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Creating a Feasible Platform for 21st Century Time Use Data Collection

Christopher Payne

Gueorguie Vassilev

The rapid expansion of digital services has emphasized the limits of statistical measures of economic growth to accurately portray changes in living standards. There are now many digital platforms which allow individuals to consume or produce more free services than was possible in a pre-digital age and this has had real benefits for consumers which are very hard to measure. At the same time, digital-only provided services may cause inequalities in service provision that affect different parts of the population. For example, those who aren't as digitally proficient as others, may struggle with digitally mediated services more than others. It is also true that some of the benefit of productive forms of economic activity have always been excluded from economic growth statistics (for example, unpaid household services including informal care, housework, DIY or unpaid transportation services), but there has recently been a renewed interest in the area, partly as a result of digital intermediation (For example, Stiglitz, Sen, Fitoussi, 2009; Bean, 2016). As digital platforms empower households to perform more for themselves, they are also further blurring the boundaries of what households choose to pay the market for, and that which they choose not to.

This paper will review the measurement practices and definition of such unpaid service production and consumption, while doing so in the context of digitally mediated service provision. Although this paper doesn't go as far as presenting the accounting solution to better connect economic measurement with welfare, the paper does propose the online time use survey as a data collection platform to meet future welfare accounting needs. A modernised online time use survey allows a platform for the complete measurement of economic production and consumption through explicit data collection. Although time-use data has been expensive and difficult to collect in the past, moving online presents an opportunity to change that. Beyond cost benefits, online diaries also provide an opportunity to:

- Collect data in a way that better connects economic activity with welfare
- Easily customise the design to collect more information related to specific activities

- Collect or enhance diary data (such as such as geo-location co-presence and some activity data) using data science techniques to lower respondent burden and improve data quality

In 2019, the ONS engaged in a work programme to develop a modernised online light diary approach to time use data collection. This paper shall outline some of the results of the development of the new tool, discuss results of user testing and piloting, show how the data collected can be used to develop measurement of economic and wider welfare, and contextualise this work with what the ONS plans next for the programme. The hope is that a modernised time-use data collection system has the capability to revolutionise economic data collection internationally, helping ensure economic statistics are fit for the 21st century and beyond.