"Development Implications of Digital Economies" (DIODE) Workshop Report (Cape Town, 22-23 Jan 2018)

Report of the third workshop of the ESRC GCRF strategic research network, "Development Implications of Digital Economies" (DIODE), held in Cape Town, South Africa.

A. Research Themes

The following research themes relating to digital economies and development emerged from the workshop presentations and discussions.

Institutions and the Digital Economy

Institutional Narratives for the Platform Economy
- De-institutionalisation: that the move to platforms is eroding or destroying the traditional institutions that oversee work and its management
- Re-institutionalisation: that new or different or renewed institutions are arising as work moves onto platforms
- Global differentiation: that the conclusions we draw about institutions and platform labour are different in the global South to the global North
- Institutional trajectory: are we seeing an institutional convergence to the middle; a race to the bottom; or to the top; or continuing institutional divergence?

Institutional Differentiation
- The context and benchmarks for digital labour (esp. gig economy) are different in the global North vs. global South. How should digital labour in the global South then be understood: as improving or worsening work standards; with what implications for interventions to improve standards; and with support for fair work standards from which stakeholders?
- What parallels and non-parallels are there between digital labour and informal labour in the global South?

Institutional Embedding and Digital Ventures
- Successful digital start-ups in the global South seek an "optimal embeddedness" that is neither too embedded nor too disembedded in the intersection of the local and the global; and in the intersection of the vertical/product sector and the horizontal/digital sector.
- Historically, concerns about "footloose capital" and the ICT sector have been somewhat unfounded as capital became relatively more embedded than anticipated. But will this still be true of gig economy capital?
- Traditional multinationals have in some cases had both a demonstrator and supply chain impact in developing countries that has raised work standards. But will this still be true of gig economy multinationals?

- Why are so few developing countries significantly involved in the digital gig economy? Are there locational dis/similarities to the distribution of IT offshoring? Is there any path dependency e.g. to earlier unevenness of IT offshoring?

The Developmental State and the Digital Economy
- Historically, some developing country governments have played a developmental state role vis-à-vis the ICT sector. Can and will they play such a role vis-à-vis the new digital economy: the gig economy, the platform economy? If so, what is that role?
- The digital-gig-economy-as-youth-unemployment-solution meme is spreading from government to government in the global South: Who is driving this? Who is benefiting from this? Is there any learning from past experiences?

Institutional Logics
- What competing logics shape the trajectories and impact of digital labour initiatives and digital enterprises in developing countries?
- For digital social enterprises – social enterprises based around a digital business model – how best can they manage the tensions but also synergies between welfare and commercial logics?

Platforms as Institutions
- How do the different types of platforms intersect with key development goals? How do the different institutional and other affordances of platforms intersect with key contextual features of developing countries?

The Dream of the Digital Economy
- The notion of the digital economy is a powerful imaginary; particularly motivating around the idea of a digital economy job. There are increasing numbers of on-ramps that promise to provide the path to realising this dream – government gig economy schemes; quasi-informal sector education; prizes. But to what extent do these pathways deliver; and what is the balance of benefits between the organisations providing the path and the individuals persuaded to participate?

## B. Theory/Methods Issues & Recommendations

Digital Economy Methods
- Notwithstanding the closed nature of much of the digital economy; there are increasing opportunities to access data online e.g. via scraping
- Ensuring rigour for all methods used, with some potential value for mixed methods in order to complement correlation and causation

Digital Economy Methodologies
- Encouragement for and a bias towards action research: "The philosophers have only interpreted the global South's digital economy in various ways; the point, however, is to change it"
- Commitment to development would suggest co-design methodologies are appropriate for any digital economy action research
- Need to broaden consideration of ethics to include digital economy issues such as data justice and digital rights of participants
- Balancing the recognition of diversity and difference between developing country contexts with the value and legitimacy of some commonality and generalisation across the global South; and the potential value of critical realism in enabling this
- Recognising the potential value of pragmatism as a philosophy guiding research on digital economies and development

Digital Economy Theory
- The value of theory which encompasses the macro perspective (e.g. because of the demonstrated importance of political economic forces in shaping digital economies); but also the value of connected the macro and the micro theoretically
- Pushing use of theory during write-up in order to expand the impact of publications on digital economy and development:
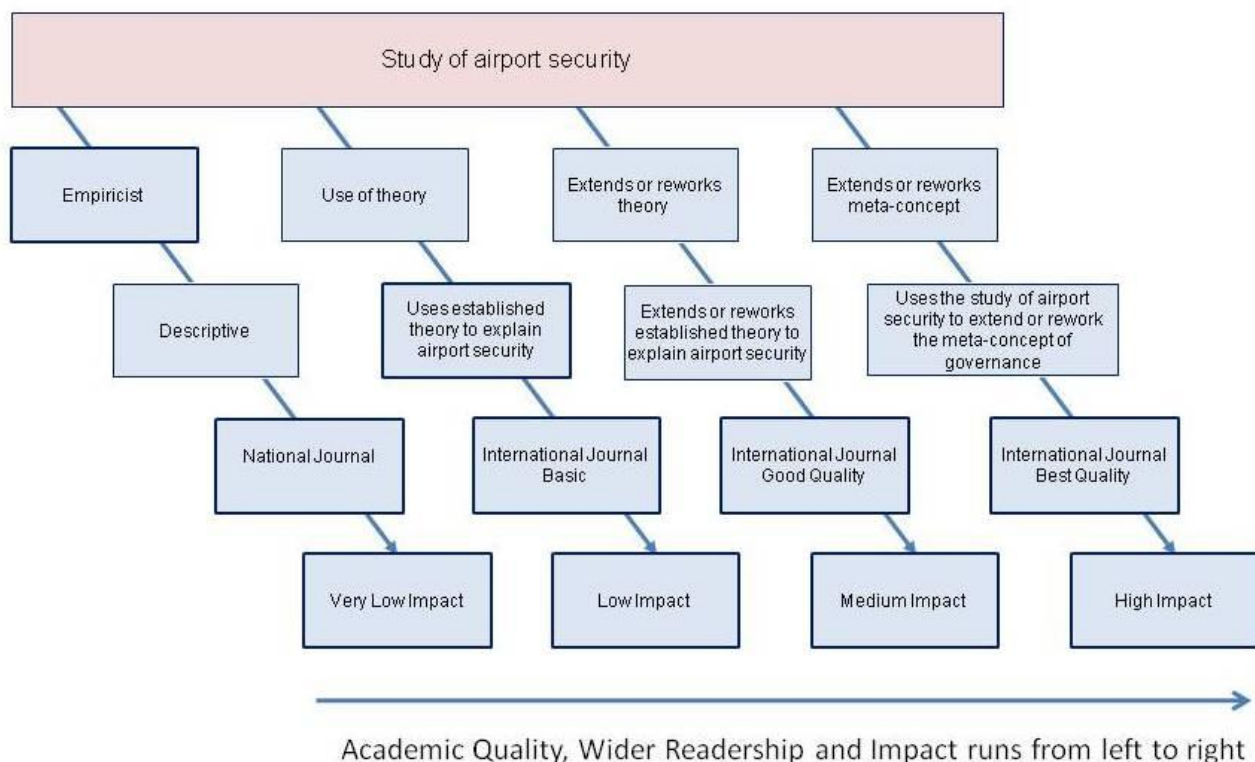
Source: Kitchin, R. (2014) Writing for impact: how to craft papers that will be cited, *The Programmable City*, 23 Apr
http://progcity.maynoothuniversity.ie/2014/04/writing-for-impact-how-to-craft-papers-that-will-be-cited/

- Use of middle-range theories can be particularly beneficial (although not specifically recommended for digital economy research, examples of middle-range theories would be media richness theory and the technology acceptance model):

Table 1: Differences between Grand and Middle-Range Theories	
Grand Theories	**Middle-Range Theories**
Unbounded, all encompassing	Bounded by subject matter (i.e., heavily contextualized)
Constituted from mostly axioms containing constructs and theoretical terms	Constituted from propositions containing observables (or easily tested as such)
Low on the falsifiability scale and passes most tests	High on the falsifiability scale and may easily fail tests
Differentiated by philosophy itself (i.e., rejecting other competing philosophies)	Differentiated by specialization (i.e. accepting of other theories)
Primarily a means of establishing legitimacy	Legitimacy is evidenced by scope, precision, and variety of investigative tools
May be developed by sheer genius, fully formed from the mind of the theorist, and may grow as a result of discussion	Requires great mass of basic observations and grows by increasing knowledge and experience of its scientists and researchers
Does not require data, generalization is based on the paradox of induction	Requires data, but is abstract enough to provide generalization
Starts from the outside with a total system and imposes on derived theories	Starts from the inside and possibly builds a unified system across different domains

Source: Hassan, N.R. & Lowry, P.B. (2015) Seeking Middle-Range Theories in Information Systems Research, paper presented at *Thirty Sixth International Conference on Information Systems*, Fort Worth, TX, 13-16 Dec

C. Workshop Timetable

Monday 22nd January 2018

Timing	Content
9:00 - 9:30	Introductions: *Richard Heeks & Jean-Paul van Belle*
9:30 - 11:00	Session 1: Talks 1-3 *Richard Heeks*: Institutional Theory and Digital Labour in Developing Countries *Balaji Parthasarathy*: Institutional Roles and Challenges for International Development in the Digital Economy *Brian Nicholson*: The Embeddedness of Digital Start-Ups in Latin America
11:00 - 11:30	Tea / Coffee
11:30 - 13:00	Session 2: Talks 4-6 *MN Ravishankar*: Hybrid Organizing and Digital Social Entrepreneurship *Yudho Giri Sucahyo*: The Digital Economy in Indonesia *Jonathan Donner*: Digital Platforms and Development
13:00 - 14:00	Lunch
14:00 - 15:20	Session 3: Talks 7-8 *Mark Graham*: Measuring the Online Gig Economy Using Data Science *Niels Beerepoot*: Standing Out in the Global Digital Labour Market: Knowledge and Skills for Global Competitiveness in a Winner-Takes-All Market
15:20 - 16:00	Tea / Coffee
16:00 - 17:00	Session 4: Talks 9-10 *Melissa Densmore*: Ethics and Values in Co-Design for Digital Development *Jean-Paul van Belle*: Experiences and Reflections of Doing Empirical Research in Africa

Tuesday 23rd January 2018

Timing	Content
9:45 - 10:00	Introductions: *Richard Heeks*
10:00 - 11:30	Session 5: Talks 11-13 *Tess Wandia*: Digital Government's Responsiveness to Citizen Needs *Nimmi Rangaswamy*: IT Skill Education and Job-Readiness for Millennial India *Payal Arora*: Prizes for Innovation in the ICTs in Education Sector for Developing Countries
11:30 - 12:00	Tea / Coffee
12:00 - 13:00	DIODE Research Activity Workshop: theories and methods in digital-economy-and-development research
13:00 - 14:00	Lunch
14:00 - 17:00	Masterclass for researchers: *MN Ravishankar & Richard Heeks*

D. Workshop Photograph

E. Masterclass Photograph