular information for different users
- 2009 website launched

FORECASTING APPROACHES



1. Long- and medium-term forecasting

- Quantitative model projections
- Qualitative sector studies

2. Short term labour market trends

- Monitoring of job vacancies
- Predictions of unemployment rate and change in total and sector employment

3. Labour market analyses

- Competitiveness of the Czech economy – Quality of human resources
- Ad-hoc surveys and analyses (quality of graduates etc.)

FORECASTING METHODOLOGY



**Model ROA-CERGE: Five-year projections of employment for 32 aggregated occupational clusters and 27 educational clusters.
Projection of graduates: 5-7 years forecast for 300+ fields of study (both secondary and tertiary level)**

Sector studies:

Analyses of chosen sectors of economy, based on In-depth interviews, Global environment analyses, Processes & technology trends analyses.

Methodology developed by NOET, evolution of best practices from Ireland, UK and other countries.

Combining with results from ROA-Cerge model and school leavers forecast.

Projection of employment for 41 sectors of the Czech economy to 2020.



PRESENTATION OF RESULTS

- www.CzechFutureSkills.eu
- specific products

[Home page](#)
[Job futures](#)
[Skill needs forecasting](#)
[Sector studies](#)
[Industries development](#)
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ABOUT FORECASTING

Why are we not content with analysing the past and knowing the present problems of our economy? Why is it helpful for the labour market to look ahead? Could the implications of the economic downturn and its impact on employment be predicted? What forecasting instruments should be chosen and what instruments are used in the most developed economies of the world?

[more information](#)

LABOUR MARKET TRENDS

The demand for labour force on the part of enterprises and the creation and elimination of jobs are influenced by various trends. These trends often originate in the workings of the global economy and have an indirect impact on the labour market. What is it that affects the labour market at present?

[more information](#)

INDUSTRIES DEVELOPMENT

This section focuses on various industries of the Czech economy, their past and expected future development. You will find information about the demand for occupations in the given industry, the expected development of employment and the age and occupational structure.

[more information](#)

SECTOR STUDIES

Sector studies facilitate an in-depth exploration of selected parts of the Czech economy and seek to identify links between changes in the global economy and the demand for workers in important sectors. What will be the implications of foreign investors' moving further East? When and in what industries is this going to happen? Which occupations will be of key importance in terms of competitiveness?

[more information](#)

FOREIGN EXPERIENCE

This section has been inspired by the experience of developed countries in the area of forecasting future need for skilled labour. In countries such as the United States, the United Kingdom, Ireland, France, Germany, Canada etc., these activities are considered to be an important part of the services provided

ABOUT US

The National Observatory of Employment and Training participates in many international projects and closely co-operates with the EC, the Cedefop, the OECD, universities and other foreign partner institutions. In the long term we focuses on evaluation of medium-term skill needs in relation to future

NEWS

Glassmakers adjust after crisis

Nový Bor, north Bohemia. In the heart of the Bohemian countryside, where the country's crystal industry originates, produc...

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07. 06. 2011

OECD lowers Czech GDP estimate

The Paris-based OECD's outlook for the Czech economy is still more optimistic than forecasts by the EU and Finance M...

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06. 06. 2011

Temelin completion could create jobs for 5,000 people - Areva

Ceske Budejovice - The construction of two new reactors of the nuclear power plant of Temelin, south Bohemia, could create jobs...

[more](#)

31. 05. 2011

[news archive](#)


CZECH FUTURE SKILLS! WEBSITE



Comprehensive website about labour market trends and skill needs forecasting, launched in April 2009

Home page

Job futures

Skill needs forecasting

Sector studies

Industries development

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- Search of occupations by categories or fulltext search engine
- 2009-2013 forecast for 30 occupation groups: chances for finding suitable job on 0-10 scale

Job futures

Full text search:

Here you will find information on professions and their future prospects.

Scroll to the profession according to the field:

Administration

[correspondance assistant](#), [data entry operator](#), [office clerk](#), [public service administrative professional](#), [receptionist](#), [secretary](#), ...

Agriculture and forestry

[animal producer](#), [apiarist](#), [forestry worker](#), [gardener](#), [zoology technician](#), ...



Home page

Job futures

Skill needs forecasting

Sector studies

Industries development

About us

Contact us

News

You searched for occupation: cook

The occupation searched for is part of the [occupational group](#): Salespersons, housekeeping, restaurant and personal service workers. Information about the future concerns the entire group.

The future situation of the occupational group on the labour market

The employment prospects for this occupational group in the 2009-2013 period will be as follows:



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The chances of finding the 2003-2008 period most average due to the population. Moreover, in these industries there is traditionally a large number of foreign workers who are often employed unofficially. This also worsens the overall ranking of this occupational group on the scale of employment chances.

Profiles include information about past development, analysis of trends for occupational groups ...

Development of the employment in the occupational group (in thousands):

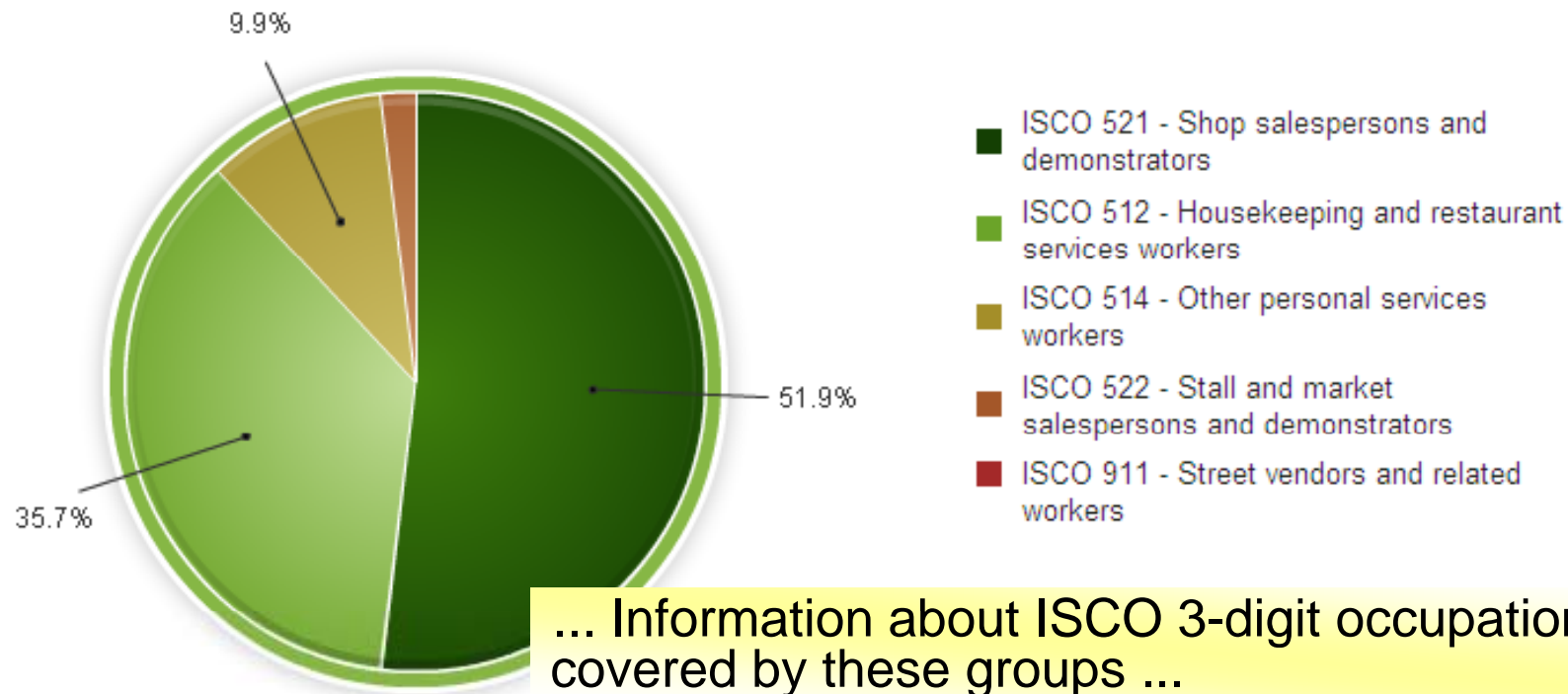


CZECH FUTURE SKILLS! WEBSITE



The current situation of the occupational group at the labour market:

The occupational group consists of the following subgroups:



CZECH FUTURE SKILLS! WEBSITE



ISCO 521 ISCO 512 ISCO 514 ISCO 522 ISCO 911

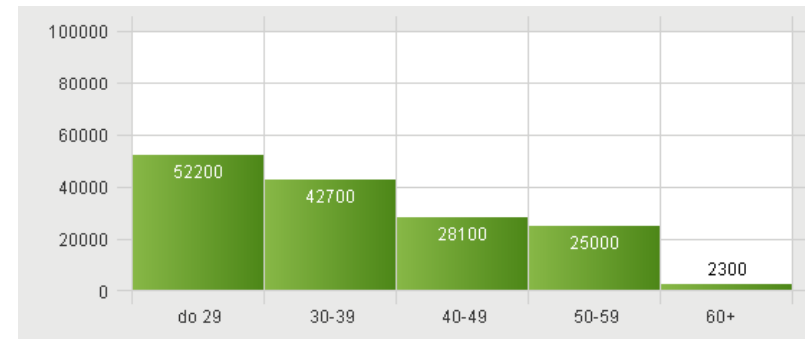
... Including age structure, suitable education pathways, forecast of graduates ...

Housekeeping and restaurant services workers (ISCO 512)

Development of employment in this occupational subgroup (in thousands)



- Total employment
- Development of employment in this occupational subgroup



Education	Number of graduates entering labour market by 2013	Development of graduate numbers in 2009-2013
Secondary (3c) - sales and services	52 950	rapid decrease
Secondary (3a) - economics, business, law	88 440	slight decrease

The development of the number of graduates is ranked using a five-degree scale: rapid decrease - slight decrease - stagnation - slight increase - rapid increase.



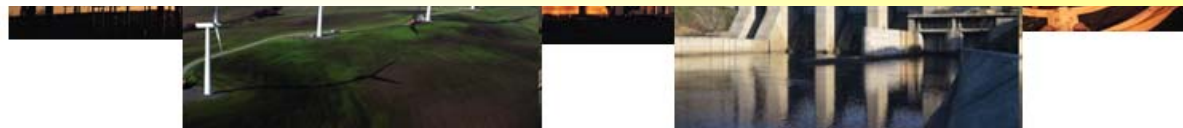
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Outputs of 3 sector studies with 2020 outlook and detailed analysis of employment and trends:



POWER SUPPLY INDUSTRY



ELECTRONICS/ELECTROENGINEERING



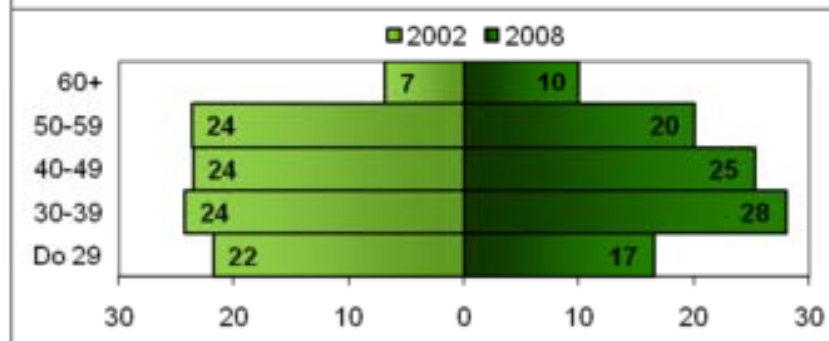
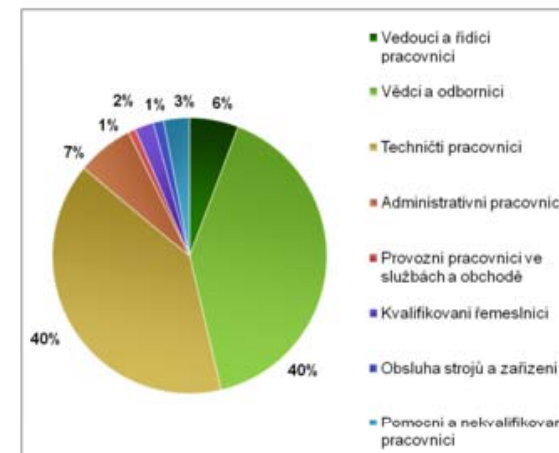
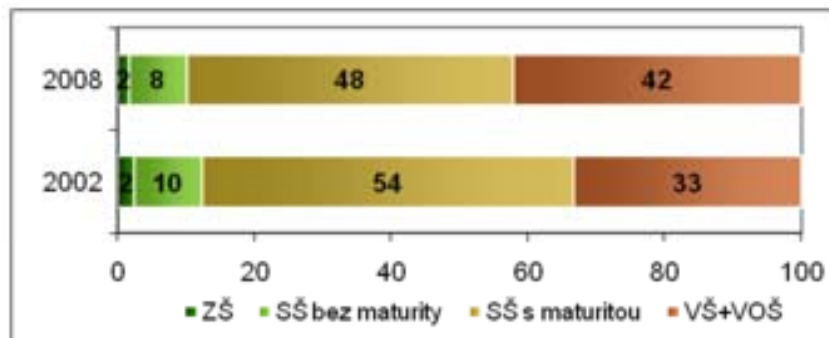
ICT SERVICES



CZECH FUTURE SKILLS! WEBSITE



- 41 short industry profiles with 2020 employment forecast
- Including analysis of past development and current situation
- Threats and opportunities for industry workforce

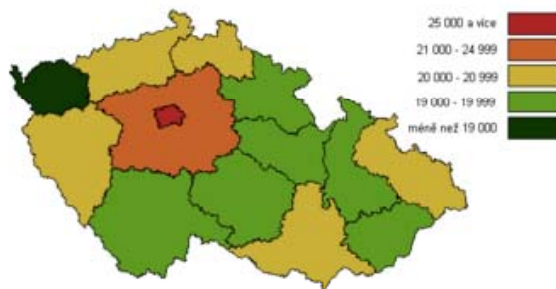


CZECH FUTURE SKILLS! WEBSITE



Analysis of labour markets in Czech Regions ...

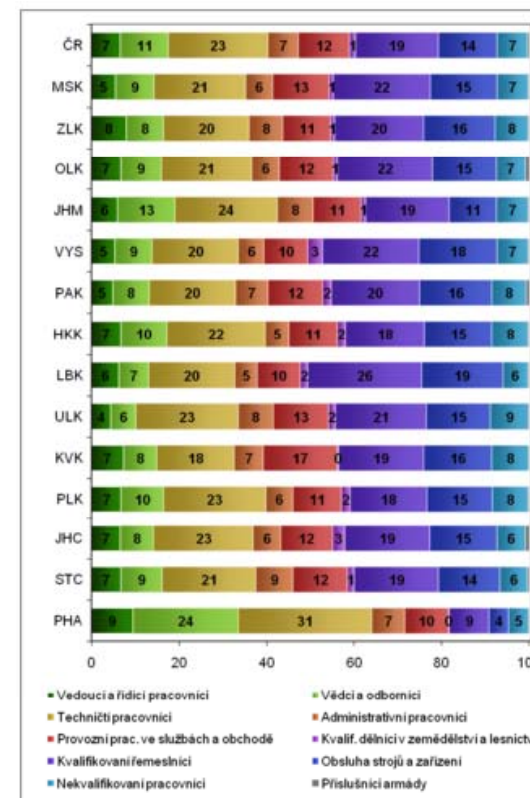
WAGES



GRADUATES



OCCUPATIONAL STRUCTURE



UNEMPLOYMENT



AND MUCH MORE ...

Specific products

- Monitoring of job vacancies
- Job profiles

JOB PROFILES



- Very extensive database (200+ occupations, ISCO 4-digit level)
- Profiles contain detailed analysis of labour market data related to each occupation:
 - Past and current development of employment
 - Future prospects
 - Ageing of workforce vs. forecast of graduates availability
 - Information on key employment sectors, including forecast
 - Job vacancies, unemployment rate for occupation
 - Wages, salaries
 - Summary analysis
- Designed as a tool for sectoral councils, education providers and career counselling



Název profese	KUČAŘI
Alternativní názvy	Šéfkuchař; Kuchař; Kuchař a číšník ;
Klasifikace zaměstnání (KZAM)	5122

Informace o dosavadním vývoji zaměstnanosti	
Počet zaměstnaných (2010)	77 800
Dlouhodobá dynamika zaměstnanosti (2000-2010)	STABILNÍ
Střednědobá dynamika zaměstnanosti (2005-2010)	
Vývoj zaměstnanosti v recesi (2008-2010)	

Šance na budoucí uplatnění (do 2013)	
--------------------------------------	--

Informace o vývoji nezaměstnanosti	
Celkový počet VPM na trhu (říjen 2010)	
Míra nezaměstnanosti (říjen 2010)	
Podíl dlouhodobě neobsazených VPM (říjen 2010)	
Uchazeči na 1 VPM (říjen 2010)	

Popis klíčových zaměstnavatelských odvětví	
Ubytování a stravování	
Podíl odvětví na zaměstnanosti v této profesní skupině (rok 2009)	
Střednědobá prognóza vývoje zaměstnanosti pro odvětví (2010-2015)	
Dlouhodobá prognóza vývoje zaměstnanosti pro odvětví (2015-2020)	

Vzdělávání	
Podíl odvětví na zaměstnanosti v této profesní skupině (rok 2009)	
Střednědobá prognóza vývoje zaměstnanosti pro odvětví (2010-2015)	
Dlouhodobá prognóza vývoje zaměstnanosti pro odvětví (2015-2020)	

Zdravotní a sociální péče	
Podíl odvětví na zaměstnanosti v této profesní skupině (rok 2009)	
Střednědobá prognóza vývoje zaměstnanosti pro odvětví (2010-2015)	
Dlouhodobá prognóza vývoje zaměstnanosti pro odvětví (2015-2020)	

Vzdělanostní struktura (obor vzdělání)	
Převažující hlavní obor vzdělání	
% pracovníků s jiným než převažujícím oborem vzdělání (2010)	

Vzdělanostní struktura (stupeň vzdělání)	
% ZŠ a bez vzdělání (2010)	
% SŠbM (2010)	80%
% SŠaM (2010)	12%
% VŠ (2010)	0%

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Mzdová atraktivita	
Medián mzdy (2q 2010, pouze podnikatelská sféra)	14 301
Dynamika mzdy v porovnání s růstem mzdy v celé ekonomice (2005-2010)	ROSTE STEJNĚ RYCHLE
Relace k mediánu mzdy v kvalifikačně příbuzných profesích	76
Absolventi	
Dynamika vývoje počtu absolventů (5 let)	VÝRAZNÝ POKLES
Projekce vývoje počtu absolventů (5 let)	VÝRAZNÝ POKLES
Míra nezaměstnanosti absolventů	19,5%
Dynamika nezaměstnanosti absolventů (2009-2010)	VELMI VYSOKÝ NÁRŮST
Věková struktura	
% mladých pracovníků (do 34 let)	33%
% starších pracovníků (55 a více let)	15%
Demografický potenciál (index podílu mladých pracovníků)	VYSOKÝ
Demografické riziko (index podílu starších pracovníků)	VELMI NÍZKÉ
Expertní hodnocení atraktivity profese a budoucí rovnováhy na trhu práce	

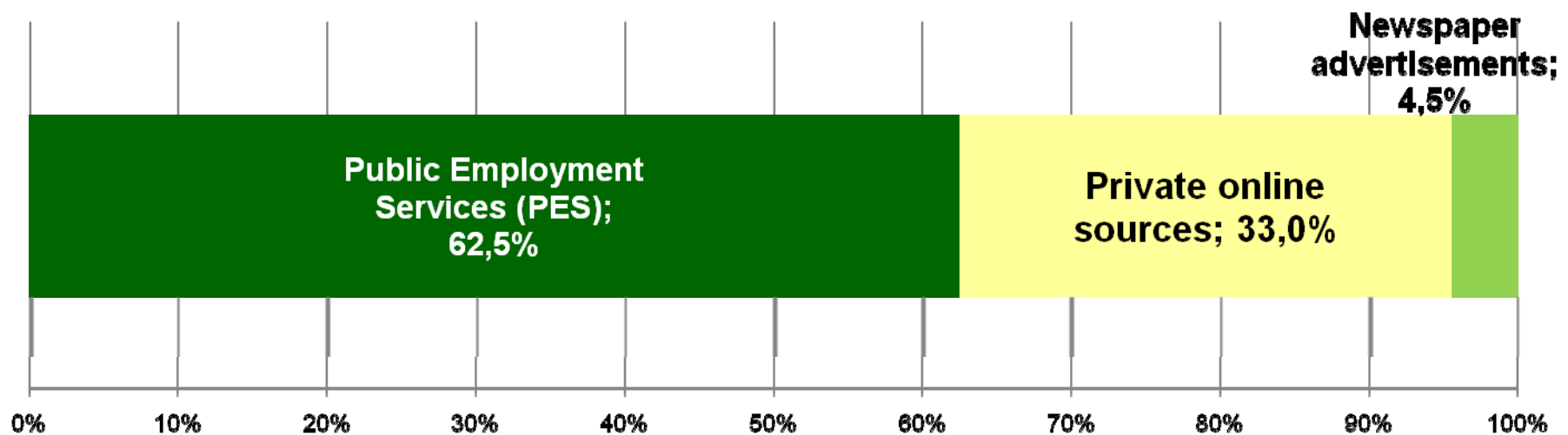
...Example of a job profile card...

"ohrožený" nepříznivým výhledem dostupnosti absolventů pro příští roky. Uplatnění na trhu práce je dlouhodobě stabilní a nedochází zde k velkým výkyvům nabídky či poptávky. Podprůměrné mzdy však v posledních letech snižují zájem Čechů o studijní obor či o uplatnění (zejména v tuzemsku). Spolu se zmíněným rizikem vývoje počtu absolventů bude tento faktor "vyvažovat" vyšší míru nezaměstnanosti a horší uplatnitelnost kuchařů.

JOB VACANCIES ANALYSIS



- Research project aimed at creation of comprehensive database of job vacancies covering public (PES) and private sources
- Based on sample of 33 000 job advertisements
- Analysis: Public sources covered 2/3 of all job vacancies, but only half of those for high-skilled jobs



341 Finance and sales associate professionals

512 Housekeeping and restaurant services workers

342 Business services agents and trade brokers

123 Other specialist managers

241 Business professionals

931 Mining and construction labourers

712 Building frame and related trades workers

311 Physical and engineering science technicians

213 Computing professionals (Computer systems designers, analysts and programmers)

343 Administrative associate professionals

214 Architects, engineers and related professionals

832 Motor vehicle drivers

521 Shop and market salespersons

913 Helpers and cleaners

222 Health professionals (doctors)

312 Computer associate professionals

932 Manufacturing labourers (in production)

828 Assemblers

722 Blacksmiths, tool-makers and related trades workers

422 Client information clerks

122 Production and operations managers

721 Metal moulders, welders, sheet-metal workers, structural-metal preparers, and related trades workers

713 Building finishers and related trades workers

131 Managers of small enterprises

724 Electrical and electronic equipment mechanics and fitters

TOP 25

THANK YOU FOR YOUR ATTENTION!



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