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distribution. IC Management efficiency of the company can be identified by the indicator of a mismatch (a difference between the maximal value of QI taken from all organizations, and concrete QI of the examined organization). The parameter of variation IC pays off as the attitude of QI of organization to average QI of all examined organizations. For good IC management author recommended to create a rating web portal for VIC research. Comparative IC rating parameters are suitable for extraction of the invisible knowledge of search engines, for example, such popular as Google and Yandex, competitors considering knowledge, both in branch, and in a regional section. They allow revealing at early stages tendencies in development of marketing and administrative strategy of the basic competitors. The comparative analysis of QI rating tables with indexes of the company's competitiveness will promote in revealing problems of knowledge management. VTC allows aggregating and transforming knowledge also in the situational and strategic centers of the analysis not only for top managers and shareholders, but also for all personnel.

Besides information, the concept of quality IC incorporates in itself a set of other quantitative and qualitative characteristics: reliability, timeliness, urgency, the importance, presentation and availability, authoritativeness, etc. They can be displayed as one aggregated indicator of quality and a demand (popularity and authoritativeness) or a rating of citations that is how many time and in what the IR are quoted and refer to the given resource, a web site, a portal, web page etc. Ratings of VIC are modeling information aspects, traces of management, external and internal influences on the organization, and results of the strategy, accepted decisions. The ratings are especially sensitive to behavior of clients, to their visions, moods, preferences and needs. It allows diagnosing at early stage behavior of consumers of services and production.

Many managers, at all seeming simplicity of a question of efficiency of a web site (portal), do not distinguish efficiency concept of IC. For example, quantity of visitors (clicks, links, and users) is identified by quality of a site, by its content or by quality of the organization and its management. The question is enough many-sided and combined. However, it is possible to allocate the typical reasons of mess. First, managers, especially experts in marketing wrongly consider that web resources are tools of the use, which should lead to increase in number of "calls" at a site. However, in conditions of knowledge economy the Internet resources are, first, the tools of the management of knowledge, both the organizations, and clients, shareholders and their attitudes. The IR is source of knowledge and IC.

Virtual IC management is maintenance of total success. The author puts forward a construction problem of measurement system and an estimation of virtual IC model, which provides identification, measurement, and an estimation of qualities of virtual "brain" of the organization, its business in the ratio with "brain" of the market. It is the sensitive and exact tool of early diagnostics for effective integration of IC components, a synergy of creative potential of the human capital that promotes steady movement to the purpose at which risks are minimal. Hence, the concept of virtual IC management is a concept of continuously increase IC by integration of the traditional IC with virtual IC (virtual IC competitors, clients and clients of competitors) for capture new knowledge. The idea of growth IC due to "capture" of a part of global virtual IC networks is an innovation in IC management. It is a model that provides achievement of competitive advantages in network economy. It is offered to measure two asymmetric indicators - qualities and demands of IR, both in "English-speaking", and in "Russian-speaking" virtual business space (in particular, for Russia).

On indicators, there are construction ratings that are ranged for comparison. Further we count more sensitive, generalized universal indicator - IC index (QI). On the interconnected tables of IR quality and demand indicators, VIC and QI managers "see" how much their activity; behavior corresponds to values and expectations of the company and investors. Moreover, it is very important. On tables or balance scorecards is visible the balance of interests of the market (tables 1, 2, and 3). They promote formation in collectives of creative-pragmatically culture; aspiration to achievement of visible results on the purposes, stimulate competition, access and consumption of knowledge, virtual network intelligence - the powerful generator of new knowledge and ideas.

**The formula for IC index (QI)**, created by author for the organizations:  $QI^2 = (IR_{Google})^2 + (IR_{Yandex})^2$ , where  $IR_{Google}$  and  $IR_{Yandex}$  - the relative values of the indexes of quality and demand IR, equal according to attitudes  $IR_{kGoogle}$  and  $IR_{kYandex}$  (indexes of IR popularity and importance = indexes of web citing, calculated by Google.com and Yandex.ru) on maximal values  $MaxIR_{Google}$  and  $MaxIR_{Yandex}$  for organizations, where k - the name of the organization. The greatest value QI reaches, when the rectangular with the sides equal  $IR_{Google}$  and  $IR_{Yandex}$  has the form of a square, and the sides are = 1.

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More significant QI = more dense "packed" the IC. **Relative index of IC (IQI)** =  $2(IR_{\text{Google}} + IR_{\text{Yandex}}) / IR_{\text{Google}} \cdot IR_{\text{Yandex}}$ . More significant IQI (the attitude of perimeter of rectangular to its area), IC is more uniformly distributed and intellectual resources are more qualitative, and greater success can achieve in conditions of an external and internal competitiveness. For the decision of special tasks, there are offered other IC indicators: continuity, uniformity, overlapping, rhythm and intensity. The innovation in IC management leads to the reduction of time of an estimation and measurement, and to increase of scalability. Use of the software, developed by the author, makes a series of simultaneous calculations which borrow tens seconds.

The offered concept of use of collective intelligence of a network consists of two "hemispheres" – national Russian-speaking and international English-speaking. Managers will prefer the tool, which will give the objective information. Innovations are not limited to methods of IC measurement. The author's offers methods of interpretation of results of measurement and the ways of estimation based on criteria of comparison of reference and actual models of IC indicators. Qualitative information filling of a site depends on IC holder. It not only displays content, but also represents the form. In dialectic knowledge the content, define the form, and the form influences on content. The virtual IC is the form of development of the IC in network economy and it is characterized as new, not studied completely, intangible capitalization, a synergy intercultural, social and business relations.

Growth of capitalization of the Internet searching systems evidently testifies to growth virtual IC, tables and thematic catalogues of IR, about demand of services, which they give. For example, net profit Goggle Inc. in the first quarter of 2007 has grown on 69 % in comparison with the similar period in 2006. Such data contain in the financial report of the company. For three months in 2007, 1 billion dollars were earned. Profit of the company was 3.68 dollars for the share that has exceeded expectations of analysts (Rosbizneskonsalting, 20.04.2007).

Operating experience of the developed model for management tasks of the innovative centers, strategic universities, and in research and IC measurement of some commercial organizations in world, Russia and Armenia are testifies to its high degree of utility. Using the tool in the situational and strategic analysis centers, will allow intellectualizing decision making, to save expenses due to unification and standardizations of administrative procedures and technologies. The economy of time and costs at the diagnosis of problems in competitive environments, concentration of resources on the major directions, will provide high efficiency in management, fruitful cooperation of business. You will see examples of measurement in the result tables 1, 2 and 3.

On interrogation UNCTAD are made lists of the countries by the most attractive to the future researches and development for 2005-2009 ([www.unctad.org](http://www.unctad.org)). In our opinion, ratings of competitiveness of economy in the countries in 2007 will come nearer to the received results, so QI allows predicting estimations of ratings of competitiveness. On IC index Russia wins first place (the country has huge potential), and on appeal to the future researches and development - second place, conceding to the Great Britain. The basic conclusions received by means of new model of IC measurement for 2005-2009, coincide with results of interrogations and estimations of experts UNCTAD. Strategically proved policy of innovative development of Russia is attraction of the transnational corporation and increase in their share in development of research and development, creation of own corporations and maintenance of intensive and their advanced IC development, injection of greater means in education by investments into leading strategic universities, growth of investments in managers education, balanced IC development. Studying of results of rating parameters and IC estimations has allowed coming to the following conclusion: QI leaders are **the Great Britain, Norway, Poland, Spain, Russia, Italy, France, Germany, Israel, Estonia, Turkey, Netherlands, and Sweden** (Vahanyan, 2007b).

Ratings of competitiveness of economy of some the countries in 2007 and 2008 will come nearer to the received results, so QI allows predicting estimations of ratings of competitiveness. On IC index Russia wins first place (the country has huge potential), and on appeal to the future researches and development - second place, conceding to the Great Britain. The basic conclusions received by means of new model of IC measurement for 2005-2009, coincide with results of interrogations and estimations of experts UNCTAD. Strategically proved policy of innovative development of Russia is attraction of the transnational corporation and increase in their share in development of research and development, creation of own corporations and maintenance of intensive and their advanced IC development, injection of greater means in education by investments into leading strategic

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universities, growth of investments in managers education, balanced IC development. Studying of results of rating parameters and IC estimations has allowed coming to the following conclusions. Transnational Corporation's advance the Russian organizations by QI (VIC) index (see table 1 and table 2); Russian universities lag behind to the Russian large commercial companies (CO). Russian innovation centers lag behind leading Russian universities. European innovation centers network lag behind Russian innovation centers. Average value of QI = 0.68.

**Table 1:** QI Ratings of the large Russian commercial companies (20.01.2006 - 20.10.2008)

№	Company Name	Rank	QI	Growth	Rank	QI	Growth	Rank	QI	Growth	Rank	QI
		20.10.08			23.05.08			01.10.07			20.01.06	
1	RBKonsalting	1	1.414	=	1	1.414	=	1	1.414	1 ↑	2	1.062
2	Rostelekom	2	0.247	=	2	0.281	4 ↑	6	0.152	2 ↑	8	0.335
3	RAO-UES	3	0.237	=	3	0.270	=	3	0.468	2 ↓	1	1.112
4	Gazprom	4	0.205	=	4	0.224	=	4	0.230	1 ↓	3	0.734
5	Mosenergo	5	0.128	6 ↑	11	0.071	9 ↓	2	0.559	12 ↑	14	0.167
6	Nor.Nickel	6	0.100	=	6	0.128	2 ↑	8	0.128	2 ↓	6	0.399
7	Tatneft	7	0.078	2 ↓	5	0.140	4 ↑	9	0.119	2 ↓	7	0.385
8	KAMAZ	8	0.078	1 ↓	7	0.091	3 ↑	10	0.097	1 ↓	9	0.308
9	Severstal	9	0.077	1 ↓	8	0.080	7 ↑	15	0.067	11 ↓	4	0.501
10	Surg.neftegaz	10	0.068	=	10	0.076	4 ↑	14	0.071	3 ↓	11	0.244
11	MGTS	11	0.061	2 ↓	9	0.077	2 ↓	7	0.143	3 ↑	10	0.293
12	Baltika	12	0.055	2 ↑	14	0.060	2 ↓	12	0.076	=	12	0.231
13	Slavneft	13	0.055	=	13	0.064	2 ↓	11	0.092	2 ↑	13	0.195
14	LUKOIL	14	0.044	2 ↓	12	0.069	7 ↓	5	0.197	=	5	0.428
15	V.B. Dann	15	0.041	=	15	0.055	2 ↓	13	0.073	2 ↑	15	0.167
16	Vimpelkom	16	0.032	=	16	0.050	2 ↑	18	0.015	3 ↑	21	0.005
17	Kaz.hel. fact.	17	0.018	=	17	0.020	1 ↓	16	0.021	2 ↑	18	0.103
18	LOMO	18	0.015	=	18	0.018	1 ↓	17	0.018	=	17	0.111
19	N. ship.comp.	19	0.013	=	19	0.014	=	19	0.014	=	19	0.071
20	P.ship. comp.	20	0.011	=	20	0.012	=	20	0.012	=	20	0.041
21	Elektrosila	21	0.001	=	21	0.001	=	21	0.003	5 ↓	16	0.141
	Aver. value		0.14			0.15			0.19			0.33

**Table 2:** The list of the organizations, ranged by QI (20.01.2006 - 23.05.2008)

N	Organizations	Number	QI 23.05.2008	QI 01.10.2007	QI 20.01.2006
1	Transnational corporations	30	1.414	1.23	1.414
2	Russian large organizations	21	0.9	1.04	0.99
3	Russian universities	30	0.65	0.68	0.52
4	Russian innovation centers	62	0.38	0.4	0.41
5	European innovation centers network	194	0.057	0.06	0.036
	Average value		0.68	0.682	0.674

It is recommended to carry out an effective cost control of brand and goodwill by method of a comparative estimation of triads: the name of firm, a name of top-manager, and IC index of the organization with the system of combined indicators corresponding with quality and demand on web resources. Results of estimations will allow revealing: adequacy of management models to the CO models, conformity of management models and IC management, conformity of models of qualities of

chiefs and qualities of management, adequacy of strategy, the strategic purposes and tasks to models of IC management and, at last, ability of chiefs to reach results by construction of effective strategy management. Introduction of IC management is expedient for carrying out on stages, in the Russian transnational corporations, then in the CO with high IC, having experience of knowledge management, in the CO using the balanced scorecard (BSC), and in other commercial enterprises. Russian CO is needed to create IC departments.

The examples confirm conclusions of the author and testify the quality of the offered tool of IC measurement for transnational corporations, taking account the world economic crisis situation. Leaders on IC index by 20.01.2006 (table 3) are Microsoft (1.41), Intel (0.4), IBM (0.336), Hitachi (0.307), and Motorola (0.23). Average QI value for 30 transnational corporations = 0.132. Only eight corporations have QI above an average. Leaders on IC index by 20.10.2008 (table 3) are: Microsoft (1.41), Intel (0.758), IBM (0.388), Motorola (0.371), and Nokia (0.185).

Net profit of the one of leading world manufacturers of cellular telephones Motorola Inc. during first six months in 2006 has grown by 27,4 % and has made \$2,07 billion in comparison with year earlier - \$1,63 billion (<http://www.utro.ru/news/2006/07/20/567292.shtml>). The sales volume of the company in I half-year 2006 has grown by 26,6 % and reached \$20,48 billion. In 2005, this parameter has made \$16,18 billion. The operational profit for the accounting period has grown on 30,7% and has reached \$2,37 billion in comparison year earlier - \$1,81 billion. Net profit Motorola in II quarter 2006 has grown by 48,3 %, having reached \$1,38 billion instead of \$933 million for April-June, 2005. The sales volume has grown by 29,4% and has reached \$10,88 billion. In I quarter 2005 this parameter has made \$8,41 billion. The operational profit has grown by 58,9% and from \$958 million has reached \$1,52 billion. From 2006-2007 average value of IC index has decreased until 0.122 (from 0.132). Eight corporations have QI above an average in 2008.

The profit of Rostelecom (Russia) for the first half-year 2006 has made 2,735 billion ruble, that twice less than a corresponding parameter for the similar period of the last year - 5,661 billion ruble (table 1). For 2006-2008 average value of IC index in Russian large CO has decreased until 0.14 (from 0.33). QI only 4 Russian organizations have QI above an average in 2008. QI decreases at "RAO UES of Russia", Gazprom, MGTS, Lukoil, and Severstal. Comparison of data on capitalization on 2006 and 2007 and significances of an of the IC index shows, that, as a rule, vectors of change of parameters are identical, moreover, functionally they are corralled. From considered 19 CO at 13 (it is 70 % of all CO) vectors of development of parameters of capitalization and IC index have coincided. Changes of significances of IC index predetermine similar changes on a parameter of capitalization approximately for a year. The similar picture is observed at the analysis of the transnational corporations. Except for Microsoft first ten corporations has lowered QI. However all corporations which were in first ten in 2006 have remained in 2007 in the list of leaders except for Wal-Mart Stores. Motorola, Samsung Electronics, SONY and Siemens have improved rating parameters. Hitachi and Wal-Mart Stores have worsened parameters. Only seven corporations have significant IC index above an average for 2007 while in 2006 they were eight. **8-10 corporations in the world are locomotives of development of the intellectual capital.** The sum of their QI blocks the sum of QI of all other corporations. The Russian leading enterprises in a greater degree depend on external effects and internal factors and are subject to changes to greater dynamics, than foreign. QI "RAO UES of Russia" and Microsoft are essential above "competitors" from the list. However, in conditions of rigid competition, globalization and an openness of economy of knowledge the Russian corporations should force accumulation IC and have more an effective utilization for maintenance of success (Vahanyan, 2007b; Vahanyan and Gaponenko, 2007; Vahanyan, 2008).

## **2.1 The - QS and ArcaLer (QI) World University rankings 2008-**

[http://www.iatp.am/arcaler\\_scorecard/index.htm](http://www.iatp.am/arcaler_scorecard/index.htm)

The Times Higher Education - QS World University Rankings identified these to be the world's top 100 universities in 2008. These institutions represent 20 countries with Israel represented for the first time. Whilst North America dominates with 42 universities, Europe and Asia Pacific are well represented with 36 and 22 respectively. ArcaLer (QI) identified top 103 (the same 100 World & 3 Russian) Universities (table 4). From 103 Universities 37 have QI more than average value (0.163) by 23.10.2008.

**Table 3: QI Rating of the transnational corporations (26.05.2006 - 20.10.2008)**

№	Company Name	Rank	QI	Growth	Rank	QI	Growth	Rank	QI	Growth	Rank	QI
		20.10.08			23.05.08			01.10.07			26.05.06	
1	Microsoft	1	1.414	=	1	1.414	=	1	1.414	=	1	1.414
2	Intel	2	0.758	=	2	0.798	1 ↑	3	0.366	1 ↓	2	0.40
3	IBM	3	0.388	=	3	0.433	1 ↓	2	0.486	1 ↑	3	0.326
4	Motorola	4	0.371	1 ↑	5	0.177	2 ↑	7	0.161	2 ↓	5	0.23
5	Nokia	5	0.185	1 ↓	4	0.190	=	4	0.209	2 ↑	6	0.188
6	Philips Electronics	6	0.154	1 ↑	7	0.157	1 ↓	6	0.190	3 ↑	9	0.122
7	SONY	7	0.146	1 ↓	6	0.167	1 ↓	5	0.202	3 ↑	8	0.169
8	Wal-Mart Stores	8	0.145	5 ↑	13	0.043	4 ↓	9	0.064	1 ↑	10	0.118
9	Siemens	9	0.107	1 ↓	8	0.137	13 ↑	21	0.019	10 ↓	11	0.108
10	Samsung Electronics	10	0.093	=	10	0.066	1 ↑	11	0.049	4 ↓	7	0.173
11	Hitachi	11	0.054	2 ↓	9	0.068	1 ↓	8	0.079	4 ↓	4	0.307
12	Shell	12	0.052	=	12	0.045	2 ↓	10	0.055	2 ↑	12	0.047
13	Toyota Motor	13	0.047	2 ↓	11	0.056	1 ↑	12	0.049	1 ↑	13	0.047
14	McDonalds	14	0.044	=	14	0.041	1 ↓	13	0.033	1 ↑	14	0.035
15	Nissan	15	0.040	13 ↑	28	0.003	2 ↑	30	0.004	3 ↓	27	0.007
16	Procter & Gamble	16	0.031	2 ↑	18	0.026	4 ↓	14	0.032	4 ↑	18	0.027
17	Pfizer	17	0.028	3 ↑	20	0.023	4 ↓	16	0.027	3 ↑	19	0.027
18	Johnson & Johnson	18	0.024	3 ↑	21	0.019	2 ↓	19	0.024	1 ↑	20	0.023
19	Volkswagen	19	0.023	4 ↓	15	0.033	=	15	0.028	=	15	0.031
20	Renault	20	0.023	4 ↓	16	0.029	1 ↑	17	0.025	1 ↓	16	0.031
21	Peugeot	21	0.022	4 ↓	17	0.027	3 ↑	20	0.024	3 ↓	17	0.029
22	Sharp	22	0.021	3 ↓	19	0.023	1 ↓	18	0.025	3 ↑	21	0.023
23	Nestle	23	0.020	1 ↓	22	0.019	=	22	0.018	=	22	0.017
24	L'Oreal	24	0.018	1 ↓	23	0.016	=	23	0.016	=	23	0.017
25	Mitsubishi	25	0.017	=	25	0.007	2 ↑	27	0.007	3 ↑	30	0.00
26	Philip Morris Int.	26	0.014	3 ↑	29	0.001	4 ↓	25	0.013	1 ↑	26	0.009
27	Pepsi	27	0.013	3 ↓	24	0.010	=	24	0.013	=	24	0.014
28	Philip Morris, USA	28	0.009	2 ↑	30	0.000	4 ↓	26	0.008	1 ↓	25	0.01
29	Olivetti	29	0.005	2 ↓	27	0.005	2 ↑	29	0.006	1 ↓	28	0.006
30	Nissan	30	0.004	4 ↓	26	0.005	2 ↑	28	0.006	1 ↑	29	0.006
	Average value		0.142			0.135			0.122			0.132

QS and ArcaLer Ranks are different (table 4) and by authors conclusion ArcaLer Ranks are more adequate. Two Russian Universities are in the top of 30 universities. Best Europe University of Nottingham Rank = 16 (QI) and = 86 (QS). Only 7 Europe Universities are in the top of 30. Massachusetts Institute of Technology is a leader, QI value = 1.046 and QI Rank = 1, QS 2008 Rank = 9, but QS 2007 Rank = 10. QS 2008 Rank of the Lomonosov Moscow State University = 183, but QS 2007 Rank = 231. Columbia University QI value = 0.566 and QI Rank = 3, QS 2008 Rank = 10, QS 2007 Rank = 11. Princeton University QI value = 0.47 and QI Rank = 4, QS 2008 Rank = 12, QS 2007 Rank = 6. QI value of the Yale University = 0.438 and QI Rank = 5, QS 2008 Rank = 2, QS 2007 Rank = 2.

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**Table 4:** (first 37 Universities) Arcaler QI\* (23.10.08) & QS (2008)\*\* Rankings of 100 World & 3 Russian Universities

№	 Institution	Country	QI	Rank	QS 2008 Rank	QS 2007 Rank
			23.10.08			
1	Massachusetts Institute of Technology	US	1.046	1	9	10
2	<i>Lomonosov Moscow State University</i>	<i>Russia</i>	<i>1.003</i>	2	183	231
3	Columbia University	US	0.566	3	10	11
4	Princeton University	US	0.47	4	12	6
5	Yale University	US	0.438	5	2	2
6	Stanford University	US	0.421	6	17	19
7	University of Michigan	US	0.354	7	18	38
8	Boston University	US	0.342	8	46	47
9	University of Pittsburgh	US	0.31	9	97	77
10	University of Washington	US	0.301	10	59	55
11	University of California, Berkeley	US	0.284	11	36	22
12	Harvard University	US	0.269	12	1	1
13	<i>Saint - Petersburg State University</i>	<i>Russia</i>	<i>0.267</i>	13	-	-
14	Dartmouth College	US	0.265	14	54	48
15	University of Texas at Austin	US	0.261	15	70	51
16	University of Nottingham	UK	0.252	16	86	70
17	University of Queensland	Australia	0.251	17	43	33
18	University of Minnesota	US	0.24	18	87	142
19	University of Geneva	Switzerland	0.239	19	68	105
20	Brown University	US	0.220	20	27	32
21	Duke University	US	0.218	21	13	13
22	Purdue University	US	0.212	22	99	77
23	University of Warwick	UK	0.21	23	69	57
24	Lund University	Sweden	0.202	24	88	106
25	University College London	UK	0.195	25	7	9
26	Carnegie Mellon University	US	0.191	26	21	20
27	New York University	US	0.188	27	40	49
28	McGill University	Canada	0.186	28	20	12
29	Cornell University	US	0.186	29	15	20
30	University of California, Los Angeles	US	0.185	30	30	41
31	Chinese University of Hong Kong	Hong Kong	0.184	31	42	38
32	<i>The Moscow State Institute of International Relations</i>	<i>Russia</i>	<i>0.181</i>	32	-	-
33	University of Virginia	US	0.181	33	96	110
34	University of Wisconsin-Madison	US	0.179	34	55	55
35	University of Cambridge	UK	0.178	35	3	2
36	University of Toronto	Canada	0.173	36	41	45
37	University of Pennsylvania	US	0.165	37	11	14
	Average value		0.163			

\*QI - index of the virtual intellectual capital (Arcaler) \*\* Source: <http://www.topuniversities.com>, <http://www.timeshighereducation.co.uk>



### **3. Conclusions**

The offered tool provides adequate measurement, identification and an estimation of IC components. This instrument enables the organizations to increase IC, using virtual intellectual capital, improve quality of IC management, and design effective strategy. It expands creative potential of top-management, personnel, visualizes advantages and lacks of competitors, allows operatively, in a mode of real time and on -line to receive new knowledge. Obtained data are interpreted in accessible language. By redistribution IC it is possible to achieve the decisive superiority on the certain directions of business above the basic competitors and to provide success in a global competitiveness.

VTC are a key of creation of values and transformations of new knowledge. The knowledge received from network is qualitatively more valuable as consider knowledge of clients of the competitors, their suppliers and investors, and e-business community. Synergy effect from strengthening and growing knowledge during creation of an added value is difficult for overestimating. The estimation of IR of competitors promotes understanding of advantages and lacks IR, to the occurrence of new ideas. VTC helps to search new technologies and values, stimulates the creative approach to work, causes aspiration and taste to innovations, and creates conditions for fast development and introduction of new culture of thinking.

IC management on the base of VTC identifies orders of the knowledge, data, experience, ideas and intellectual assets from the global network. It builds them in the strict, logically interconnected structure in the form of strategic balanced scorecards or maps of indicators. VTC is interactive and invariant. It has allowed defining the facts of market redistribution of IC and its concentration in leading corporations in the world.

VTC helps clients organizations (companies, universities) assess how they compare with others in their ability to compete in the global knowledge economy. It can develop a framework that clients can use as the basis for their transition to a network economy; illustrate the rapid progress in IC management that can be made. In the future the VTC research and development is planning to use with K4D (the World Bank Institute's Knowledge for Development Program) for innovation IC measurement for countries and regions to better understanding strengths and weaknesses, as well as the strengths and weaknesses of actual and potential competitors. Countries, TNC, profit and non-profit organizations, Universities need a simple and the same IC tool for IC management and must then articulate their goals and develop policies and investments to achieve them.

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