# Data Innovation and the Informal Economy: A Capability Approach Narrative

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While many marginalised groups, including women and poor and low-income families, are working in the informal economy (Adom, 2015), these actors remain absent in major public policies. While policymakers have come to an understanding about the role of the informal economy and the imperative behind extending social protection to informal workers (Surrender and Walker, 2013), recent literature provided hints of economic growth as the unspoken mission of being on the side of the informal actors, (Joshi, Prichard, and Heady, 2014; Schneider and Klinglmair, 2004; Schneider, Buehn, and Montenegro, 2010). Example of such mission includes the rising trend of documenting the informal economy – which is less likely to bring many benefits to the informal actors, compare to firms in the formal economy that get a direct splash of the economic growth. Therefore, a previous hypothesis that data is all that is required to bring equality to the informal economy is inaccurate.

This article aims to unwrap the role of data on the informal economy. More specifically, by looking at recent data innovation, the article criticised the growth narrative behind documenting the informal economy, which hinders improvement in informal actors' livelihood conditions. This article relies on the capability approach first developed by Amartya Sen (see: Sen, 1994, 2001, 2004) and later Martha Nussbaum (see: Nussbaum, 2003, 2011) to evaluate the current usage of statistics to measure the magnitude and nature of the informal economy, in addition to elaborating the 'ideal' of how to define objectives of documenting the informal economy through data innovation.

## Data and the Informal Economy

The effort to document the informal economy goes way back to 1977 when the UN Statistical Commission formed an international expert group on Informal Sector Statistics. While the statistical measurements continue to undergo revisions, one problem remains persistent: the use of unclear, fragmented estimates. Some of the concerns brought by UNECE (2008) were the usage of labour employment surveys to measure employment in the informal economy, reliability of data from different sources, and how to measure illegal activities. Similarly, WIEGO (2014) listed several recommendations that seek to address the weaknesses of the statistical methods. It urges countries to collect the statistical information of informal employment in agriculture, a previously neglected data. By excluding variables that capture the variation of work and modes of economic activities in the informal economy, statistics would not have the right level of utility to deliver the intended outcomes for the informal actors.

Moreover, the statistics still do not account for the workers' wellbeing and are mainly interested in their type of jobs and whether or not they receive social protection. The analysis and evaluation of the undocumented economy by UNECE (2013), for example, is centred on NOE's contribution to GDP. Little to no attention is given to how this measurement is translated into a better policy for workers in precarious occupations in the informal economy.

Another limitation of the current statistical measurement method is its inability to document the changeable nature of occupations in the informal economy and its expansion or decline in size. This limitation puts pressure on policymakers that simply cannot catch up with the changes while having to create a policy that is responsive to the existing situation. The need for a more holistic data set containing information about the living conditions of the informal labours is therefore extremely urgent.

A recent innovation known as the 'big data', the substantial volume of data sets generated from various sources (Glanz, 2013), sparks interest on the role that it can have on shaping development. Just with any kinds of innovation, data innovation also brings positive energy on progress to tackle challenges in the informal economy. There have been some attempts to study the impact of big data or statistical measures on socio-economic issues in the informal economy and social policy literature. In his study of big data and credit access of low-income individuals in China, Kshetri (2016) finds that big data helps financial institutions decide whether to lend the money to low-income individuals by providing richer information about their ability to repay the loan.  But given the scarcity of literature in big data and the informal economy, it is difficult to draw a connection as to whether a technological change in data collection and documentation can bring positive effects to the lives of the informal actors, and likewise, the way society perceives the informal economy. Instead of making an analytical connection between data innovation and socio-economic issues, this article seeks to review the lens through which policymakers view data innovation in the context of the informal economy.

## The Growth Dilemma

Data innovation can be useful for addressing the invisibility of the informal actors and at the same time, give a clearer picture of their actual livings. Yet, oftentimes, growth remains the main analytical argument behind data innovation, even when it is the matter of the informal economy. As such, there is hardly any change in how policymakers defines the informal economy. Looking back, the 'ancient' definition of the informal economy as unregistered economic activities that directly contribute to the country's GDP (Feige, 1989, Brady and Feige, 1990; Schneider and Hofreither, 1986) is representative of the past stance of policymakers in terms of their objective on ensuring growth through the informal economy, which remains unchanged.

What seems to be happening is a renewal of ways to achieve economic objectives with no attention to the living conditions of the informal actors. Contrary to the expectation of developmentalists, people, especially those living in poverty or with low-income that are associated with precariousness, are viewed as the source of growth and not the purpose of development. Growth can, in a way, contribute to development. But, as Ranis, Stewart, and Ramirez (2000) argue, it depends on how the resources are allocated. The problem is, in the context of rising interest in documenting the informal economy, growth in itself is not treated as a means to improve equality.

In the same vein, on the ILO (2019) report, it was mentioned that "social and labour policies take a back seat in national development strategies" (p.78). While it is understood that the tendency to aim for growth is systematically linked to the "developing country" status, policymakers in the region should recognise that it prevents the alleviation of deprivation in various forms (ILO, 2019). The question that should be asked regarding the adoption of big data to document the informal economy is therefore not about whether it allows the undocumented economy to be seen, or its contribution to GDP, but what it can do to the actual livings of informal actors.

## Rethinking the End Goal of Data Innovation

The root cause of this seemingly never-ending problem is how policymakers view the end goal of a policy or an innovation. The capability approach first introduced by Amartya Sen examines development from a human-centred approach. It is not about whether economic growth is improving or whether big data makes the informal economy more visible. It is about what these people can potentially do with their visibility. Robeyns (2017) on criticising the stylised view on development, said:

> "When asking normative questions, we should ask people what they are able to do and what their lives are able to lead" (Robeyns, 2017).

When talking about how policies or innovations affect people, we should start asking questions that are particularly associated with changes in the actual living of the individuals. In the context of the informal economy, much attention has been paid towards increasing their visibility, making them known to the public. Since the informal economy is built upon the notion of invisibility (Frey and Schneider, 2000), the goal has always been about obtaining more acknowledgment. This objective is being wedded to the growth opportunity acquired from making the informal actors visible to the public eyes. The consequences of only thinking about 'acknowledgment' without attempting to deal with the actual living of the informal actors are various. The informal actors, Timoveyev (2012) argues, have to bear a life without social protection, poor working conditions, job insecurity, and no labour contracts. Having considered these problems, increasing visibility through data innovation should therefore consider not merely the growth objective but also how to alleviate the precarious living situations of informal actors. This can be done through documenting the socio-economic conditions of the informal actors. Whether in the end data innovation positively affects GNP or GDP should not be the centre of attention.

On the Future of Work report, ILO (2019, 2020) recommends increasing investment in three areas, namely, i) people's capabilities, ii) the institutions of work, iii) decent and sustainable work. In regard to strengthening people's capabilities, the ILO urges to strengthen social protection systems for workers in all forms of work. In the same vein, to promote decent and sustainable work, the ILO suggests focusing on the informal economy where most people are in a vulnerable position, both in terms of income and wellbeing.

Therefore, the author partly agrees with ILO's recommendation on enhancing people's capabilities to protect people in the informal economy. However, a missing element from ILO's recommendation for the future of work is 'to include policymakers in their suggestion to increase investment on people's capabilities'. Because whether or not documenting the informal economy helps enhance the capabilities of informal actors depends on policymakers' ability to interpret the data and act based on the statistical figures. For instance, policymakers need to understand: what is the rationale behind distinguishing between agricultural and non-agricultural sectors in the informal economy? What does the data say when there are more informal economies in urban than in rural areas? How should policy respond to these differently while still situated within the same country or even the same province? Therefore, big data is not that powerful if the people are clueless about what the data really says.

As such, the growth accumulation tendency in developing countries with a large informal economy can be traced back to two aspects. First, the failure to document the socio-economic conditions of people working in this sector. The informal economy is the workplace of the working poor. Knowing how the bottom of the pyramid dominates this economy, statistics should tell about their living conditions and how it changes over time. The second factor is

government officials' ability to balance the growth and development objectives and understand when the latter should be prioritised. While data innovation allows the documentation of diverse aspects of the informal economy and its actors, the functionality of such data set depends on policymakers' ability to read, interpret, and recognise what kinds of data are needed to help the informal actors lead the lives they have reason to value.

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