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## **COMPARATIVE ANALYSIS OF THE KNOWLEDGE-BASED POTENTIAL ON THE LEVEL OF COUNTRIES**

Most governments declare the creation of dynamic and competitive knowledge-based economy as a priority area of economic development. The scope of these trends considerably varies geographically and by industries. Thus, the need for comprehensive comparative research of these trends and their dynamics arises. But one of the main problems is defining information society in any other way, measuring it in a different way with different variables and methods.

Approaches to monitoring system indicators are developed by the International Telecommunication Union of the UN. This methodology is based on determining the index of information and communication technologies (ICT Development Index, IDI). It includes three groups of parameters: 1) availability of ICT; 2) use of ICT; 3) development of ICT-skills. Index IDI describes not only the degree of spreading and readiness to use ICT, but also allows to compare the gap between countries and to trace its change in dynamics.

Publishing World Times and IDC company developed in the 1990's their own method of measuring the ability of countries to "participate in the information revolution" using the Information Society Index (ISI). The ISI is based on the assessments of the level of civil liberties, the number of press per capita and the freedom of the press. This approach mostly gives understanding of development of knowledge-based potential of the country from the prospective of national information potentialities and information capital.

A method for constructing the composite Networked Readiness Index (NRI) was developed by Harvard University in the framework of the World Economic Forum. The basis of its measurement consists of three sub-index: 1) the environment as a crucial factor in network readiness; 2) the readiness of key stakeholders to use ICT; 3) the use of ICT. The results give an opportunity to estimate the development of potential of information and communication technologies along with the degree of their penetration into other areas of the economy.

World Bank's methodology provides the annual calculation of Knowledge Economy Index (KEI), which includes consists of four components: 1) economic incentive and institutional regime; 2) education and training; 3) innovation and technological adoption; 4) information and

communications technologies infrastructure. If the first component allows estimating the readiness of the country (region) to the use of knowledge, the next three characterize its capacity to generate and share knowledge.

The comparative analysis of all methodologies mentioned above can be done by their application in the regional context, the results of which are presented in table 1.

*Table 1 – Indexes of the knowledge economy across countries*

Country	IDI		ISI		NRI		KEI	
	I	R(155)**	I	R(53)	I	R(142)	I	R(148)
Eastern European and Baltic States								
Poland	6,19	31	-	33	4,16	49	7,41	38
Ukraine	4,40	67	-	-	3,85	75	5,73	56
Russia	6,00	38	407	41	4,02	56	5,78	55
G7 countries								
United Kingdom	7,75	9	938	10	5,50	10	8,76	14
Germany	7,39	16	903	15	5,32	16	8,90	8
Italy	6,28	29	763	24	4,17	48	7,89	30
Canada	7,04	22	966	5	5,51	9	8,92	7
U.S.	7,48	15	993	3	5,56	8	8,77	12
France	7,30	18	842	19	5,12	23	8,21	24
Japan	7,76	8	833	18	5,25	18	8,28	22

\* Compiled by the authors

\*\* I, R (155) - value of the index and ranking the country among 155 countries participating in the monitoring

Comparison of countries on the basis of the different indexes allows establishing the fact of a significant gap between innovation-driven economies (G7 countries) and the transition from factor-driven for efficiency-driven economies (Ukraine, Russia). The largest gap is in the "network readiness" of countries due to the low coverage of network technology in business and public spheres. An elimination of this gap is an important priority in shaping innovation policies.

Thus, the conducted research showed that most popular systems of indicators and composite indexes of development of the knowledge-based potential are using close source information. However, differences in the way of generalizing partial indicators can identify those aspects of economic development that require special attention and should be included in the monitoring facilities not only in the framework of international programs, but also within individual countries and regions.