

# From the Digital Divide to Digital Justice in the Global South

[Keynote Web Science Workshop DigDivDigHum-20]

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## ABSTRACT

As we shift paradigms in the relationship between digital technologies and international development, many issues will need to be rethought. In this paper, I look at the changing nature of the relationship between digital and inequality in the global South; in particular tracing the re-scoping from concerns just about the digital divide and exclusion, to broader concerns about digital justice that also cover adverse incorporation into digitalised development systems across economic, political and social spheres.

## CCS CONCEPTS

• **Information Systems**; • **World Wide Web**; • **Web Applications**; • **Social Networks**; • **Social and Professional Topics**; • **Computing / Technology Policy**;

## KEYWORDS

Digital divide, Digital development, Digital justice, Digital inequality, ICT4D 3.0

## ACM Reference Format:

Richard Heeks. 2020. From the Digital Divide to Digital Justice in the Global South: [Keynote Web Science Workshop DigDivDigHum-20]. In *12th ACM Conference on Web Science (WebSci '20 Companion)*, July 6–10, 2020, Southampton, United Kingdom. ACM, New York, NY, USA, 2 pages. <https://doi.org/10.1145/3394332.3402821>

## 1 ICT4D PARADIGM SHIFT

In recent years, there has been talk of a paradigm shift emerging in the relationship between digital technologies and international development; typically referred to either as moving from “ICT4D 2.0” to “ICT4D3.0”, or more generally from “ICT4D” to “digital development” (Bon & Akkermans 2019 [1], Heeks 2020 [6]). Various dimensions of the paradigm shift can be identified: changes in the nature of the technologies being used in the global South; changes in the salience and presence of digital data in development processes; changes in the demographics of digital users; etc.

Out of these dimensions of change, one can then identify changes in a number of development issues. The one discussed here will be that of digital inequality; originally understood in terms of the digital divide; something which, historically, has been a central digital problem for the lower-income countries of the global South.

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*WebSci '20 Companion*, July 6–10, 2020, Southampton, United Kingdom

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ACM ISBN 978-1-4503-7994-6/20/07.

<https://doi.org/10.1145/3394332.3402821>

Initially defined in terms of lack of access to digital technologies, the digital divide has extended over time to include lack of ability to afford the technology, and lack of ability to effectively use the technology (Heeks 2018 [5]). But the problem remains framed in terms of exclusion.

As digital intensification during the Covid lockdown has demonstrated, the digital divide remains a potent constraint on development. However, growing digitisation in recent years has meant that growing numbers of citizens in the global South are no longer excluded from digital systems and processes:

“We can thus talk seriously about the existence of a digital “nervous system” for development. This is a pervasive digital infrastructure in which most development organisations from international agencies through government departments to small community-based organisations have internet access—often broadband internet access—and in which most individuals in developing countries have digital mobile phone access.” (Heeks 2020 [6]).

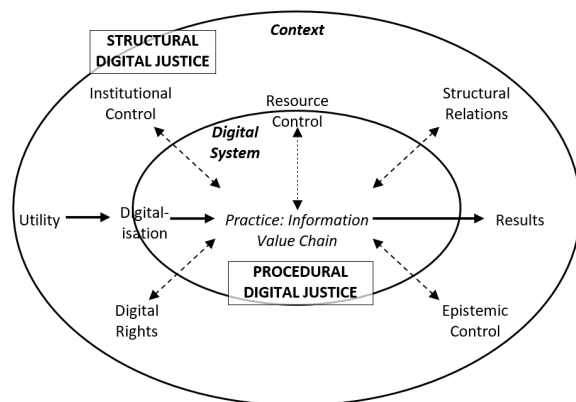
From this, a new challenge emerges. Not exclusion but “adverse incorporation”, defined “as operating ‘when powerful, connected people command resources from which they draw significantly increased returns by coordinating the effort of outsiders whom they exclude from the full value added by that effort’ (Tilly, 1998, p. 10 [12]).” (Phillips 2013: 176 [11]). As the definition indicates, adverse incorporation is a key mechanism by which inequalities are maintained and increased: as those with power and resources gain more from development systems than those who are adversely incorporated.

We can see evidence of adverse incorporation into digitalised development systems – and consequent exacerbation of inequalities – across economic, political and social spheres. For example:

- The so-called “thintegration” of African small enterprises into digitalised global value chains, where gains are made by lead firms in the global North at the expense of those small enterprises (Murphy & Carmody 2015 [10], Foster et al. 2018 [4]).
- Use of digital technologies to provide the state with increasing means to surveil and control its populations (Creemers 2018 [2]).
- The way in which growing use of mobile phones can be associated with an increase in violence against women (Hobbis 2018 [9]).

## 2 SOCIAL JUSTICE

The battle against the digital divide and for digital inclusion must continue via technical and social innovation to make digital more ubiquitous, more affordable and more usable. But alongside this, concerns about digital equity must also include a battle against adverse digital incorporation.



**Figure 1: Conceptual Model of Digital Justice for Development (adapted from Heeks & Shekhar 2019 [7])**

This will first mean countering the current adverse digital incorporations. An example here would be the Fairwork project, which seeks to address inequalities between capital and labour as workers are adversely incorporated into the digitalised labour market of the platform economy (Fairwork 2019 [3]). Or use of mobile phones as a platform intervention seeking to prevent gender-based violence (Yankah et al 2019 [13]).

It will also mean designing “advantageous digital incorporations”: those with a specific pro-equity focus. Pro-equity uses of digital technologies have been a mainstay of the ICT4D field for many years. The insight provided by adverse incorporation, however, is that incorporating marginalised groups into development systems typically leads to growing inequality due to the unequal structural basis of those systems (Hickey & Du Toit 2013 [8]). Advantageous digital incorporation can only occur, then, if digital interventions in some way address underlying structural inequities.

This takes the debate away from the language of technology and design and into the realm of social justice. As the Figure 1 model demonstrates, it takes the focus away from the practices and procedures of digital development systems – what one may call procedural digital justice – and towards the need to impact the wider institutions, structural relations, digital rights and episteme that surround such systems. Only by impacting those can we move from adverse to advantageous digital incorporation, and deliver digital justice in the global South.

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