NET MED
**YOUTH**
NETWORKS OF MEDITERRANEAN YOUTH

# FORECASTING
# YOUTH
# SKILL NEEDS

# 1.    WHAT IS SKILLS FORECASTING?

Skills Forecasting is a model to track the evolution of the labour market. The model uses annual data to predict labour market mismatches over a time span of 5 to 10 years.  In other words, the model helps determine if the number of persons ready to work (Labour Market Supply) is greater, equal, or lower than the jobs available (Labour Market Demand).

## Supply Deficit / Demand Surplus

# of persons ready to work    <    Than available jobs

## Supply Surplus / Demand Deficit

Jobs available    <    Than # of persons ready to work

Skills forecasting helps identify job prospects by occupation with a certain degree of accuracy. While forecasts cannot fully take into account all economic shocks or political shifts, they can provide reliable information for transparent and effective decision-making. Governments use this information for workforce development and planning purposes. Universities and vocational training centers use this information to make evidence-based decisions regarding their admission policies, program offers and delivery methods. Individuals use it to make informed decisions regarding their career pathways.

# 2 - WHY IS IT IMPORTANT FOR YOU AND YOUR ORGANIZATION?

Youth organizations are key civil society players making governments, private sector and fellow citizens accountable and responsible for youth wellbeing. By working for and with youth, your organization also contributes to the development of discerning, active and responsible young citizens. Skills forecast will/can improve your outreach programs, services and advocacy efforts.

Having a sound knowledge of the evolution of the labour market and the skills needed to participate in it, your organization will be able to:

**1** // Prioritize activities and services

**2** // Establish roadmaps

**3** // Define resource allocation in priority sectors

**4** // Design activities and provide services in :

    **a** Training/upgrading in high impact sectors

    **b** Career counselling

    **c** Advocacy
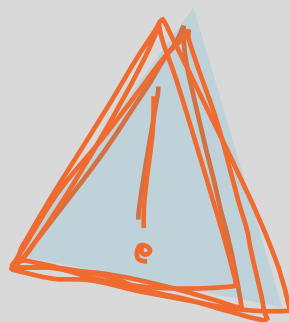
Here are some examples of how youth organizations can make use of skills forecasting:

## TRAINING AND UPGRADING IN HIGH IMPACT SECTORS

Recent skills forecasting publications show that firms will have to recruit a large number of programmers in coming years. Your organization decides to organize a web programming boot camp for the community's young people in order to provide them with the necessary tools to successfully integrate the labour market.

## CAREER COUNSELLING

Using the latest skills forecasting results, you have prepared a number of short leaflets to keep counselors updated on the job market so they can inform students on future trends. This knowledge base helps the counselor guide the student in answering the following questions: what will be the job market trends when I am looking for a job? What opportunities might these trends create?

## ADVOCACY

The Ministry for Youth and Sports has been mandated to draft a new National Youth Policy. Civil society organizations, including your association, have been invited to a round table to identify priority areas. After reading the latest skills forecasting report you have identified graduate programs that will lead to the training of too many students, resulting in a severe surplus of workers by 2020. You will come to the round table with figures to support your claims.

# 3 - THE MODEL IN A SNAPSHOT

## Which data does the model use?

| SOURCE | TYPE OF DATA | USEFULNESS | MODEL | AVAILABILITY OF DATA |
|--------|--------------|------------|-------|----------------------|
| Macroeconomic data/ National accounts | Gross Domestic Product - GDP | To estimate the number of workers needed by industry sectors | Demand | Readily available |
| Labour Force Survey | Number of employed/ unemployed | To characterize employed and unemployed persons by occupation | Demand and Supply | Standardized/ confidential |
| Census | Age structure of the population | To forecast the number of people entering and exiting the labour market | Supply | Standardized/ confidential |
| Education data | Enrollment Drop-out rates Graduation by ISCED level | To estimate how many qualified workers are entering the labour market | Supply | More difficult to access/ less standardized |

**One of the challenges of Skills Forecasting is to make sure that all the data is always organized under the same classification1.**
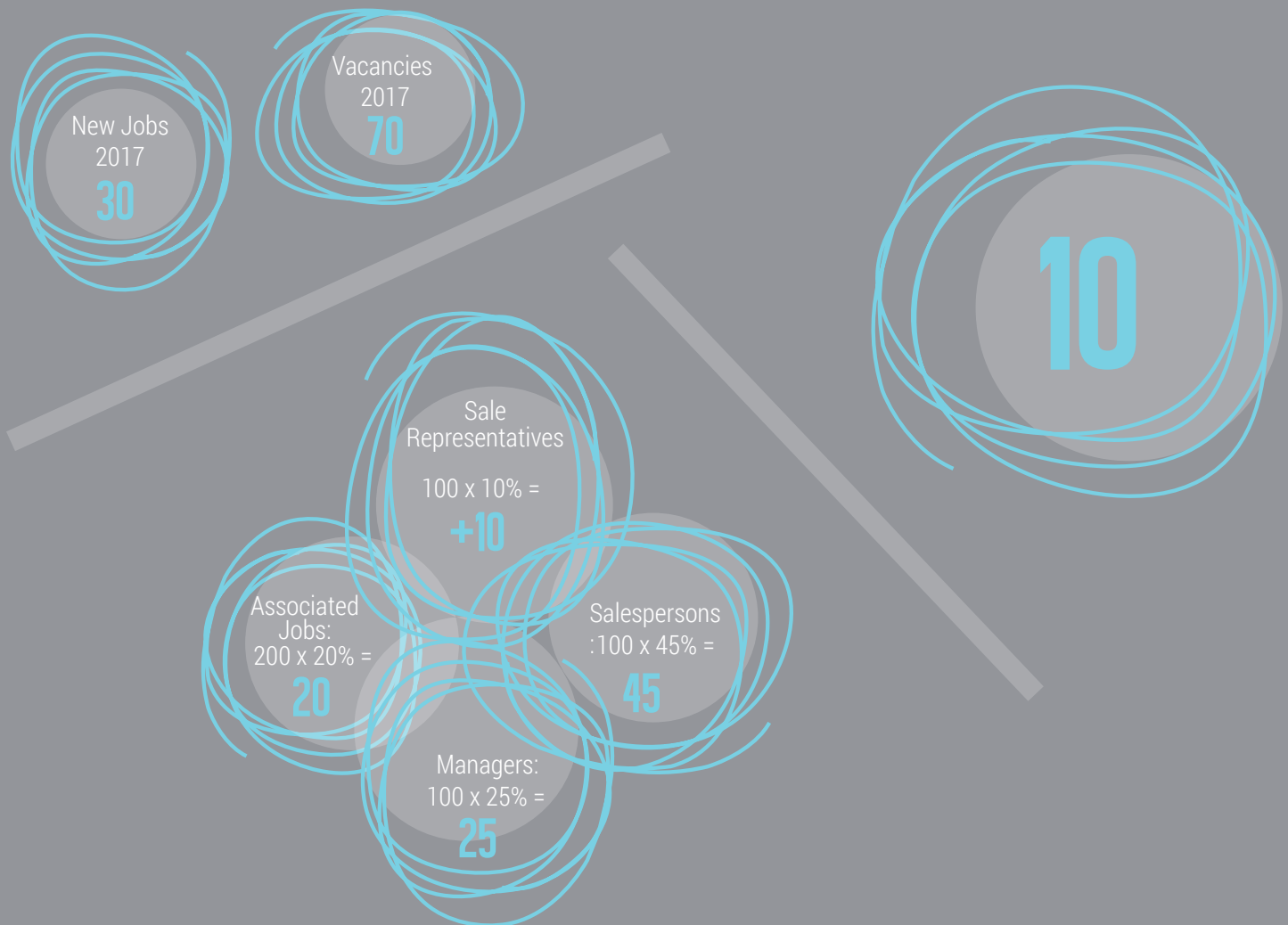
# HOW DOES IT WORK?

With all the data in hand, it is possible to forecast **Labour Demand** and **Labour Supply** and estimate **Mismatches.**

**1 //**   **Forecasting Labour Demand:** Labour Demand is estimated by adding the number of new job openings (expansion demand) and the number of people leaving their jobs vacant (replacement demand) by given industry or occupation. This result should be translated into demand by occupation using the estimated number of associated occupations (or job position) stemming from each industry (e.g., office assistants, sales representatives, etc). The result is the number of workers required to fill new positions or replace current workers for each given occupation. This formula applies for each year of interest within a period of 5 to 10 years.
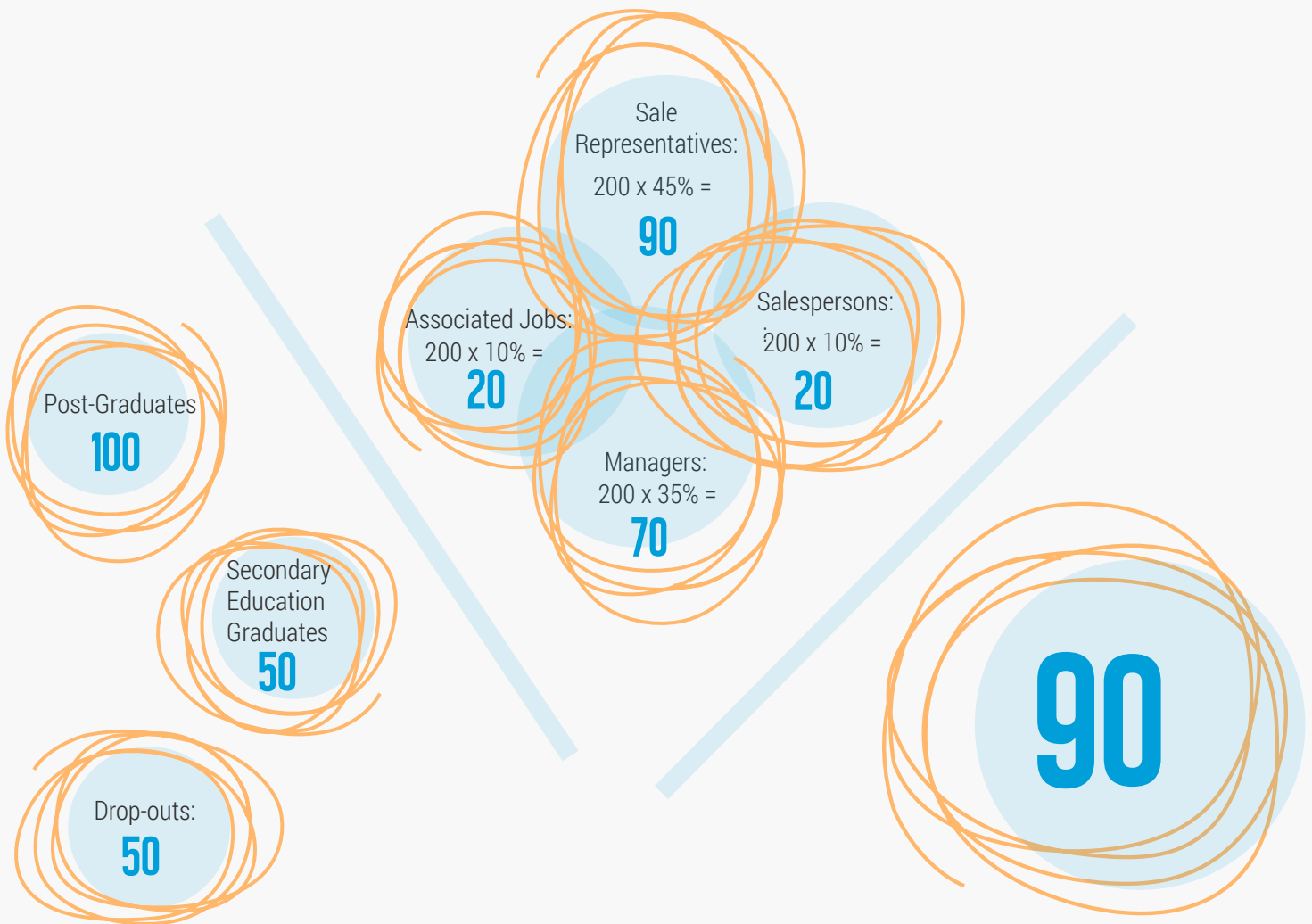
Using data from the latest Macroeconomic and Labour Force Survey, here is an example of a Labour Demand forecast for Sales Representatives in 2017:

New Jobs
2017
**30**

Vacancies
2017
**70**

**10**

Sale
Representatives
100 x 10% =
**+10**

Associated
Jobs:
200 x 20% =
**20**

Salespersons
:100 x 45% =
**45**

Managers:
100 x 25% =
**25**

**2 //** **Forecasting Labour Supply:** Labour Supply is the number of persons qualified and available to fill a position. It is estimated by adding the number of people coming from the educational system, the number of unemployed, and the net migration.

Supply of people coming from the educational system is estimated by allocating graduates and drop-outs to job positions they would potentially pursue using surveys as points of reference (e.g., Labour Force Survey, Tracer Studies, etc.) .

Using education statistics and using the Labour Force Survey as a reference, here is an example of a Labour Demand forecast for Sales Representatives in 2017:

Sale Representatives:
200 x 45% =
**90**

Associated Jobs:
200 x 10% =
**20**

Salespersons:
200 x 10% =
**20**

Post-Graduates
**100**

Managers:
200 x 35% =
**70**

Secondary Education Graduates
**50**

Drop-outs:
**50**

**90**

Supply from the unemployed is deducted from the number of employed using population forecasts and economic trends. Unemployed people are then allocated to an occupation based on their education profile. This is done by using the Labour Force Survey as a frame of reference.

Supply from net migration is only used when there is reliable aggregated data that allows for estimating in-migrants and out-migrants by level of education and/or occupation so that it can be added to the supply from education and the unemployed.

**3 //** **Forecasting Labour-market Mismatches :** Comparing demand and supply for each forecasted year provides us with the difference between available positions and people seeking to fill them. In the examples for estimating demand and supply (just from education) for Sales Representatives there is a 1:9 mismatch that is 1 job position for every 9 job seekers.

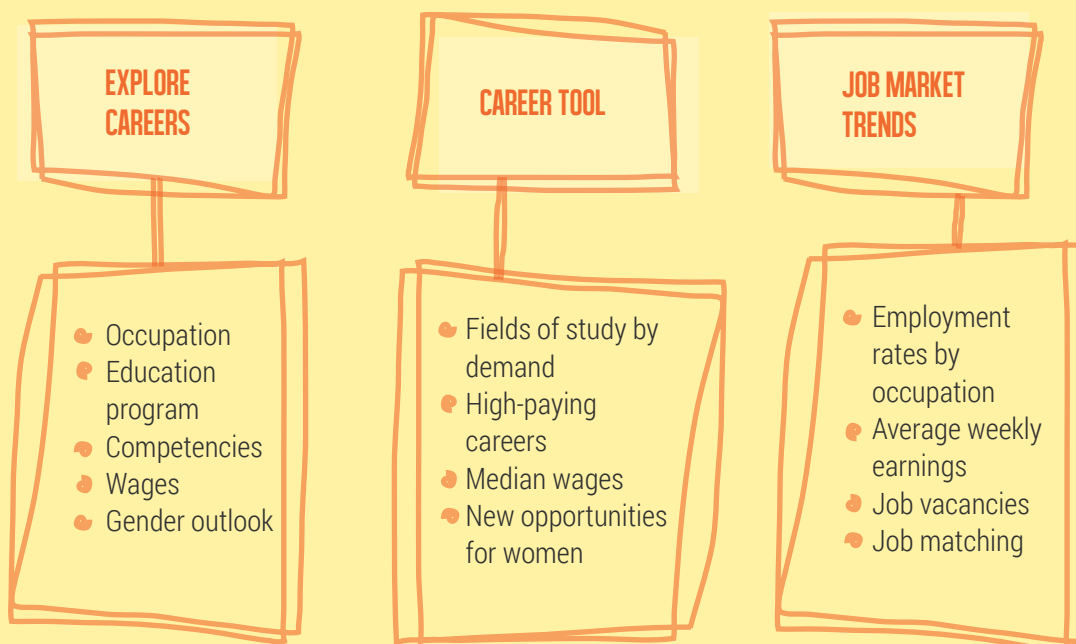Using these results, Youth Organizations can :

**a**  Provide information services for youth to make decisions regarding their career pathways

**b**  Identify demand driven training programs

**c**  Advocate for systemic changes

## HOW TO MAKE INFORMATION MEANINGFUL?

Information derived from the model can be shared with various audiences. Here are some key examples:

**Job / Career Seekers**

Forecasting models produce sound information to determine potential job prospects in a particular field of interest. Labour Market search engines are a great way to optimize the use of such information as they allow user-specific queries. Typical search engines contain information about Local Labour Markets, skills requirements by occupations, and job market trends. Search engines are a one-stop-shop for Job/Career Seekers and can be customized to their specific needs and characteristics:

**EXPLORE CAREERS**

- Occupation
- Education program
- Competencies
- Wages
- Gender outlook

**CAREER TOOL**

- Fields of study by demand
- High-paying careers
- Median wages
- New opportunities for women

**JOB MARKET TRENDS**

- Employment rates by occupation
- Average weekly earnings
- Job vacancies
- Job matching

**Governments / Institutions**

Forecasting models provide key information to inform policy strategies and programs regarding participation, employment, and career pathways. For information to be useful, it has to focus on specific issues. Here are some examples:

| PARTICIPATION | CAREER MOBILITY | INNOVATION AND TECHNOLOGY |
|---|---|---|
| • Gender disparities<br>• Youth unemployment | • Life-long career prospects by occupation<br>• Second careers | • Education and training to meet Expansion Demand |

# 4 - THE NET-MED YOUTH SKILLS FORECASTING INITIATIVE

**The NET-MED Youth Project** aims to create an enabling environment for young women and men to develop their competencies exercise their rights and meaningfully engage as active citizens
**The Skills Forcasting initiative** is intended to develop a simulation model to anticipate future skills needs within the framework of a coordinated project among various institutions.
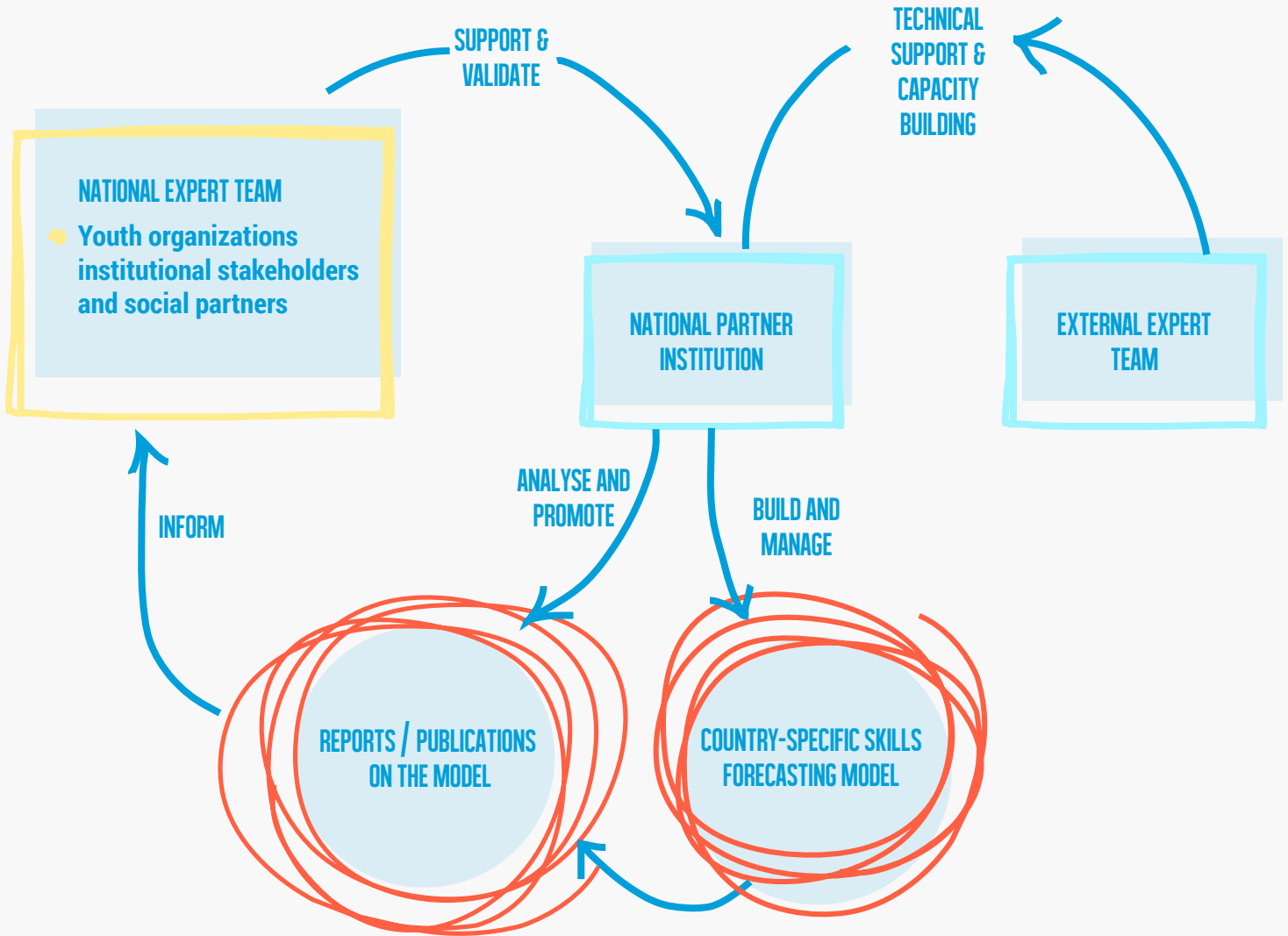
The expected Outputs are :

● Comprehensive methodological approach for developing a Skills Forecasting Model.

● Sustainable national capacities built at 2 levels: Technical Staff (National Partner Institution) & National Expert Team (youth organizations institutional stakeholders and social partners)

● Standard stand-alone Skills Forecasting Model

**A feasibility study** was conducted in 2014-2015 and concluded that basic data and resources to develop a skills forecasting model were available in the 7 countries. However, some technical challenges needed to be overcome such as the significance of the informal economy, the importance of cash transfers from abroad and the need to focus on young people (and women employment).

An **External Expert Team** was recruited to support national institutions in each beneficiary country to develop a Skills Forecasting Model, and to make sure national stakeholders have been equipped with all the tools to fully benefit from this exercise.

# NET - MED YOUTH
# SKILLS FORECASTING

SUPPORT &
VALIDATE

TECHNICAL
SUPPORT &
CAPACITY
BUILDING

**NATIONAL EXPERT TEAM**
- **Youth organizations institutional stakeholders and social partners**

NATIONAL PARTNER
INSTITUTION

EXTERNAL EXPERT
TEAM

INFORM

ANALYSE AND
PROMOTE

BUILD AND
MANAGE

REPORTS / PUBLICATIONS
ON THE MODEL

COUNTRY-SPECIFIC SKILLS
FORECASTING MODEL

**#netmedyouth**
**www.netmedyouth.org**