Technical tools to help transform information into knowledge
Global Project on Measuring the Progress of Societies

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Abstract

Global Project on "Measuring the Progress of Societies" www.oecd.org/progress

Is hosted by the OECD and run in collaboration with other international and regional partners - it seeks to become the world wide reference point for those who wish to measure, and assess the progress of their societies. Read more about - What we are doing

New ICT tools have the potential to bring dramatic improvements: the Global Project will foster the development of new tools and approaches to help decision makers and citizens develop a better knowledge of their society using statistical information. The presentation will display some new Web tools which can be used to show statistics in dynamic and innovative ways, to reach out to new audiences.

Read more www.oecd.org/progress/ict

Keywords:

Improvement to statistics via dynamic ICT tools

Web technologies

Information into knowledge

1. Global Project what is it?

At the OECD World Forum in 2007, on "Measuring and Fostering the Progress of Societies", the ***Istanbul Declaration*** English version was signed by several international and national organisations. It calls for action to encourage communities to consider for themselves what "progress" means in the 21st century, to share best practices on the measurement of societal progress and to increase the awareness of the need to do so using sound and reliable methodologies.

Measuring progress initiatives are being run in many countries, developed and developing. A Global Movement of initiatives is happening in all areas of

society. Initiatives are being run by governments, by civil society, by academics and the private sector. Some of the most successful have been run in novel partnerships that span the different sectors. They are being run at the country and international levels. Some are being done for local communities. But for the most part, those working in this field are working in isolation. They have few opportunities to discuss with their peers their common experiences or develop best practice.

Mission Statement: Global Project on Measuring the Progress of Societies exists to foster the development of sets of key economic, social and environmental indicators to provide a comprehensive picture of how the well-being of a society is evolving. It also seeks to encourage the use of indicator sets to inform and promote evidence-based decision-making, within and across the public, private and citizen sectors. The project is open to all sectors of society, building both on good practice and innovative research work.

The Project Mission Statement says that "the project is open to all sectors of society" and the Istanbul Declaration urges "statistical offices, public and private organisations, and academic experts to work alongside representatives of their communities to produce high-quality, facts-based information that can be used by all of society to form a shared view of societal well-being and its evolution over time".

2. Why do we need territorial measures of Well-being?

Initiatives to do just this are being run in many countries, rich and poor. They are being run by governments, by civil society, by academics and the private sector. Some of the most successful have been run in novel partnerships that span the different sectors. They are being run at the country and international levels. Some are being done for local communities. All these initiatives show the relevance of the issue and the need to develop new institutions able to engage all stakeholders.

Policy makers need sound statistical information on the source of regional competitiveness, but such information is not always available. Sub-national data are limited and regional indicators difficult to compare among countries.

According to a survey carried out by UNDP, more than 150 composite indicators have been developed by public and private institutions to measure country performance in economic, social and environmental terms. Moreover, hundreds initiatives have been launched around the world to use indicators to make national and local politicians accountable, and this is happening in developed and in developing countries. A world movement is emerging and the linkage between statistical indicators, policy design and democratic assessment of the performance of a country (a region, a city, etc.) is at its core.

This movement is characterised by a great many similarities. Globalisation and old and new media (especially the use of Internet) are allowing more cultural exchange than ever across different continents and communities. Some indicators-based initiatives have already created networks to share good practices, well beyond the national boundaries. International research societies have stimulated discussion

among scholars and practitioners, resulting in growing similarities in the taxonomies of indicators sets used around the world.

There is now a significant opportunity to bring this vast wealth of experience into a more coherent and structured network, and so provide a more solid answer to the question that more and more societies (and individuals) are asking: where are we heading?

Concerns about this have been growing. And over the past 10 years or so there has been an explosion of interest in producing measures of societal progress. Measures that go beyond GDP to represent a broader view of the ways in which societies are progressing and regressing. Measures which are based on the true values of a society. Such sets of progress measures can help governments focus in a more joined up way on what really matters: they can foster a more informed debate on where a society actually is, where it wants to head, and – crucially – the choices it needs to make if it is to get there. By measuring progress we can foster progress. Well-being is an issue that is vital for all concerned. It will ensure that the realities of many people's daily lives are taken into account when policy makers need to make decision that will affect them. Read more on the New Economics Foundation (NEF) website and the National Accounts of Well-Being report

To take these ideas forward there is a need for agreement on a measurement framework or a handful of frameworks. A "single number" approach (like composite indicators) is not necessarily the best way to measure progress, a set of indicators would be much better, and both objective and subjective indicators should be included. We also have to admit that measuring the progress of societies is a relevant issue both in developed and in developing countries: diversity is a value, so it is not necessary to have a single list of indicators/domains for all countries. International benchmarks are useful: comparing the situation of a specific country, or between regions.

3. How ICT can help

Information plays a vital role in economic and political processes. The increase in available information, coupled with advancements in Information and Communication Technologies (ICT) has changed the ways in which markets and societies work. The Internet and other media, as well initiatives aimed at building information repositories through the collaboration of individuals, such as wikis and blogs, make more information available to more people than ever before. Therefore, the ideal of a "fully informed decision maker" is far from the case: although citizens are constantly bombarded by information, this information is not necessarily translated into knowledge. Read more: Technical tools to help transform information into knowledge

On the contrary, more and more people are overwhelmed and confused by the amount of information available. "...in an information-rich world, the wealth of information means a dearth of something else: a scarcity of whatever it is that information consumes. What information consumes is rather obvious: it consumes the

attention of its recipients. Hence, a wealth of information creates a poverty of attention and a need to allocate that attention efficiently among the overabundance of information sources that might consume it" (Herbert Simon).

Many people are unable to fully understand ongoing debates about public policies and feel threatened by the complexity of global issues and the polarity of 'evidence' used by those on different sides of the debate (climate change, migration, economic globalisation, etc.). The development of Internet has shown drawbacks: the dissemination of false information, manipulation of public opinion through propaganda, and confusion about what is accurate and what is poorly measured is all too common. Gathering information has never been easier. Selecting the "right" information and turning it into knowledge has become harder than ever.

High quality statistical data is generally recognized as a "public good" and a life-blood of democracy: As Geoff Mulgan (former advisor to Tony Blair) said, "Few things are as vital to democracy, and as problematic, as access to reliable knowledge and information. Without it there is no way for citizens to judge whether their rulers are competent or incompetent, lucky or unlucky, honest or dishonest. Well-being depends on being well-informed". But disinformation spreads rapidly. Data based on shaky methodology is often quoted in public debate as "fact" and correct information can be misinterpreted (so called "mutant statistics"). In those countries in which surveys have been undertaken, it is clear that a large percentage of the population does not know the key economic and social facts that underpin their country.
Measuring Progress Webcast - Geoff Mulgan speech

4. What ICT tools are currently available?

Over the last two years, the OECD has decided to experiment new tools to make its statistics more accessible and re-usable by users, as well as to test new approaches to communicate statistics and engage people in exploring data and sharing their findings. The following actions have been undertaken:

- In 2006, the OECD Council endorsed a new policy for dissemination of statistics, which involves the re-organisation of statistical products in three broad categories: *OECD Facts and Figures*: a series of simple tables, with commentary, aimed at non-specialists and specialists, to be freely available to all; *OECD Core Data*: up to 1000 ready-made tables, with metadata, drawn from all OECD databases, aimed at students, informed and specialist audiences, to be freely available to all; *OECD Statistics*: a portal giving access to all complete OECD databases, to be available on subscription using the free-at-the-point model.

  The OECD uses Adobe Flex OECD Factbook to display statistical data graphically online. In order to ensure the portability of developments to the greater statistical community, this development is based on content in the

Statistical Data and Metadata Exchange (SDMX) ISO standard. Read more www.sdmx.org

- In 2007 the OECD made available the data published in its "Factbook" (a selection of more than 200 economic, social and environmental indicators) on Swivel.com, a web 2.0 platform for uploading, exploring, sharing data and disseminating their insights via email, web sites and blogs. To manage OECD data, Swivel created a special label "Official Source" to distinguish data uploaded by Organisations like the OECD and by individuals.

- In co-operation with the Gapminder Foundation (www.gapminder.org), the OECD is planning to upload "2008 Factbook" data on Trendalyzer, the software developed by Hans Rösling and his team. The OECD is also planning to create video clips where analysts would present "stories" about countries' performances, policy reforms, etc. based on Factbook data and the use of Trendalyzer and other dynamic visualisation tools. Try it now! OECD Factbook 2008 in Gapminder Graphs

- As one of the key issues for organisations that produce statistical indicators concerning countries' performances is to represent, in a synthetic way, the relative position of each country vis-à-vis the others or relevant groups of countries (OECD totals, EU totals, etc.), the OECD developed *Dynamic Country Profiles* based on 32 indicators derived from the Factbook. These profiles are represented through four (two concerning economic dimensions, two social dimensions) dynamic "spider charts" (or "radar charts"), where 8 indicators concerning the selected country and the OECD total/average. The user can both select a particular year or the "animated presentation". In the latter case, moving averages are used to show how the country situation evolved over time in comparison with the OECD total or other countries.

- In March 2008, the OECD Development Centre launched *Wikigender* (see www.wikigender.org), the first "wiki-based" OECD initiative which aims to facilitate the exchange and improve the knowledge about gender-related issues around the world. A special section is devoted to statistical evidence, where "official" and unofficial data can be easily recognised and evaluated by the audience. In this respect, Wikigender serves as a pilot for the proposed development of a "Wiki4Progress", in the context of the Global Project on "Measuring the Progress of Societies".

- In 2008, launch of OECD eXplorer, which was developed jointly by the OECD and the National Centre for Visual Analytics (NCVA) at Linköping University, Sweden. This is a powerful, interactive tool for comparing and analyzing regional statistics. It combines maps and other graphics via the Internet, to increase the user's understanding of regional differences and structures across and within countries. See the Regional Statistics - Try it now.

5. Wiki4Progress.org is the "glue" to fix the pieces of the puzzle

New technologies (web 2.0) are producing a revolution in the way we work, communicate and interact. The web has become our main reference place for any knowledge or search of information, and this trend will continue even more so for the next generations.

Now "in a world in which people and institutions are 'bombarded' by information every day, each Organisation needs to enhance its role as 'knowledge builder'. To benefit fully from new ICT tools, we need to develop, with the help of information specialists (including librarians), a true 'knowledge management' approach, by introducing a process to classify information properly, reduce duplication and facilitate dissemination, repurposing and searching.

The claim that statistics is a technique that serves higher public interests and is performed by skilled people in administration compellingly represents the popular image of an "operational discipline" that mostly consists in the production of official data. Now we need to get all the online active communities and the different levels of users involved in this Global Movement, and the new web technologies can help us.

One of the ICT goals of the Global Project on Measuring the Progress of Societies is to create a new dynamic Wiki Platform, this will be where Progress indicators would be shared at all levels and regions of societies. It shall be called www.Wiki4Progress.org, it is currently under construction and we hope that the first prototype will be available over the coming months. This will be a building structure to fit together "glue" all the pieces of the puzzle. How many of us get frustrated to have to go to various different sites to find the same similar data and then don't know which is the most reliable or relevant one to use? How many passwords or links do we need to get that one figure or fact that we need right now? Doesn't it become frustrating? Wouldn't it be simpler to have one main web place to find all we need to find and learn what we need to know about that topic?

The Wiki4Progress site would be where the open source technologies interact with the statistical data and the experts with the everyday people who need to find, or question and understand topics related to their lives can go there and query or communicate information. This would be a place where information can be shared openly and freely. We will build interactive communities within the Wiki4Progress site. Data could be uploaded via templates by users and the data compared and discussed by the user communities. Expert areas would validate the methods used and give their stamp of approval, where necessary.

So the technologies are here, the pieces of the puzzles can now be put in place. I rely on and strongly encourage the enthusiasm and dedication of the statistical world to interact using this new Wiki4Progress site. This will enable us to share economic, social and environmental indicators, to include well-being and regional topics on our data collections. To visualise this data on interactive GIS maps, charts, dynamic graphs. It will also enable us to communicate in new interactive web communities, and to reach out to new audiences, to share expertise, validate discussions and help us turn information into knowledge.