### Design of IT program curriculum

Materials for discussion

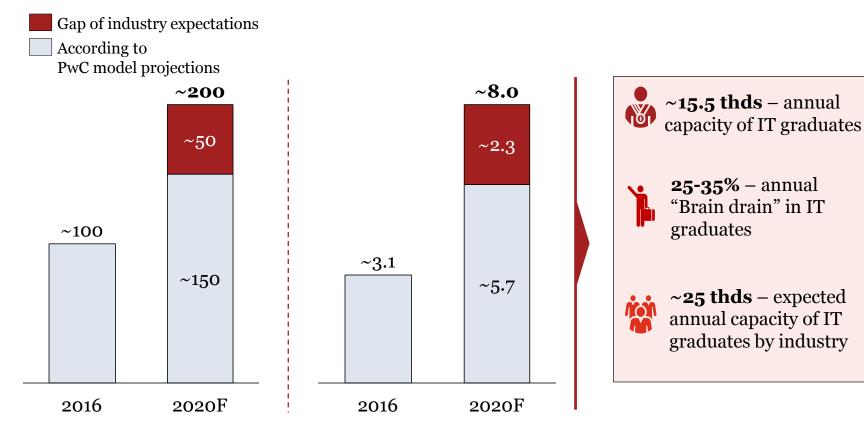


July, 2017



## Ukraine education system does not satisfied market's needs for IT specialists and does not cover existent "brain drain"

IT specialist employment in Ukraine and IT market volume (thds, \$ bln)



Source: PwC analysis

## Desired model will provide higher specialization of IT specialists in a shorten terms and will be agile to market needs

IT specialists time-to-market preparation

Public universities
(36-45 months)

Private universities
(12-24 months)

Private IT-schools
(6-12 months)

45-70 months
Average time-to-market for

Junior/Middle IT specialist

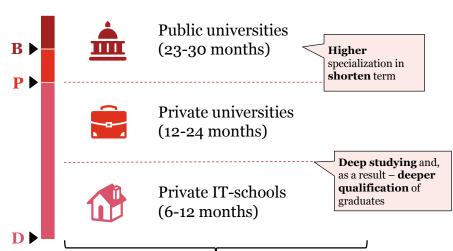
Full preparation of IT specialists is ~45-70 months (depends on qualifications & requirements)

Improvement of curriculum will reduce time-to-market by ~2545%

As a result – yearly graduated IT specialists at the needed level of ~20-27 thds

Qualification:
B - Basic P - Proficiency D - Deep

### Desired situation



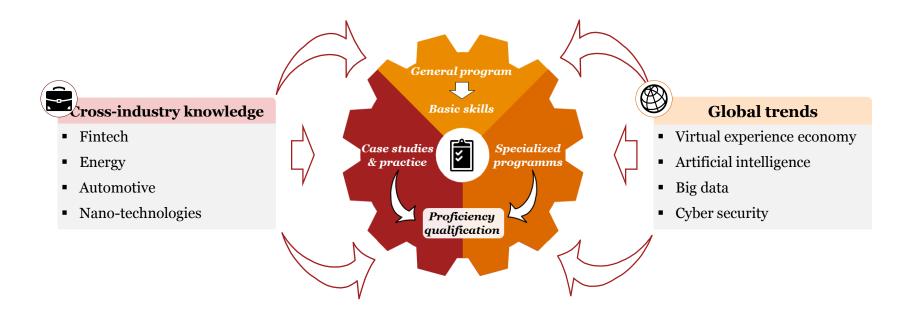


**31-50** months

Average time-to-market for Junior/Middle IT specialist

# We proposed specific model of curriculum studies which will satisfied needs of all market stakeholders at level of public universities

**Curriculum studies work chart** 



Source: PwC analysis

# General approach based on best international practices include 4 main phases that must be enforced by all market stakeholders

### **Proposed approach**

### PHASE 1 Methods and benchmarking

#### **GOALS**

- Detailed segmentation of the labour market
- Development of a study programme map
- Development of a map of profile competencies
- Comparison of study programmes
- Benchmarking of successfulness of graduates' employability
- Development of methods (connecting existing data sources with the newly collected data)
- Definition of the structure of data collection

## PHASE 2 Forecasts of demand for prospective study programmes

#### GOALS

- Key trends and their justification
- Opportunities, risks and factors of uncertainties
- Groups of "top prospective" study programmes with regard to the projections of growth segments of the market
- Key profile competencies for the prospective study programmes



#### PHASE 3

Detailed recommendations for optimising the contents and forms of studies

#### **GOALS**

- Required competency profile for the selected prospective study programmes
- Assessment of differences between a graduate's required and current competency profile
- Recommendations for innovating the study programme content
- Summary of procedures and the best experience for further utilization
- Justification of the need of given competencies
- Recommendations for profiling the competencies directly in practice during the university course
- Recommendations for the process of innovation of the study programs

#### PHASE 4 Analysis of financial models and their testing

#### **GOALS**

- Development of schemes for financing
- Evaluation of designed models and assessment of economical/social impacts
- Development of most attractive financial model on "sharing" basis – government and business investments

Source: PwC analysis April 2017

