

International Labor Organization

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International Labour Organization

Every day people across the world in both developed and developing economies are creating an ever growing ocean of digital data. This 'big data' represents a new resource for international organizations with the potential to revolutionize the way policies, programmes and projects are generated. The International Labour Organization (ILO) is no exception to this has begun to discuss and engage with the potential uses of big data to contribute to its agenda.

Focus

The ILO, founded in 1919 in the wake of the first world war, became the first specialized agency of the United Nations. It focuses on labour issues including: child labour, collective bargaining, corporate social responsibility, disability, domestic workers, forced labour, gender equality, informal economy, international labour migration, international labour standards labour inspection, microfinance, minimum wages, rural development, and youth employment. By 2013 the ILO had 185 members (of the 193 member states of the United Nations). Among its multifarious activities, it is widely known for its creation of Conventions and Recommendations (189 and 203 respectively by 2014) related to labour market standards.

Where Conventions are ratified, come into force and are therefore legally binding, they create a legal obligation for ratifying nations. For many Conventions even in countries where they are not ratified, they are often adopted and interpreted as the international labour standard. There have been many important milestones create by the ILO to shape the landscape to encourage the promotion of improved working lives globally, although a significant milestone is often considered to be the 1998 Declaration on the Fundamental Principles and Rights to Work which had four key components: the right of workers to associate freely and collectively; the end of forced and compulsory labour; the end of child labour; the end of unfair discrimination among workers. ILO members have an obligation to work towards these objectives and respect the principles which are embedded in the Conventions.

Decent Work Agenda

The ILO believes that work plays a crucial role in the well-being of workers and families and therefore the broader social and economic development of individuals, communities and societies. While the ILO works on many issues related to employment their key agenda which has dominated activities in recent decades is 'Decent Work'.

'Decent work' refers to an aspiration for people have work that is productive, provides a fair income with security and social protection, safeguards basic rights, offers equal opportunities and treatment, opportunities for personal development and a voice in society. 'Decent work' is central to efforts to reduce poverty and is a path to achieving equitable, inclusive and sustainable development; ultimately it is seen a feature which underpins peace and security in communities and societies.

The 'Decent Work' concept was formulated by the ILO in order to identify the key priorities to focus their efforts. 'Decent work' is designed to reflect priorities on the social, economic and political agenda of countries as well as the international system. In a relatively short time this concept has formed an international consensus among government, employers, workers and civil equitable globalization, a path to reduce poverty as well as inclusive and sustainable development. The overall goal of 'Decent Work' is to instigate positive change in for people at all spatial scales.

Putting the Decent work agenda into practice is achieved through the implementation of the ILO's four strategic objectives, with gender equality as a cross-cutting objective:

- 1) Creating jobs to foster an economy that generates opportunities for investment, entrepreneurship, skills development, job creation and sustainable livelihoods.
- 2) Guaranteeing rights at work in order to obtain recognition for work achieved as well as respect for the rights of all workers.
- 3) Extending social protection to promote both inclusion and productivity of all workers. To be enacted by ensuring both women and men experience safe working conditions, and allow free time, take into account family and social values and situations, and provide for compensation where necessary in the case of lost or reduced income.
- 4) Promote social dialogue by involving both workers and employers organizations in order to increase productivity, avoid disputes and conflicts at work, and more broadly build cohesive societies.

ILO Data

The ILO produces research on important labour markets trends and issues to inform constituents, policy makers, and the public about the realities of employment in today's modern globalized economy and the issues facing workers and employers in countries at all development stages. In order to do so it draws on data from a wide variety of sources.

The ILO is a major provider of statistics as these are seen as important tools to monitor progress towards labour standards. In addition to the maintenance of key databases such as LABOURSTA, it also publishes compilations of labour statistics, such as the Key Indicators of Labour Markets (KILM) a comprehensive database of country level data for key indicators in the labour market which is used as a research tool for labour market information. Other databases include: the ILO STAT, a series of data bases with labour related data; NATLEX which includes legislation related to labour markets, social security and human rights; and NORMLEX which brings together ILO labour standards and national labour and security laws. The ILO data base provides a range of data sets with annual labour market statistics including over 100 indicators worldwide including annual indicators as well as short term indicators, estimates and projections of total population, and labour force participation rates.

Statistics are vital for the development and evaluation of labour policies, as well as more broadly to assess progress towards key ILO objectives. The ILO supports member states in the collection and dissemination of reliable and recent data on labour markets. While the data produced by the ILO are both wide ranging and widely used they are not considered by most to be 'big data', and this has been recognised.

ILO, Big data and the Gender data

In October 2014 a joint ILO-Data2X roundtable event held in Switzerland identified the importance of developing innovative approaches to the better use of technology to include big data, in particular where it can be sourced and where innovations can be made in survey technology. This event, which brought together representatives from national statistics offices, key international and regional organizations, and non-governmental organizations, was organised to discuss where there were gender data gaps, particularly focusing on informal and unpaid work as well as agriculture. These discussions were sparked by wider UN discussions about the data revolution, and the importance of development data in the post-2015 development agenda. It is recognised that big data (including administrative data) can be used to strengthen existing collection of gender statistics, but there needs to be more efforts to find new and innovative ways to work with new data sources to meet a growing demand for more up to date (and frequently updating) data on gender and employment. The fundamental goal of the discussion was to improve gender data collection which can then be used to guide policy and inform the post-2015 development agenda, and here big data is acknowledged as a key component. At this meeting four types of gender data gaps were identified: coverage across countries and/or regular country

production; international standards to allow comparability; complexity; granularity (sizeable and detailed datasets allowing disaggregation by demographic and other characteristics). Furthermore a series of big data types that have the potential to increase collection of gender data were identified:

- Mobile phone records: for example mobile phone use and recharge patterns could be used as indicators of women's socio economic welfare or mobility patterns.
- Financial patterns: exploring engagement with financial systems.
- Online activity: for example google searches or twitter activity which might be used to gain insights into women's maternal health, cultural attitudes or political engagement.
- Sensing technologies: for example satellite data which might be used to examine agricultural productivity, access to health care and education services.
- Crowdsourcing: for example disseminating apps to gain views about different elements of societies.

A primary objective of this meeting was to highlight that existing gender data gaps are large, and often reflect traditional societal norms, and that no data (or poor data) can have significant development consequences. Big data here has the potential to transform the understanding of women's participation in work and communities. Crucially it was posited that while better data is needed to monitor the status of women in informal employment conditions, it is not necessarily important to focus on trying to extract more data but to make an impact with the data that is available to try and improve wider social, economic and environmental conditions.

ILO, the UN and Big Data

The aforementioned meeting represented one example of where the ILO has engaged with other stakeholders to not only acknowledge the importance of big data but begin to consider potential options for its use with respect their agendas. However, as a UN agency they partake in wider discussion with the UN regarding the importance of big data, as was seen as the 45th session of the UN Statistical Commission in March 2014 where the Report of the Secretary-General on 'Big data and the modernization of statistical systems' was discussed. This report is significant as it touches upon important issues, opportunities and challenges that are relevant for the ILO with respect to the use of big data.

The report makes reference to the UN 'Global Pulse' which is an initiative on big data established in 2009 which included a vision of a future where big data was utilised safely and responsibly. Its mission was to accelerate the adoption of big data innovation. Partnering with UN agencies such as the ILO, governments, academics, and the private sector it sought to achieve a critical mass of implemented innovation and strengthen the adoption of big data as a tool to foster the transformation of societies.

There is a recognition that the national statistical system is essentially now subject to competition from other actors producing data outside of their system and there is a need for data collection of national statistics to adjust in order to make use of the mountain of data now being produced almost continuously (and often automatically).

To make use of the big data a shift may be required from the traditional survey oriented collection of data to a more secondary data focused orientation from data sources that are high in volume, velocity and variety. Increasing demand from policy makers for real time evidence in combination with declining response rates to national household and business survey means that organizations like the ILO will have to acknowledge the need to make this shift. There are a number of different sources of big data which may be potentially useful for the ILO: sources from administration e.g. bank records; commercial and transaction data e.g. credit card transactions; sensor data e.g. satellite images or road sensors; tracking devices e.g. mobile phone data; behavioural data e.g. online searches; and opinion data e.g. social media. Official statistics like those presented in ILO data bases often rely on administrative data and these are traditionally produced in a highly structured manner which can in turn

limit their use. If administrative data was collected in real time, or in a more frequent basis then it has the potential to become 'big data'.

There are however, a number of challenges related to the use of big data which face the UN, its agencies and national statistical services alike:

- Legislative: in many countries there will not be legislation in place to enable the access to, and use of, big data particularly from the private sector;
- Privacy: a dialogue will be required in order to gain public trust around the use of data;
- Financial: related to costs for access data;
- Management: policies and directives to ensure management and protection of data;
- Methodological: data quality, representativeness, and volatility are all issues which present potential barriers to the widespread use of big data
- Technological: the nature of big data, particularly the volume in which it is often created meaning that some countries would need enhanced information technology.

An assessment of the use of big data for official statistics carried out by the UN indicates that there are good examples where it has been used for example using transactional, tracking and sensor data. However, in many cases a key implication is that statistical systems and IT infrastructures need to be enhanced in order to be able to support the storage and processing of big data as it accumulates over time.

Modern society has witnessed an explosion of the quantity and diversity of real-time information known more commonly as big data, presenting a potential paradigm shift in the way official statistics are collected and analysed. In the context of increased demand for statistics information, organizations recognize that big data has the potential to generate new statistical products in a timelier manner than traditional official statistical sources. The ILO, alongside a broader UN agenda to acknowledge the data revolution, recognizes the potential for future uses of big data at the global level; although there is a need for further investigation of the data sources, challenges and areas of use of big data, and its potential contribution to efforts working towards the 'Better Work' agenda.

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See Also: United Nations; United Nations Educational, Scientific and Cultural Organization (UNESCO) United Nations Global Pulse.

Further Readings

International Labour Organization. *Key Indicators of the Labour Market*. (2014) International Labour Organization. http://www.ilo.org/empelm/what/WCMS_114240/lang--en/index.htm [Accessed: 10/09/14].

International Labour Organization . *ILO Databases. International Labour Organization*. (2014) <http://www.ilo.org/public/english/support/lib/resource/ilodatabases.htm> [01/10/14].

International Labour Organization. ILOSTAT Database. International Labour Organization. (2014) http://www.ilo.org/ilostat/faces/home/statisticaldata?_afzLoop=342428603909745 [Accessed: 10/09/14]

United Nations. *Big data and modernization of statistical systems. Report of the Secretary-General. United Nations*. United Nations Economic and Social Council. (2013) Available at: <http://unstats.un.org/unsd/statcom/doc14/2014-11-BigData-E.pdf> [Accessed: 1/12/14].

United Nations. *UN Global Pulse*. United Nations. (2014) Available at: <http://www.unglobalpulse.org/>
[Accessed: 10/09/14].