KOICA Korea International Cooperation Agency

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Inter-regional Technical Forum on

Skills for Trade, Employability and Inclusive Growth

Skills Technology Foresight

Building a shared vision of skills development

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Siem Reap, Cambodia

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Our work on global skills anticipation

2012-2015		2013-2015	2015-2016	2015-2017
AGENCY FOR STRATEGIC INITIATIVES	ATLAS OF EMERGING JOBS	SKOLKOVO Moscow School of Management; ILO International Labour Organization	GLOBAL EDUCATION FUTURES	BRICS Business Council
Since 2012: future skills for 25 existing sectors of Russian economy + 9 emerging sectors of National Technology Initiative Network of learning platforms & STEM clubs for next gen engineers	Ca. 200 jobs of the future (leading carrier guiding tool that stimulated transformation of Russian secondary & tertiary education)	Methodology of skills anticipation co-developed with International Labor Organizations. Pilot applications in Viet Nam, Armenia, Tunis, Tanzania, South Africa, Argentina	Discussion of skills of the future involving industrial & TVET leaders from ca. 50 countries of the world	Skills development strategy with focus on Industry 4.0 since 2015

Project team

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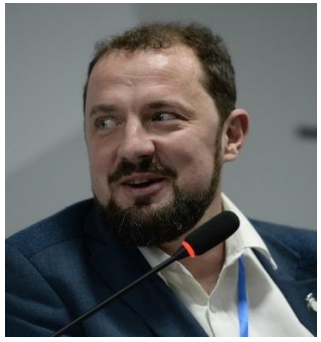


Dmitry Sudakov

Polina Fedorova

STF: a tool for the future building

Solid pipeline of successful projects:

- SKOLKOVO & ILO: Skills Technology Foresight tool for the identification of future skills needs (Armenia, Vietnam, 2014)
- Global Education Futures (USA, Russia, Brazil, Germany, 2015-2016)
- BRICS Skills Development Working Group (Brazil, Russia, 2015)
- Tanzania: National Skills Development Strategy (2015)
- ILO: Skills anticipation for metal processing industry and food production sector (Tunisia, 2016)
- Tens of successful foresights in Russia, including National Technology Initiative, Competence Foresight-2030, etc.

Key features of STF

- STF is a participatory method
- STF is integrative and dialogue-building: people from different working domains engage in dialogue and establish a shared vision
- STF is qualitative, not quantitative
- STF is sectoral: it focuses on specific economic industry

Context of work

Crucial need for an integration into global division of labour

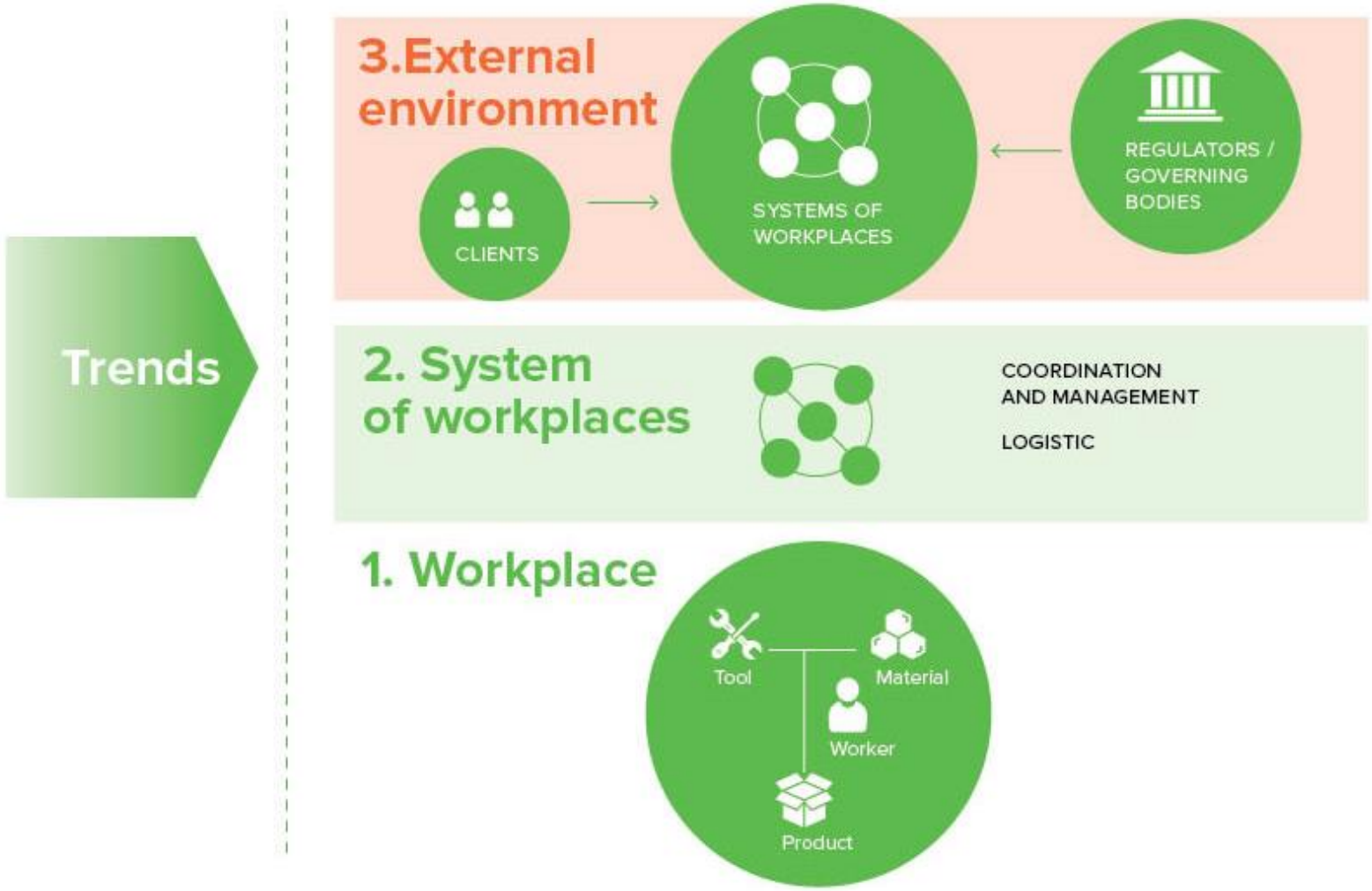
Increasing gap between TVET & HE system and business requirements

Skills development with focus on growing sectors

Efforts of the government to kick-start changes in perspective economic sectors

Growing pressure of global competition for markets and talents

How do we think about the skills transformation?



Key trends transforming the system

Trend	Workplace				Workplace System (eg. factory)		External environment	
	Worker-tool	Worker-material	Worker-product	Worker-customer	Manage-ment	Logistics	Regulators	Classes of consumers
Automation of public and private sectors	🔴	🟡	🔴	🔴	🔴	🔴	🔴	🟠
Digitalization of econo-my & society	🔴	🟡	🔴	🔴	🔴	🔴	🟠	🟠
Globalization of tech-nological development	🟠	🟡	🟠	🟠	🔴	🔴	🟠	🔴
Greening of cities and economy	🟠	🟠	🔴	🟡	🟡	🟠	🔴	🔴
Rise of the net-centric society	🟡	🟢	🟡	🔴	🔴	🟠	🔴	🔴
Demographic changes	🟡	🟢	🟡	🔴	🟡	🟢	🟡	🟠

How may the transforming economy look in the next 15-20 years?

	Manufacturing sector	Service sector
 Standardized output (largely automated)	**Highly autonomous cyberphysical systems**	**Digital, AI (and other technologies)-supported**
 Customized output (“human touch”)	**Local production based on additive technologies**	**Technology-supported, customized services with ‘human touch’**

FutureSkills initiative as a way to coin new skills

New jobs

skills for Industry 4.0 and the new economy

Transforming jobs

skills transforming because of new technologies

Obsolete jobs

what should we do with “redundant people”?

General logic of the Future Skills approach

- Shared vision building
- Designing demo-competitions
- Identifying key gaps in education & training
- Changing the training process