



MANAGING THE TVET INSTITUTION

COMPUTER SIMULATOR



MOSCOW 2014

Contents



- Interactive course «Managing TVET Institution»
- Approaches and technologies
- Description of the computer simulator
- Beta-testing event results and implementation proposal

About the project



- **Goals:** development of support mechanisms and training programmes for modern labour market demands that match the innovative economic development.
- **Target audience:** managers of TVET institutions.
- **Project proposal:** interactive course based on a computer simulation (face-to-face and distant formats).

Project history



Analysis of current situation and problems

- During last year joint seminars were held with experts from partners country to take into account country-specific parameters.

Development of the computer simulator

- Development of the subject matter and the mathematical model together with experts in the field of professional education.

Testing the simulator in Russia

- A set of a testing events were held in Russian TVET institutions.

Revision of the computer simulator

- As a result of testing events additional changes were included into the mathematical model as well as in the technical component of the simulator.

Educational outcomes



- Getting a complete picture “helicopter view” on TVET institutions.
- Demonstration of case studies and mastering of best practices.
- Conceptualizing on leading trends and developments.
- Practicing decision-making in changing environment (change-management).
- Management skills training.

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Simulation training methods



■ Computer simulations have appeared in the second half of the 20th century with the development of IT industry. The principle of “training by using simulation” is being actively distributed in the field of education.

■ Today, world leading business schools like Harvard University, Wharton University, INSEAD, etc. use computer simulations in their educational programs.



Modern aviation training simulation

Training of managers using computer simulation

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More than 10 000 managers from different fields participated in activities featuring computer simulation.



Training of managers using computer simulation

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- Trainees analyze management reports, make decisions, see the effects of the decisions made.
- Every trainee is a part of the team.
- Real life experience (simulation process requires trainees to make important managerial decisions to solve different problems).
- Upon completion of the game, the analysis of results is conducted, right and wrong decisions are analysed.



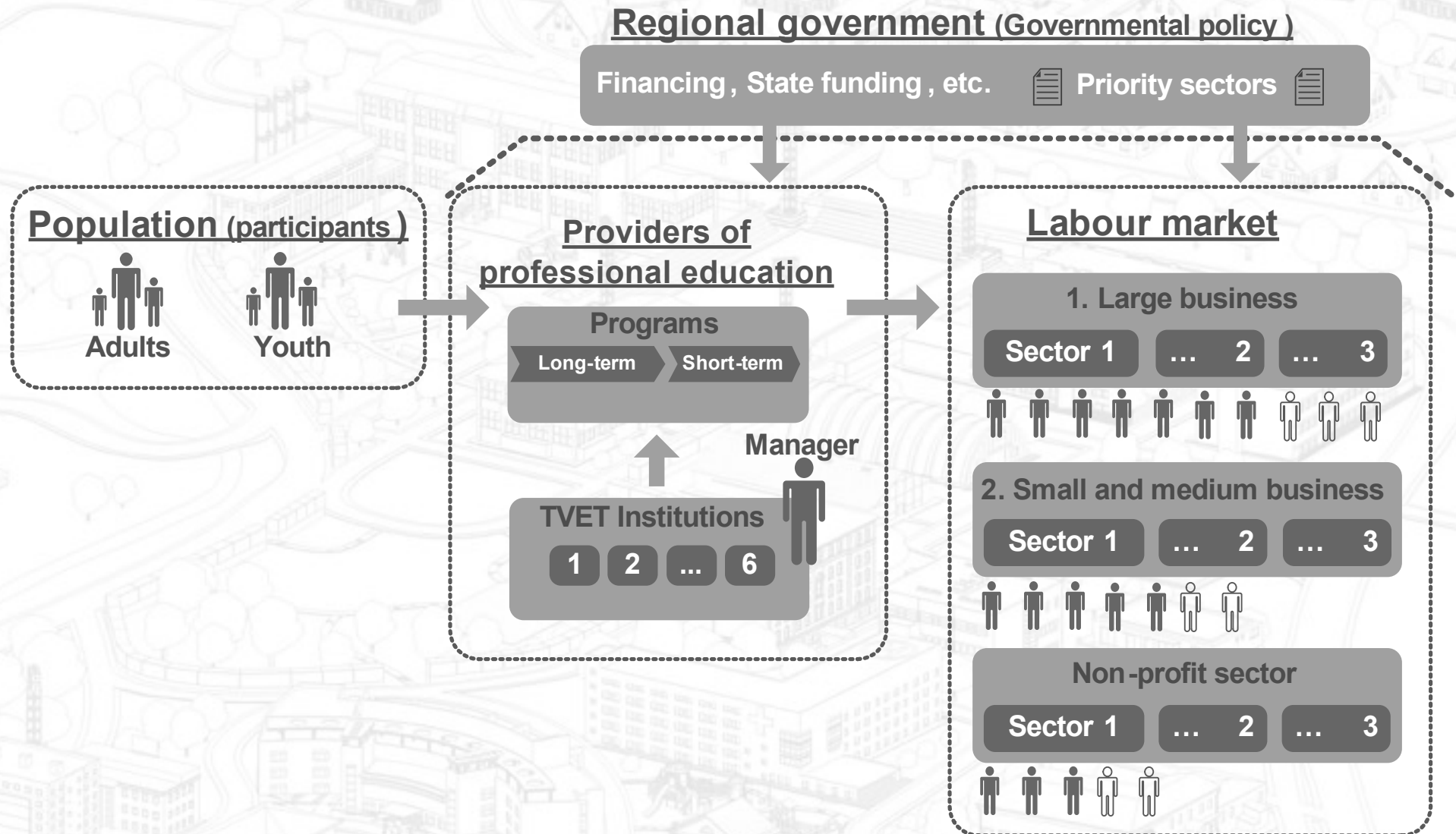
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Description of the computer simulator

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Main goals



- Analysis of the labour market demand.
- Introduction of new educational products to the market.
- Adjustment of main and supporting processes in the institution.
- Building partner relations.

Activities



Main activity:

- Analytics
- Monitoring and development of new educational programmes
- Partnerships

Supporting activity:

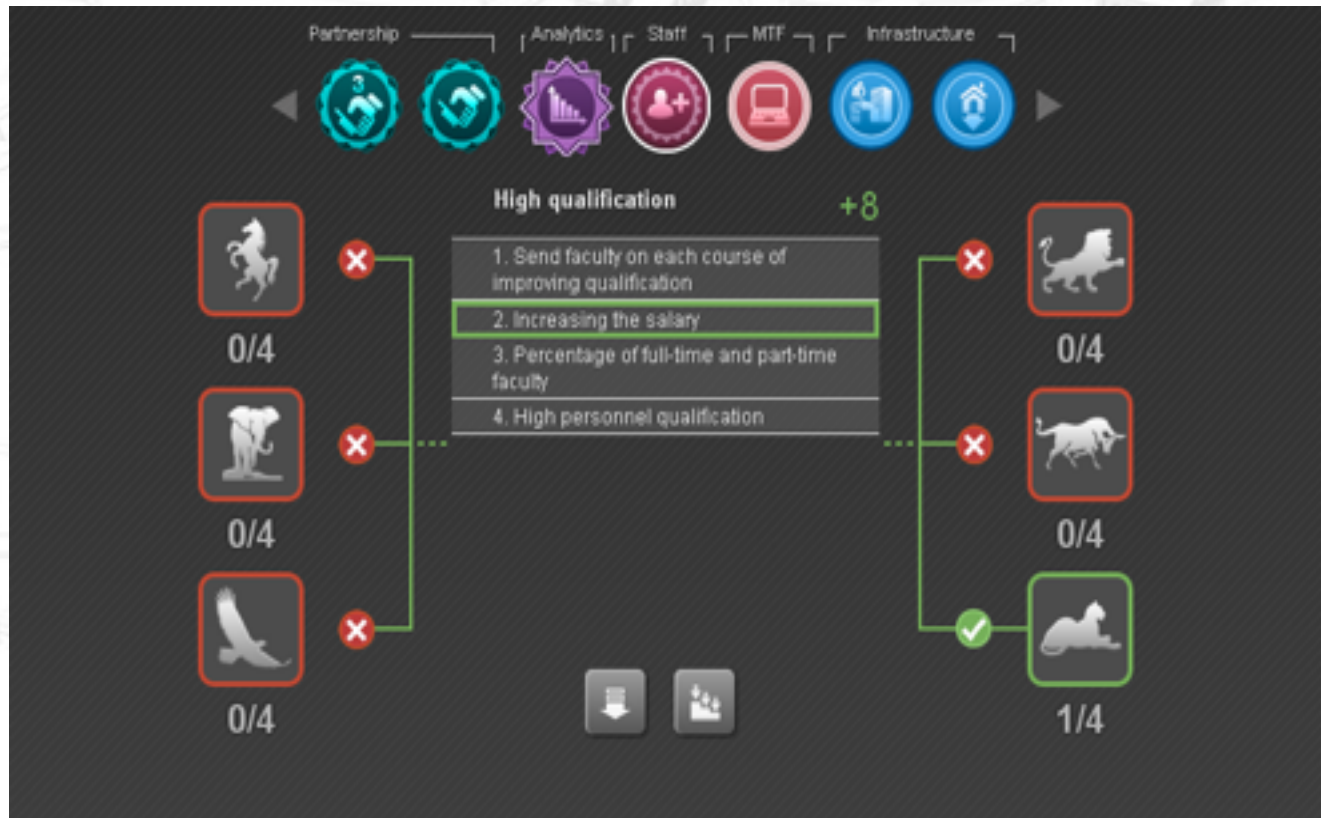
- Cooperation with the supervisory board
- HR policy (salary, staff training, etc.)
- Facility management (repairs, energy saving, etc.)
- Management of classroom and laboratory equipment
- Maintenance and outsourcing
- Finance management
- Participation in government programmes, competition for grants
- PR and mass media

Teams' rating

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Criteria for comparing teams



- Institutions' rating is based on a number of captured achievements (60).
- In order to capture an achievement, **you need to fulfill a number of requirements (1-8).**
- **Different achievements have different value** when calculating the final rating.

Interface forms

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International Beta-testing event in SKOLKOVO



■ **Number of Participants:** 24 people. (5 teams)

■ **Participants:**

- Country representatives (Vietnam , Armenia, Tajikistan, Kyrgyzstan) (**17 people**).
- Vocational training experts (**4 people**).
- ILO (International Labour Organization) representatives (**3 people**).



Expert opinion:

■ **Michael Axmann** (expert in Skills Development Systems, Skills and Employability Department, ILO, Geneva)

“Clearly, the tool could be used beyond the CIS countries. It would be intriguing to see the simulator used as part of the European Training Centre’s (ETC) Principle training programme at Turin.”

Expert report on the quality of the simulator



Event participants were given specially designed questionnaires evaluating the computer simulator. Based on the answers, the following results were collected:

Criteria	Average score*
Relevance of principal decision-making situations and administrative challenges	2,7
Comprehensiveness of the set of decision-making situations an education administrator encounters	2,7
Possibility of use if adapted to country specific parameters	2,8

*MAX 3 points.

Conducting the simulation is easy



1

Preparing event moderators

1. Coach 1-2 event moderators to facilitate the simulation (1-4 days, online-training is possible)
2. All necessary documentation is provided (manuals, etc.)

Support
centre



Moderators
in place

2

Simulation training arrangement

1. Prepare the event hall and the necessary IT infrastructure
2. Print out game documentation (manuals, rules, etc.)
3. Set-up the simulation (passwords, etc.)
4. The simulation game can be accessed through internal and external network (network website)

Moderators
in place



Event venue

3

Conducting the educational event

1. Engage the participants using the introductory presentation
2. Consult the event participants (using the instructions, as well as providing them with clues)
3. To help moderators, easy interface was developed for calculating the results, switching between rounds, etc.
4. Discuss with participants their strategies, right and wrong decisions during plenary session.

Moderators
in place



Participants

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Technical requirements

(30 participants)

1. 1-2 Event organizers
2. Event hall for 20-30 people
3. Computers – 12-18, projector, flipchart
4. Internet access (if the simulation to be accessed from the external network)

Good luck!