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Digitalisation of Indigenous Finance Institutions in Sub-Saharan Africa: A Critical Discourse Analysis

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Abstract:

This paper conducted a Critical Discourse Analysis (CDA) on top IS publication outlets in Sub-Saharan Africa. The aim was to identify and critically evaluate taken-for-granted assumptions contributing to the marginalisation of indigenous finance institutions (IFIs). The scarcity of literature suggested absence of a discourse on IFIs in the ICT4D domain. Consequently, no substantive deductions were made on violations of validity claims. Habermasian CDA was nonetheless applied to the selected literature to highlight issues relating to comprehensibility, truth, sincerity and legitimacy. Majority of the literature extended the narrative of IFIs as part of the transient informal economy that is expected to dissipate as viral digital technologies such as mobile money aid the mainstream financial system to achieve total financial inclusion. Alternative perspectives were missing from this body of literature. Appropriate definitions, diverse research questions and methodologies are required to better understand IFIs, their history, contemporary practices and role in sustainable development.

Keywords: Indigenous Finance Institutions, Informal Finance, Digitilisation, Digital Technologies

1. Introduction

Digitalisation “refers to the structuring of many and diverse domains of social life around digital communication and media infrastructures” [1, p. 5]. The concern of this paper is to explore how indigenous finance institutions (IFIs) are interacting with, influencing, and being influenced by digital technologies. The term ‘indigenous’ is elusive to define. From an African perspective, indigenous knowledge is regarded as that which is embedded in African philosophy and practices that have existed for centuries [2]. To define indigenous finance institutions, a brief review of the informal sector is necessary. The informal sector has been the subject of debates, particularly among economists and policymakers. Even the definition of what the informal sector is, is not conclusive [3]. Broadly, the informal sector is a ‘grey market economy’ that is not governed by the formal and legal frameworks outlined for businesses in a certain jurisdiction [4].

From a macroeconomic viewpoint, governments have related to the informal sector in either of two ways [5]. The first is by embracing and supporting it. The second is attempting to bring it under their regulatory purview to enforce various standards such as labour and tax laws. The rationale for businesses in the informal economy is to avoid high operational costs that come with formalisation, and this allows them to provide affordable products and services to large sections of the population [4]. While unregulated by formal legal frameworks, the informal sector has its own internal system created and enforced by various stakeholders within the ecosystem. The entire phenomenon can, in one way, be considered a response to the brutal and bureaucratic formal system that constrains personal initiative particularly among groups with limited socio-economic capital. The informal sector thus creates a “shadow” economy that offers a path out of poverty. In the place of written laws and contracts, the informal economy is governed by mutual cooperation, collaboration and reciprocity.

The informal sector is vast, but this article is only concerned with one aspect of it: informal finance institutions. Origins of informal finance institutions such as rotating savings and credit associations (ROSCAs) and accumulating savings and credit associations (ASCAs) have been traced to urban immigrant groups needing a source of capital to build new livelihoods in new environments [4], [6]. In pre-monetized societies in Africa, similar practices existed prior to European contact with the continent [2]. There were activities coalesced around families, communities, or kingdoms whose objective was communal welfare. This is consistent with one of the most prominent African philosophies, Ubuntu, which posits that a person is a person through other people, thus placing the community's interests above the individual.

Modern day community-based finance institutions that still espouse Ubuntu philosophy can be found across Africa [2]. Chama, Chilemba in East Africa, Esusu, Susu, Tontines, Djanggi in West and Central Africa, stokvels, Chilimba in Southern Africa. Although in literature these institutions are typically referred to as informal finance institutions, it is owing to their links to pre-colonial practices that the term 'indigenous finance institutions' is preferred in this article. By so doing, the virtues of indigenous socio-economic practice such as mutual co-operation and communal welfare are given higher credence than the notoriety and lack of governance that the term 'informal' invokes [3].

2. Contextualising Indigenous Finance Institutions

Indigenous finance institutions (IFIs) are significant contributors to household income and employment in developing countries [3]. Specifically, IFIs provide bootstrap financing for small businesses as well as other needs among financially marginalised communities in the global South [2]. Unlike mainstream bank financing, the IFI channels have lower repayment cost and do not have strict requirements such as collateral as prerequisites. This source of capital is crucial particularly to start-ups before they develop the track record that can qualify them for credit with banks.

Despite its centrality in the lives of the financially excluded, the IFI sector has historically been viewed as "temporal", "fringe" or a "waiting room" in the transition process from traditional, rural to the formal, urban economy [3]. This persistent informalization of IFIs has delegitimized their existence, which served to worsen their exclusion in the global financial discourse. In this paper, we view the IFI sector as existing of its own accord, not solely because of marginalisation and exclusion [2], [7]. IFIs have been largely associated with rural, urban poor, low literacy, low-income populations [8]. These groups also tend to be underserved by the mainstream financial system and thus forced to depend on alternative means of accessing capital and other financial services. Although these groups depend more on IFIs, proliferation of IFIs among urban, educated and banked groups suggests that access to the mainstream financial system does not obliterate the role of IFIs.

Although financial inclusion in the mainstream financial system has increased steadily in Sub-Saharan Africa, the widespread use of IFIs has remained. In West African countries such as Ghana and Nigeria, usage ranges between 50-95% of the adult population [9]. In South Africa, access to mainstream financial services is above 70%, which is one of the highest in Africa [10], [11]. Nonetheless, 11.5 million people, which is more than half of the adult population, use IFIs regularly [12]. While the number of those with access to banks is large, only about 33% use them for savings and 12% for borrowing [10]. These are among the services IFIs offer with more flexibility and lower costs than banks. This shows, at least in the case of South Africa, that mere access to the mainstream system does not eliminate people's use of IFIs.

Whether viewed as transition states or lasting institutions, the current role of IFIs in socio-economic development is self-evident. Additionally, the fact that they have survived attempts to formalise and 'civilise' them for decades speaks to the resilience of communal practices and institutions. Resilience in IS discourse has been approached from several perspectives. Heeks and Ospina [13, p. 75] define resilience as "the ability of a system to withstand, recover from, and adapt to short-term shocks and longer-term change." One way of assessing resilience is by looking at before, during and after a disturbance to a system has occurred [14]. Although the technological revolution has affected IFIs, the largest shock they have faced and prevailed against so far is colonialism. Colonialism significantly disrupted livelihoods and socio-economic structures in Sub-Saharan Africa. Thus, it is possible to look at IFIs before, during and after colonialism to get insights about the resilience of these indigenous information systems.

The second approach of assessing resilience is using three attributes: robustness, self-organisation and learning [13]. Robustness is a measure of how well a system can maintain its characteristics and performance in spite of external shocks and disturbances. The current principles, activities, and practices of IFIs are very similar to pre-colonial practices which included among other things regular meetings and contributions in one form or another for the mutual benefit of all members. Self-organisation measures how well a system can recover by rearranging its functions and processes to adapt to external disturbances. IFIs shifted from non-monetary to monetary contributions when the traditional African ways of subsistence were disrupted, and most people transitioned to the cash economy [6]. Learning refers to the system's ability to generate feedback and use it to build new skills, attitudes, and competencies necessary for experimentation and innovation. Ongoing appropriation and domestication of ICTs in IFIs [12], [15] is evidence of a system that is capable of engaging with external knowledge and incorporating it where it is found to improve the system.

By the metrics of resilience outlined by Heeks and Ospina [13] and Atinaf, Molla and Anteneh [14], IFIs are resilient indigenous financial systems. This should interest the ICT4D community to understand IFIs and their relationships with ICTs and development goals better. This is particularly important because of the fundamental differences between the

philosophies underpinning IFIs and digital technologies. IFIs are rooted in African philosophy, that puts *we* (the community) ahead of *I* (the individual) [16]. Digital technologies are underpinned by Western philosophies centred on the individual. Although IFIs are appropriating some digital technologies, there is a fundamental misalignment. This misalignment is worth investigation so that IFIs can be offered ICT solutions aligned with the African way of *knowing* [16], [17], to support them to play their role in socio-economic development.

ICT4D practitioners have been called upon to engage deeper with various stakeholders, including community organisations playing a role in poverty and inequality eradication among other development goals [3]. In 2019, the Electronic Journal of Information Systems in Developing Countries (EJISDC) ran a special issue on “IT for the informal sector in developing countries”. This issue appealed to the IS community to provide nuanced IT solutions that can support the informal sector “beyond the conventional straight-jacketed technology, economic, and policy solutions for the informal sector” [5, p. 1]. Bhattacharya [3] further proposed that ICT has much to offer the informal sector when it is not used solely as a tool to formalise the sector. The rallying call in the special issue and the propositions made therein back this article’s interest to examine the discourse around ICT tools designed for and used by IFIs.

The next section discusses critical discourse analysis as the approach that was chosen for this review and the rationale for the choice.

3. Critical Discourse Analysis (CDA) Review Methodology

Critical discourse analysis (CDA) is one of the methods of conducting systematic literature review. Specifically, it is a critical review method applied when the objective is to examine and challenge ideological assumptions existing in literature [18]. By analysing a discourse, CDA brings out ideological hegemonies that may have been reproduced in literature in a domain. The two most common perspectives in CDA are Foucauldian and Habermasian CDA. While both seek to identify and challenge ideological hegemony with emancipatory ends, they approach it from different perspectives. Foucauldian CDA examines a communicative utterance, the context, and power structures between actors. Further, it examines historical discourse and how it influences current norms and practices. Habermasian CDA on the other hand analyses communicative utterances between actors in a communicative process. This scope limit assumes an ideal speech situation, a transcendental condition where all actors participate in the communication process freely, with no coercion from hegemonic powers.

However, it is acknowledged that the ideal speech situation is rarely achieved due to power imbalances [18]. Thus, communicative utterances are assessed to identify how actors have deviated from the ideal speech situation. This deviation could be a result of conscious or unconscious hegemonic participation. Conscious hegemonic participation is intentional manipulation of communication while unconscious participation constitutes adopting and advancing dominating ideologies in a taken-for-granted manner. Habermasian CDA is concerned with the latter. Habermasian CDA was selected to assess the IFI digitalisation discourse. Applying Foucauldian CDA and assessing conscious hegemonic participation involves direct criticism of individual and institutional actors advancing hegemonic participation. The discourse assessed in this review comprises of publications. It is not part of the objective of this review to assess the authors and affiliated institutions. Rather, the interest is to analyse the discourse itself to identify the various perspectives and assess any unconscious deviations from the ideal speech situation.

Unconscious hegemonic participation is identified by assessing the discourse against four validity claims: comprehensibility, truthfulness, legitimacy, and sincerity [19]. To be comprehensible, utterances should be linguistically simple, free of technical jargon that makes it difficult to understand. Truthfulness refers to the content of an utterance, where arguments should be factual and complete. Legitimate discourse is inclusive of all perspectives. Sincerity is the disparity between the speaker’s utterance and what they intend to communicate.

CDA is value laden. Thus, it is not entirely free of the researchers’ bias, beliefs and assumptions [18]. To support the researchers’ interpretation and judgement of the discourse assessed, empirical evidence is required [18], [19]. This prevents researchers from making conclusions that are not a truthful representation of the analysed text. Wall et al. [18] outline four principles of conducting Habermasian CDA on publication discourse. First is to assume that the publication process aspires towards the ideal speech situation by being open to debate and allowing researchers to present alternative, even unpopular ideas without fear of any negative consequences. The second is to assume that hegemonic participation existing in a domain is unconscious. Hence, focus and criticism is directed towards concepts and not the authors and their institutions. Thirdly, researchers should test each text against the four validity claims but draw conclusions based on the body of literature assessed and not a single publication. Lastly, the review can be conducted on a sub-discipline or across several disciplines depending on the nature of the topic at hand.

The body of literature selected for this review comes from five publication outlets: the Information Technologies & International Development Journal (ITID), Electronic Journal of Information Systems in Developing Countries (EJISDC), African Journal of Information Systems (AJIS), Information Technology for Development (ITD), and IFIP Working Group 9.4 (IFIP). Bai [20] identifies ITID, EJISDC and ITD as the top 3 ICT4D journals globally. AJIS was selected for its specific focus on IS research from within the African continent. IFIP WG 9.4 was selected alongside the journals for being one of the longest running top conferences globally, and is specifically dedicated to research on social implications of ICTs for development. Wall et al. [18] recommend top journals for critical reviews as they have

a wider audience and are more cited, hence have more ideological influence on the community. The four journals and one conference selected are among the top reputable publication outlets for IS researchers in developing countries, particularly those researching ICT4D. They are therefore a good sample of advances in ICT4D, the dominant ideologies around digitalisation and innovation in developing countries.

Before embarking on a critical review, a likelihood that some ideological hegemony exists ought to have been first identified. “A simple review of a representative sample of the literature based on a specific and simple set of criteria may be sufficient to demonstrate the need for a full-scale critical review” [18, p. 11]. The authors’ first conducted a literature review as part of a proposed co-design study to develop an ICT solution for IFIs. It was then that it became apparent that digitalisation of IFIs was scarcely discussed in literature. The literature was extended to the broader informal sector to understand how it is being supported by ICTs. That further supported the intuition that the informal sector is under researched in general, and ICT practitioners’ attention has been called towards the sub-domain [3]–[5]. The EJISDC special issue in early 2019 emphasised the need for more empirical research in the informal sector. This forms the backdrop against which this review will be attempting to establish a discourse in the sub-domain by assessing articles for the period 2019, 2020 and 2021.

The next section presents the analysis and findings based on the four validity claims. The coding schema developed by Wall et al. [18] for conducting CDA was followed for this analysis. It includes guidelines such as which speech elements to analyse for each validity claim as well as the section of publication these elements are likely to be found.

4. Empirical Analysis and Findings

After the 5 publication outlets were identified, the authors searched each of them manually, browsing each issue from 2019 to 2021 and identified topics related to the informal sector or informal finance. This yielded only six papers after full paper screening. Due to this low number, the authors searched Scopus for additional papers using the key words ‘informal financ*’ ‘digitisation’ and ‘digitalisation’. This yielded an additional six papers. All the papers analysed are presented in Table 1. The six papers from the supplementary search on Scopus are marked with an *.

Table 1. A summary of the papers analysed

Authors	Publication	Country/context	Paradigm	Methods
[21]	ITD	Ghana	Positivist	Quantitative
[22]	ITD	Zambia	Positivist	Quantitative
[23]	EJISDC	Zambia	Interpretivist	Qualitative
[24]	EJISDC	Sub-saharan Africa		Qualitative
[25]	ITD	Nigeria		Quantitative
[26]	ITD	44 African countries		Quantitative
[27] *	Journal of Enterprising Communities: People and Places in the Global Economy	42 African countries	Positivist	Quantitative
[16] *	1st Virtual Conference on Implications of Information and Digital Technologies for Development		Critical	Qualitative
[28] *	Telecommunications Policy	Burkina Faso	Positivist	Quantitative
[29] *	1st Virtual Conference on Implications of Information and Digital Technologies for Development	Malawi		Qualitative
[12] *	International Development Informatics Association Conference	South Africa	Interpretivist	Qualitative
[30] *	International Conference on Information Resources Management	South Africa	Interpretivist	Qualitative

For the analysis, the screening was done manually and NVivo 12 was thereafter utilised for coding and analysis. Table 2 presents some of the assumptions extracted in papers, which form the basis of identifying a discourse in the literature analysed.

Table 2. Examples of assumptions extracted from the analysis

Validity Claim	Underlying assumption	Testing Criteria	Findings
Comprehensibility	Informal finance reflects a lack of formal financial services and regulations	Definition of informal finance institutions	Only 3 studies described informal finance institutions according to their practices as opposed to being the opposite of formal, regulated financial institutions
Truth	Financial inclusion studies capture IFI perspectives	Empirical situation	Only two out of 12 studies engaged directly with IFIs to capture first-hand perspectives
Sincerity	Informal finance will disappear as more people move to the formal financial system	Connotations	Informal finance was not discussed much and when it was, it was only a few remarks in passing
Legitimacy	Informal finance is mostly used by the poor and unbanked	Lack of diverse perspectives	Poor, poverty, unbanked, rural, excluded appeared frequently
	Methods		There were no design or evaluation studies
	Focus on registered microfinance and SMEs		All except two empirical studies engaged with registered microfinance and small enterprises.
	Mobile money as the ultimate financial inclusion innovation		Mobile money had the highest occurrences across the studies

The main deduction that was made from the search and analysis was that there is no discourse on IFIs in Sub-Saharan Africa within the ICT4D domain. This conclusion was arrived at based on the lack of literature on the subject from the top publication outlets. The extended search on SCOPUS did not yield much either. While the papers found provide knowledge on some studies and perspectives on the informal sector, they are insufficient as a corpus for discourse analysis. This lack of discourse can be viewed as a form of unconscious hegemonic participation where a research sub-domain has been neglected by researchers without conscious intention on their part. Based on this deduction, no conclusions were drawn on violations of validity claims. Instead, CDA was used to map out issues related to each validity claim, from which implications and recommendations for future research were later derived.

The comprehensibility claim is concerned with the ease of understanding terms. Although the informal sector concept was fairly clear, informal finance was not clearly defined. In one instance IFIs such as rotating savings and credit associations and self-help groups (SHGs) were classified under microfinance institutions and in another, the same were classified together with practices such as hiding cash at home, using predatory loan sharks, using bus drivers as remittance channels, and keeping livestock. Thus, the concept of informal finance, the variety of practices and institutions within it is unclear. Truthfulness is concerned with factual accuracy in a discourse. The fact that very few studies engaged with IFIs empirically challenges some of the assumptions extended in conceptual papers. For instance, while some conceptual articles on financial inclusion reported that the use of informal finance is declining, the studies that were dedicated to IFIs and surveyed IFI users reported a different picture, both in qualitative findings and national statistics. The confusion between the diffusion of mainstream financial services coupled with innovations such as mobile money, and the decline of informal finance usage reflects some unconscious deception on the assumed future of informal finance.

The sincerity claim looks at connotative language that might result in confusion. Only 3 articles had sections expounding on informal finance and their various forms. While there was a recurring acknowledgement of the role informal finance has been playing especially among the unbanked, it was mostly followed by an elaborate discussion on mobile money as a panacea for the financially marginalised. ‘Mobile’ was by far the most frequently used word in the publications (1021 instances). On the other hand, ‘informal’, which comprised also of non-finance mentions of the informal sector had 348 mentions and ‘rotating’ which captured rotating savings and credit associations (ROSCAs) had only 19 mentions. In one instance, when highlighting the gap in financial inclusion, ROSCAs and ASCAs were classified as informal services that the marginalised resort to. In the same article in another section highlighting the impact of mobile money, ROSCAs and ASCAs were classified as formal savings channels that have benefited from mobile money

alongside banks. The authors don't take this as intentional distortion of the place of IFIs but a result of the lack of clarity pointed out under the comprehensibility claim.

The legitimacy claim concerns the inclusion of different perspectives. First, most studies in their background and literature review sections acknowledged the informal sector, and the existence of both registered (and regulated) and unregistered (and unregulated) institutions. However, when sampling, majority went for the registered institutions, be it SMEs or microfinance institutions (MFIs). One of the assumptions advanced was that informal finance is mostly for the poor, rural and unbanked. Among the keywords in this domain, 'poor', 'poverty', 'rural' appeared frequently. Only two studies presented profiles of educated, urban and tech savvy IFI users. Thirdly, participation in informal finance was also predominantly presented as a survivalist endeavour for the unbanked. The alternative perspective of IFI users which was only represented by two studies suggests there are social-cultural reasons why people choose to use IFIs despite having steady income and access to mainstream financial services. Informal finance tended to be reduced to remittances, with multiple instances referring to insecure ways of sending and receiving money, and cash storage in lockboxes. There was a lack of other perspectives on IFIs such as easy sources of low-cost credit for personal and business needs, social capital and insurance mechanism [8]. Lastly, innovation in informal finance was predominantly discussed in relation to mobile money as the solution. Apart from discussions of how IFI users are appropriating and domesticating popular ICTs such as mobile devices and social media, the entire body of literature analysed lacked any mention of niche innovation for or within IFIs by the ICT4D community.

5. Implications and Recommendations for Future Research

Overall, the literature analysed reflects a nascent debate in ICT4D on indigenous finance, its role in socio-economic development and its future. The difficulty to define the informal sector applies to the IFIs too. The paucity of literature dedicated to innovations in IFIs may be because of the dominant view of their transitory nature. If one regards the informal sector, IFIs included, as survivalist transitory states that will eventually dissolve naturally as people transition to the formal system, then it might not be worth investing in ICT solutions for. There are exceptions to this dominant view, such as the conceptual discussion by van Stam [16] and empirical studies by Biyela, Tsibolane and Van Belle [12], Menze and Tsibolane [30] and Kariuki and Ofusori [15].

Comprehensibility can be enhanced by having more studies in the vein of Aliber [7], Ojera, [2] and van Stam [16], dedicated to in-depth exposition of IFIs, their history, contemporary practices and the role of ICTs in supporting them to promote socio-economic development. IFIs and other informal sector institutions are usually described on the basis of what they are not, such as not regulated, nor registered [7], [31]. As a starting point, appropriate definitions and descriptions can be debated and agreed upon. Truth and sincerity can be addressed by openly acknowledging that deeper perspectives of IFIs exist and encouraging more research to understand them. Terms such as 'unregulated' in defining IFIs only consider the legal frameworks that apply to mainstream financial systems, while disregarding that IFIs have their own form of governance that has sustained their existence for centuries.

Legitimacy can be enhanced by IT/IS researcher's broadening the scope of empirical investigations. The informal sector is seen as generally meeting a demand for products and services that the formal economy is unable to meet. From this viewpoint, the existence of IFIs signals financial intermediation needs among populations that are underserved by the mainstream financial system. However, there is evidence of IFI use cutting across demographics [8], [12], and in Sub-Saharan Africa, such practices preceded the establishment of the mainstream financial services on the continent [2], [7]. Different questions therefore need to be asked such as why people choose to use IFIs even when banked, what the role of IFIs is in sustainable development and how ICTs can support that. While there is no shortage of innovation around mobile money, mobile banking and other financial technologies aligned with the mainstream financial system, the lack of innovation for IFIs reflects the view of indigenous finance systems as subaltern. Other areas of the informal sector such as street trading have received diverse attention, including design science research to understand their unique challenges and build responsive ICT solutions [32]. Such methodological variety can also be applied in researching IFIs which would be in line with da Silva's [32, p. 693] call for "...new studies to develop more native and indigenous theories of ICT4D". Lastly, a lot of ICT4D literature is underpinned by assumptions of individual agency and empowerment [34]. IFIs are established and run based on collective empowerment. Studies that explore this notion of communal or collective capabilities would enhance our understanding of ICT adoption and use in contexts where groups can have more empowerment and emancipatory impact than the individual.

6. Conclusion and Limitations

The IT/IS space is a fast-paced environment. Thus, three years since the EJISDC special issue called for innovation in the informal sector was deemed a sufficient timeline to examine what steps the ICT4D community has taken in response to the call. Among the top publication outlets selected, the findings indicate a scarcity of both conceptual and empirical studies regarding IFIs. Focusing on the five publication outlets that were deemed among the top voices of IS in Sub-Saharan Africa limited finding more literature that may have been published in other venues. Future research can expand the number of outlets to capture more perspectives.

CDA is rooted in the critical paradigm which calls for self-reflexivity as part of the research process [19]. Methods used, analysis and interpretation in interpretive and critical research is usually limited by the researcher's experiences and

worldview [35]. In this case, the authors are interested in the preservation of indigenous knowledge systems, of which IFIs are a part, and how ICTs can support these alternative ways of knowing that may not be compatible with mainstream ideologies and artefacts. Therefore, the interpretations and conclusions arrived at from this review can be challenged from other viewpoints. Opening a debate is one of the goals of critical research, to spur discussions that would result in a deeper understanding of the phenomenon.

7. References

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Appendix



Figure 1. Word frequency from the 12 papers analysed