Guidelines for Target Group Survey

Work Package 2 / Task 2.1.

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DEVELOPMENT OF A MASTER PROGRAMME IN THE MANAGEMENT OF INDUSTRIAL ENTREPRENEURSHIP FOR TRANSITION COUNTRIES

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Partners :

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Skill needs assessment

Motivation:

Technological change, globalisation and migration have considerably changed the skills demand imposing significant economic costs for employers, employees and society as a whole. Educational institutions can contribute to reduce the skills mismatch and shortage by providing the educational program which respond to skills need of market.

Education provider, employers and students have to be well-aware of occupation changes and skills required in short-, medium- and long term.

Market needs analysis as a part of MIETC project is aimed to analyse the skills demand and supply mismatch and shortage.

Aim: To determine skills in shortage for industrial sector taking into consideration all stakeholders (industry, HEIs, graduates, employees).

Methodology:

The analysis will rely on both qualitative and quantitative data sources in order to validate the results. We will use the initial quantitative analysis on the industrial sector of each country to define, delimit and choose the kind of experts that will take part of the DELPHI analysis for assessing the skills that will be required in the future.

Quantitative analysis

In the analysis of the industrial sector, we will take into account four different perspectives, two at macro and two at micro level:

1. **Macroeconomic:**
    A. Regional perspective
    B. Sectoral perspective
2. **Microeconomic:**
    A. Supply side: University perspective
    B. Demand side: Employer perspective

1.A. Regional perspective:

As the first step of labour market needs analysis, we will perform the analysis of macroeconomic data in order to delimit the reference labour market of each university and study its characteristics. We can find different labour markets within the same country, in fact, for example due to big regional disparities and low workforce mobility in Kazakhstan, two regions (Karaganda and East Kazakhstan) may be analysed separately.

We will analyse national and regional trends on labour force participation, employment and unemployment rates. In particular, we will also look at the employment and unemployment rates by education.

Unemployment rates by level of education and field of education can reveal problems of mismatch, insufficient demand or give some clue about quality and skills composition of education programmes.

Wage changes can be considered as a signal of skills shortage or overcrowded occupations, so we attempt to analyse the evolution of wages, although it a variable that tends to have important data availability limitations. Some of indicators that will be analysed are:

A. Unemployment/employment rates by level of education and region
B. Regional median wages by region
C. Industrial output growth by region
D. Future output growth by region
E. Regional migration of high educated workers
F. Relative increase of median wage by occupation

1.B. Sectoral perspective:

Second step is to analyse and anticipate sectoral production and employment trends to identify the future skills that will be more demanded by the market. Employment data will be used to approximate the demand for labour taking into consideration retirement outflow.

Based on the public employment services (Биржа труда) and other job seeker organisations (private internet portal, recruitment agency) we will identify the sectoral mismatch through the analysis of vacancies and job seekers. We will check which are the skill required in those vacancies that have been hard to fill in order to identify the skill shortage. Job vacancies will provide information on short-term trends in the structure of skills demand. Local partner will help to identify the most used tool in each country (public employment service, internet, private organisations…) and consequently the most reliable data.

Since the programme is include the development of entrepreneurship skills, it is important to include the data on the growth of new enterprises in industrial sectors, the barriers they faced and etc. Some of indicators that will be analysed are:

G. Sectoral output growth
H. Sectoral employment growth
I. Changes of ratio between number of vacancies and job seekers
J. Share of hard-to-fill vacancies
K. Sectoral wages evolution
L. Growth rate of new firms

2.A. Supply side: University perspective

A key point to identify the skill need is important to have a clear picture of the supply side and its level of education. Demographic data will demonstrate trends in labour supply, oversupply in case when younger cohorts exceed older one or otherwise when there is ageing of population and younger cohort is not large enough to replace older population. In this case the economy will face shortage challenge. As a result, the weight of this population in the labour market may determine the type of skills offer. Additionally, it's important to determine if young workers have acquired their skills in national or foreign universities; how many young workers with high education have emigrate abroad to find a job.

M. Share of young people & older people in the total labour force;

N. Ratio between the population about to leave the labour force (55–64) and entering the labour force (15–24).

Thus, education indicators will be used to describe the stock of skills supply available and its structure. When data is available, we will analyse data from the surveys *of recent graduates (tracer studies), employability of graduates.* Some of indicators that will be analysed are:

A. percentage structure of graduates by level (and field) of education;
B. growth trends in numbers of graduates by level (and field) of education
C. Percentage of graduates who working in a completely different field from that studied
D. Percentage of workers who report they need future skill development to perform their job
E. participation rate in education of the adult population (by type and field of education and training, indicates the areas of skills that require improvement)

We will need to know about the geographical origin of students in order to determine the area of influence of each university in order to determine which level of macro data (city, oblast, region, country) we need to gather.

2.B Demand side: Employer perspective

Once we have a clear picture of the supply we also need to analyse the demand. The skills need may be different by SME than those required by big firms. At the same time those firms which export may need additional skills from their workers. For this reason, it's important to analyse the structure of the demand. Some of indicators that will be analysed are:

O. Active enterprises by sector
P. Number of enterprises by firm size
Q. Number of exporter firms by sector
R. Output by firms sizes
S. Size of informal sector by activity sector

Qualitative Analysis: Delphi Analysis

Based on quantitative analysis, we will define the list of experts together with the local partners that will take part in the Delphi analysis (at least 15 experts). There will be representatives from small and big companies, job seekers institutions, university experts on labour market.
After list of experts will be defined, we will apply the Delphi method. At the Initial Round, the key questions will be distributed to the experts. The companies respond individually to the questionnaire expressing their individual ideas around the issue and return to the moderator. Then, moderator narrows down the key points of respondents and send them back a feedback report. Respondents reviews the feedback and may change their previous responses. Then, they have to reply on the second question independently and anonymously again. As the second round completed, moderator write and submit final report. The procedure can be repeated.

What information does the survey provide?
1. Share of employers facing skills shortage
2. Hard to fill vacancies/reasons
3. Occupations which are hard to find (skills shortage)

4. Types of skills which the employers cannot find
5. Trainings needs

Types of skills are associated with job tasks. We are interested in skills that required for competent performance of tasks and can be taught with education and trainings programmes.

Timeline

- *15th of January 2020 - 31st of January 2020*: AYeconomics will search the information on international organisations such as International Labour Organization (ILO), World Bank or United Nations to start the macroeconomic analysis, and check the data required from local partners and that it's not available form international organisations and the microdata required.

- 1*st of February 2020 - 29th of February 2020*: AYeconomics will provide a list of indicators and the data required to calculate for each of them to the local partners. Local partners will send all information before 29th of February. When the information will be imposible to get, local partners they will communicate to AYeconomics, so they can meet to find data that may be used as proxies.

- *1st of March 2020-31st of March 2020*: AYeconomics will analyse all data, identify the target market, identify the segments of representative experts for each university and build the questionnaire that will be used for the DELPHI Analysis.

- *15th of March 2020-31st of March 2020:* After the kick off meeting the CA partners will organise the workshop with experts to present the projects aim and tasks to receive the compromise to participate in Survey and provide the feedback.

- *1st of April 2020- 15th of April 2020*: Identification of potential segment of interest and potential experts for each university together with AYeconomics.

- *15st of April 2020- 30th of April 2020*:The local partners will send the questionnaires to the local experts.

- *1st of May 2020-15th of May 2020*: AYeconomics will do the first analysis on the results on the skill required in each labour market, and elaborate the second round questionnaire.

- *15th of May 2020-31st of May 2020*: *Local partners will send the questionnaire for the second round.*

- **1st of June 2020-30th of June 2020:** AYeconomics will provide the report for the distribution among stakeholders, it will help to validate the results of analysis and provide feedback and qualitative information to improve interpretation of outcomes.

- **1st of July 2020-15th of July 2020:** Ayeconomics will provide the final report to all partners.