Value co-creation in the delivery of public services: formulating a strategy for low - and middle - income countries

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Abstract
: Failures of e-Government projects in low- and middle-income countries (LMICs) are well-documented. For many countries information and communication technologies present the most effective approach to overcoming some of the challenges faced in service provision, yet the long-term sustainability of projects may be hampered by an inadequate evaluation of the social and technical environment into which these solutions are placed. More recent literature therefore suggests a strategy of co-creation. This strategy raises questions however on the most relevant approaches to its adoption within LMICs. In this reflection paper we argue for consideration of a decolonising intersectionality framework based on the active involvement of beneficiary communities.

Keywords
intersectionality, co-creation, e-government, co-design, decolonising methodologies

1. A strategy of co-creation

Information and communication technologies (ICTs) are widely perceived as important in the achievement of socio-economic goals [1], and support increased transparency, openness and accountability of public institutions as part of e-government initiatives [2]. The long-term sustainability of e-government projects in low- and middle-income countries (LMICs) is often disrupted however, not only by institutional policies and capabilities, but also by extraneous factors such as misalignment between project outcomes and stakeholder expectations [3].

Recent literature on citizen participation in e-government processes therefore challenges traditional top-down approaches to e-government project development and, instead, emphasise co-creation in project design [4]. This strategy recognises that projects may fail as 'they do not recognise the social and organisational complexity of the environment in which the systems are deployed' ([5], p 10). Co-creation intimates the active role of citizens at multiple stages of project development [6, 7]. Embedded in the idea of co-creation is the concept of value as underscored by the service-dominant logic prevalent in marketing theory – that the term co-creator asserts the endogenous role of consumers in value co-creation, where the organisation may only offer value propositions [8]. The perception of value however varies by beneficiary [9] and successful

co-creation is therefore dependent on a perception of derived mutual benefits which can only be understood through pre-determination of stakeholders' needs.

2. Value co-creation in public service delivery

In the context of public service delivery, governments make value propositions that typically focus on improving government efficiencies, increasing transparency, and identifying "socioeconomic costs and benefits, for example, gains in time or money to pay government bills, or to comply with taxes and other dues, or to obtain a registration certificate" ([10], p. 330). Value, however, is perceived and determined by service consumers [8]. Without a clear needs-assessment, value propositions may therefore be incongruent with user perception of service value. Further, if co-created value is used as a measure of e-government success – that is, it is not viewed as a by-product of co-creation processes but as a primary objective – then co-creation processes should be predicated by a full expression and understanding of stakeholder needs. The concept of value is somewhat rhetorical however as it carries an implicit assumption of a positive outcome for all stakeholders [11]. Value co-destruction – where at least one group of stakeholders experiences negative outcomes – may also occur. Uppström and Lönn [12] explore this dichotomy through the adaptability of information systems (IS) artefacts across boundaries between stakeholders. Value co-destruction may be attributed to the level of complexity of the boundaries that are traversed by these IS artefacts or 'boundary objects' - defined as "objects which are both plastic enough to adapt to local needs and the constraints of the several parties employing them, yet robust enough to maintain a common identity across sites" ([13], p. 7). In LMICs, these boundaries may occur between communities or stakeholder groups that may not be culturally, socially, or ethnically homogenous. We argue that consideration of these complex boundaries and the implications for value co-creation have not been sufficiently addressed in the e-government literature.

3. Current discourse in social science research

To address this gap, those objects that are used across more complex boundaries [12] suggest the need for collaborative, co-created processes with beneficiary stakeholder groups. Social science research at the community level, often referred to as community-based participatory research (CBPR), emphasises a reciprocal relationship, where participants are engaged throughout the research process from initial problem definition to data collection, analysis and dissemination of findings [14]. Effective CBPR is thus characterised by minimisation of power imbalances between researcher and research participants and the creation of positive outcomes for the community that are sustainable beyond the life of the research project [14]. Many communities however face marginalisation in research processes. Decolonisation methodologies aim to work closely with participants in the collection, analysis and dissemination of new knowledge [15], and focus on the implications of research on participants and their communities. The assumption in this narrative is close collaboration in the design of research where some level of reciprocal partnership is achieved [16]. This reciprocity encompasses sensitivity to the social and cultural traditions and values of the communities in which this research occurs, and close

collaboration between researcher and participants in the co-creation of value. We further reflect on decolonising methodologies in the context of co-created e-government solutions.

3.1. Decolonialisation Methodology and Intersectionality

Colonialism works to organise individuals through a hierarchy that divides and subjugates people into categories of race, gender and sexuality [17, 18]. Consequently, colonialism has segregated and displaced communities, but also superseded their knowledge base. Chilisa and Mertens ([19],p .243) contend that people in LMICs "have no or limited roles in planning the methodological strategies needed to support an accurate understanding of problems, crafting appropriate interventions, or designing an evaluation that is responsive to their culture, context, and needs." It is such community knowledge that is vital to improve service provision, however capturing such knowledge requires a nuanced understanding of systems and structures that impact the lived realities of those living in LMICs. Decoloniality is an epistemological concept concerned with promoting commitment to and a shared knowledge of alternate forms of language, action and involvement [20].

Participant contributions particularly in LMICs, are often undervalued in service provision [21]. For example, funding organisations may structure financing around how information is disseminated: the need for formally organised information dissemination workshops with stakeholders as opposed to small gatherings with only senior members of the community; imposition of time restrictions for data collection and analysis, that conflict with the desire by research participants for face-to-face relationships that are developed over a longer period of time; or the adherence to ethical guidelines of the researcher's organisation or funding agency rather than locally developed guidelines. These systems and guidelines are structured according to paradigms from higher income countries (HIC) and are based on evaluations, monitoring and evaluation systems, which do not attend to the intricate relational issues shaped by the societal norms, cultures and priorities of communities within LMICs [19]. It is therefore arguable that many of the institutionalised research structures and requirements may not embrace decolonisation methodologies. Consequently, there is a need for new systems to be developed that reflect the needs of LMIC communities. An intersectional lens can promote the use of local knowledge in the development of IS systems. Intersectionality is both a theoretical approach and a political practice that examines how inter-related systems and structures of power create and sustain practices of marginality and oppression [22]. It refers to the interaction of categories of difference in relation to individual lives, social practices, and cultural norms and the outcomes of these interactions in terms of power and oppression. Intersectionality can enhance our understanding of marginalisation at both the relational and structural level [23]. A look at the relational level can reveal how IS are utilized by individuals. At a macro level, structural factors such as colonialism, that inhibit the sustainability of IS, require exploration. Consequently, intersectionality enables an investigation into the interconnectedness of social categories and systems and provides a deeper understanding of communities and the social, cultural, and economic environment in which IS are employed, and how junctures of oppression impact the sustainability of IS in LMIC communities.

Decoloniality examines the basis of these oppressive systems and provides a means of mitigating their influence by questioning dominant epistemologies, with the aim of breaking hegemony.

Hence, decoloniality connects with intersectionality to resist prevailing knowledge. A decolonial intersectionality contests ideologies that suggest alternative knowledges are inadequate [24]. Writing about the benefits of a decolonial framework to improve technical communication, Haas ([25], p.304), claims 'this framework also pushes user-centered design theorists and practitioners to interrogate the extent to which all designers imagine users that mirror themselves—and calls into question the extent to which designers are capable of imagining users different from themselves.' Hence, a decolonial intersectionality can provide greater scope for co-creating sustainable IS systems that meet stakeholder needs and expectations rather than reflecting the views of the designers.

Intersectional coalitions require commitment from all stakeholders and do not necessarily occur naturally. Townsend-Bell [20] explains how bridge actors can promote successful coalitions. Bridging reflects the way in which actors, who are often intersectionally marginalised, become a mobiliser, using their knowledge, concerns, and experiences to promote links between communities and ideas. Working with communities towards co-creation of IS in this way ensures that local knowledge is utilised, thus improving long-term sustainability. For e-government projects to garner success, facilitating a deeper understanding of user perceptions should be an integral objective of the design process. Indeed, if a boundary object is to operate effectively it must make sense and function for all communities. We agree with Uppström and Lönn [12] that when a boundary object is nonsensical it is not viable and consequently does not facilitate collaboration and value co-creation. Despite various research analysing the role of stakeholders in e-government initiatives, most studies have been founded on general categorisation [26].

Hence, we argue that an intersectional framework is key to understanding the interrelated and multifaceted nature of LMICs when creating IS systems that can add value for all stakeholders. Additionally, improving community well-being through IS necessitates the introduction of potentially transformative practices where the consumer effectively participates in value creation. We believe that an intersectional approach that aids cocreation can abate co-destruction that can result from the homogenisation of communities. Rather than homogenising communities, as is the tendency with top-down approaches [27], recognising intersections that may impact the viability of IS can refine our understanding of their long-term sustainability. Indeed, the main principle of research based on intersectionality is "to probe beneath the single identity to discover other identities that may be present and contributing to a situation of disadvantage." ([28], p.204). A decolonial intersectionality can therefore capture the experiences of the marginalised to create a richer needs assessment which benefits co-creation in LMICs. Accordingly, the construction and management of boundary objects is vital "to developing and maintaining understanding across intersecting social worlds" ([13], p.393).

4. Concluding Comments

Developing a co-created strategy for long-term sustainability of implemented solutions demands the involvement of all stakeholders. The importance of approaches leading to successful co-creation is particularly pertinent to communities in LMICs where an axis of privilege and subjugation creates complex boundaries impacted by intersections relating to multifarious issues of culture, resources, education, and environment. Hence, research concerning sustainable

and equitable IS within LMICs, requires a decolonial intersectional framework which avoids a homogenisation of marginalised communities and the application of hegemonic knowledge systems. In addition, the methodology needs to capture the world views of peripheral communities and adhere to notions of justice and reciprocity. Thus, in formulating a co-creation strategy for public service delivery projects in LMICs we are tasked with ensuring that the knowledge and experiences of participants are captured, analysed and disseminated in ways that resonate with the realities of their respective communities [15].

References

[1] R. Pradhan, M. Arvin, M. Nair, J. Hall, S. Bennett, Institutional development in an information-driven economy: can icts enhance economic growth for low- and lower middle-income countries?, Information Technology for Development (2022). doi:10.1080/02681102.2022.2051417.

[2] A. Addo, P. Senyo, Advancing e-governance for development: Digital identification and its link to socioeconomic inclusion, Government Information Quarterly 38 (2021) 101568.

[3] D. Frost, B. Lal, E-government project design in developing countries, in: ECIS IFIP WG 8.6 2018 Conference: Smart Working, Living and Organising, University of Portsmouth, Portsmouth, 2018.

[4] M. Jong, S. Neulen, S. Jansma, Citizens' intentions to participate in governmental co-creation initiatives: Comparing three co-creation configurations, Government Information Quarterly 36 (2019) − 500.

[5] G. Baxter, I. Sommerville, Socio-technical systems: From design methods to systems engineering, Interacting with Computers 23 (2011) 4–17.

[6] A. Khan, S. Krishnan, Citizen engagement in co-creation of e-government services: a process theory view from a meta-synthesis approach, Internet research 31 (2021) 1318–1375.

[7] W. Voorberg, V. Bekkers, L. Tummers, A systematic review of co-creation and co-production: Embarking on the social innovation journey, Public Management Review 17 (2015) 1333–1357.

[8] S. Vargo, R. Lusch, Evolving to a new dominant logic for marketing, in: R. Lusch, S. Vargo (Eds.), The service-dominant logic of marketing, Routledge, 2006.

[9] A. Scupola, I. Mergel, Co-production in digital transformation of public administration and public value creation: The case of denmark, Government Information Quarterly 39 (2022) 101650.

[10] S. Madon, S. Sahay, R. Sudan, E-government policy and health information systems implementation in andhra pradesh, india: Need for articulation of linkages between the macro and the micro, The Information Society 23 (2007) 327–344.

[11] C. Domegan, K. Collins, M. Stead, P. McHugh, T. Hughes, Value co-creation in social marketing: functional or fanciful?, Journal of Social Marketing 3 (2013) 239 − 256.

[12] E. Uppström, C. Lönn, Explaining value co-creation and co-destruction in e-government using boundary object theory, Government Information Quarterly 34 (2017) 406–420.

[13] S. Star, J. Griesemer, Institutional ecology, 'translations' and boundary objects: Amateurs

and professionals in berkeley's museum of vertebrate zoology, Social Studies of Science 19 (1989) 387–420.

[14] E. Wilson, Community-based participatory action research, in: P. Liamputtong (Ed.), Handbook of Research Methods in Health Social Sciences, Springer Singapore, 2019, p. 285–298.

[15] E. Rix, S. Wilson, N. Sheehan, N. Tujague, Handbook of research methods in health social sciences, 2019.

[16] J. Ellis, M. Earley, Reciprocity and constructions of informed consent: Researching with indigenous populations, International Journal of Qualitative Methods 5 (2006).

[17] R. Grosfoguel, l. Oso, A. Christou, Racism', intersectionality and migration studies: framing some theoretical reflections, Identities 22 (2015) 635–652.

[18] O. Oyěwùmí, The invention of women: Making an African sense of western gender discourses, University of Minnesota Press, 1997.

[19] B. Chilisa, D. Mertens, Indigenous made in africa evaluation frameworks: Addressing epistemic violence and contributing to social transformation, American Journal of Evaluation 42 (2021) 241–253.

[20] E. Townsend-Bell, Breaking hegemony: coalition as decolonial-intersectional praxis, European Journal of Politics and Gender 4 (2021) 235–253.

[21] World Bank, World development report 2004: making services work for poor people, The World Bank, 2003.

[22] K. Crenshaw, Demarginalizing the intersection of race and sex: A black feminist critique of antidiscrimination doctrine, feminist theory and antiracist politics, University of Chicago Legal Forum 1989 (1989) 8.

[23] C. Corus, B. Saatcioglu, An intersectionality framework for transformative services research, The Service Industries Journal 35 (2015) 415–429.

[24] P. Collins, Intersectionality as critical social theory, Duke University Press Books, 2019.

[25] A. Haas, Race, rhetoric, and technology: A case study of decolonial technical communication theory, methodology, and pedagogy, Journal of Business and Technical Communication 26 (2012) 277–310.

[26] O. Ashaye, Z. Irani, The role of stakeholders in the effective use of e-government resources in public services, International Journal of Information Management 49 (2019) 253–270.

[27] B. Vogel, Civil society capture: Top-down interventions from below?, Journal of Intervention and Statebuilding 10 (2016) 472–489.

[28] N. Yuval-Davis, Intersectionality and feminist politics, European journal of women's studies 13 (2006) 193–209.