

Thoughts on African Content and Implementation Strategies involved in ICT Access in (rural) Africa

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Abstract. This is the text of the presentation of the author at the Human Sciences Research Council (HSRC) Seminar Series in Pretoria, South Africa, 25 March 2014. The author proposes the African components ‘ubuntu, orality, relatio, dominatio and animatio’ as drivers of content, and ‘community engagement, skill development and thought leadership’ as an implementation strategy involved with the practice of ICT access in (rural) Africa.

1 A short biography

I greet you, a Netherlands-born engineer involved with Information and Communication Technologies in Africa.

My introduction to African realities was through engineering in radio, in Swaziland in 1987. With intermittent stops in India, South Africa, Zimbabwe and Zambia, I have lived full time in Africa since 2000 and am currently with my family in Harare, Zimbabwe. There I hold office at the Scientific and Industrial Research and Development Centre (SIRDC), where I work with colleagues on exciting activities, besides my other volunteering responsibilities and a number of university affiliations¹.

When working in Social Sciences, I often find myself on slippery slopes. My training is in engineering, hiding in the deterministic approach of $1+1=2$ or a reliance on laws that only science knows, and business buys. I am on a transdisciplinary journey, which includes social sciences, natural sciences and the humanities – and it is daunting. However, I echo *ambuya* Lorain Laubsher that in our countries most issues are human and can be solved by means of human effort [1]. So, that is why it is logical that this engineer is pulled into the realm of the Social Sciences, as in my view ‘the World-of-Things’ depend on ‘the World-of-Humans’.

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2 Introduction

This paper emerges from ‘lessons learned from rural Africa’ [2]: an environment in which I lived full time for a uninterrupted period of 12 years. In my opinion, the rural areas are often misunderstood and even misrepresented by those ‘from the outside’. Often, those foreign to the environment have adopted an attitude of condemnation and view the setting as ‘in urgent need of development’, in casu desiring to replace it with what they themselves are used to, realities often foreign to those same rural areas.

In previous work, I have dealt with a multitude of facets of the natural realities. These range from technical publications to exploits in economics, change management, etc. Before I begin, I thank you for the challenge which you provided me: to study for this address and present it to this esteemed audience. I have opted to write out the text to be able to include the references and for it to be available for further study, if you so desire.

3 Building up

In a recent guest blog on ICTworks, hosted by San Francisco-based Inveneo, observations, presumably generic, affecting ICT innovation in Zambia were presented [3]. They resonate with some of the messaging on the difficulties of producing technology in Africa, presented during recent SXSW-2014 in Austin, Texas [4]. Despite obvious issues with generalising from particular experiences, and the obvious neoliberal and libertarian biases, these kinds of observations are cited as ‘the reality in Africa’. The ICTworks blog, for instance, judges the African education system, decries the banking system, castigates the quality of local products, and goes on and on to list the shortcomings of ‘the African environment’ regarding innovation or production. A number of you will recognise these perceptions and might be working within the confines of those assessments.

I label these types of castigations as ‘colonialistic’. This label is especially fitting in light of a description of colonialism which I got from within the rural area of Zambia, where it was said that “colonialism starts with condemnation”. As a matter of fact, a respondent continued with “.. and after condemnation, colonialism brainwashes, and then puts conditions in place”. Unfortunately, the spirit of colonialism remains vibrant and real in us today, for instance in the form of internalized condemnation of the colonialisied. Today, both the colonialisied and colonialisers are still arrested in living out their respective, internalised roles in contemporary societies.

4 An Alternative view, derived from a ‘Lived Life’

With this paper, I want to sensitise you to an alternative view, one that is appreciative of the great achievements of African thought and practice – still existing, and still withstanding vigorous attempts to over-ride, diminish or even

ridicule its existence. This view emerges out of ethnographic observation of my experiences in Africa, living 12 years in rural Africa and of extensive travels in Africa and abroad [5–8]. Much is based on the context of Macha Works, where it is recognised that change is not to be *implemented*, but *emerges* from ‘a waiting to happen’ situation [9, 10]. Change is embedded in the structure of the reality itself, the social environment with its human and non-human aspects [11]. In my view, research of a trans-disciplinary nature, where we can all contribute, provides for new and important knowledge. In my view, African academics that unearth new insights for Africa and the world are essential as ‘without vision, the people perish’ [12].

I espouse this *Afro-constructive* view gladly, as I am convinced the world needs Africa, and – notwithstanding the possible pitfall of doing to others what they are doing to us – it is time that Africa takes up its rightful position and influences the world [13, 14]. In my view, the moving, recent tribute of many, including an astounding number of world leaders, on the occasion of the funeral of Nelson Mandela is grounded in such understanding of ‘Africa’s offer to the world’.

In my research I try to challenge our ways of thinking, to try and unveil new opportunities, allow for new visions, and create space for new paradigms to emerge [10]. Out of this endeavour, I currently designate five distinctive components of African reality, a Big Five that became tangible as main themes during my research towards ‘a strategy to make ICT accessible in rural Zambia: A case study of Macha Works’ [15]. This ‘Big Five’ contains:

- Ubuntu
- Orality
- Relatio
- Dominatio
- Animatio

The distribution and representation of this Big Five will undoubtedly vary widely in the diversity of the African continent, however, a general description of their individual characteristic might provide insights for the Game Management Area of social science in the African society. I will take each individually, and briefly:

4.1 Ubuntu

Well, as I am speaking to an African audience, I do not have to go into this in depth. You know from your daily experience that Ubuntu is an epistemology dealing with ‘I am because we are’. It represents a view on *self* as in co-living with *the other*. Ubuntu is a source of great inspiration for empathy and focus on wholeness of the conglomerate, whether a household, family, or a community of any sort. Without trying to limit its definition, Ubuntu is certainly a metaphor that embodies the significance of human solidarity, a solidarity that is sorely needed in a world hampered by inequality and fuelled by rampant individualism.

4.2 Orality

This deals with the tradition of primarily using oral means of information exchange in interactions. My observations of rural Africa suggest that without a proper understanding of the practices and value of orality, much efforts of textualisation of communication is in vain [16]. In my view, the strengths of orality are grossly overlooked, although new generations, even in the West, are starting to appreciate the efficiency of it. Especially the spectacular growth of cloud services such as YouTube, Instagram, Soundcloud, Facebook, and others, show to me that orality is ‘cool’. In Africa, the physical representation of such cloud services, Indabas and others, have been in existence for a very long time. They provide a viable way of processing information [16]. Africans are real masters of the oratory and in this respect, in contemporary times, are its leaders the world.

4.3 Relatio

Here we deal with what I call, the relatio-economy [17]. This is, from the outset, an ‘Economy of Giving’. My friend Peter Weijland recently published the mathematical frame-work of this economy [18]. In my view, Relatio explains why the local grocery market looks the way it looks like, and how the rural areas continue to exist and flourish because of the vibrant market of giving, yielding and sharing. Of course, this is all under siege because of the unrelenting gospel of the blessings of capitalism and neo-liberalism. However, if we follow Nkrumah’s reasoning that ‘capitalism is a development by refinement from feudalism, and that feudalism was a refinement from slavery’ [19], it is clear that we can learn a lot from the African Relatio that puts ‘relationships’ as the prime variable – and reason – for economic transactions. Of course, people keep track of their social accounts [6]. Relatio relates to this social account, and – although further verification is needed – its imperatives, and lessons for the world, are enlightening.

4.4 Dominatio

In the realm of social justice, Africa has drawn the ‘short straw’ often. And, still, the internalised experiences of domination throughout recent history are not something to glance over easily. Fortunately, there is still vibrance and much resilience. An informal economy is operational and African heroes stand out world-wide. This facet is what I call dominatio, the realisation that we continue together, that forgiveness, real interest and love are among the ingredients of sustaining current and future relationships. This forgiveness, such an impressive basis for the new South Africa since 1994, is challenging for those from outside of the African continent. It is something the world needs, and Africa understands.

4.5 Animatio

Within Animatio we enter into the realm of connectedness with the material and immaterial world around us. Animatio is the tuning in of activities to an

African rhythm. It sustains progress and provides the solidity of everyday life, the strength to stand tall amidst tidal waves of change and difficulties. Animatio enshrines the collective search for African guidance in situations of change and stress. The strength of the African rhythm, the tuning into local culture, sustains balance. It provides the sense of belonging and aids in attaining equilibrium, time and again. It honours birthed connections with one's family, the community, the nation, the continent, and humanity at large. It connects to the environment, defines and regulates ethical behaviour and measures and evaluates the works.

Animatio assures that human values such as love, solidarity and empathy, fuel caring for the other, the environment, and ecology. This yields balance in expressions of humanness, also in music, poetry, dance, and sports. Animatio assures a solid basis for growth in assuring that change abides through cultural roots that have gone deep. It aims for fair play and sustains courage. When understanding and affirming animatio, one is *en route* to sustainability.

5 The Practice of Engendering ICT Access

My recent work at Nelson Mandela Metropolitan University has been concerned with strategy development for access to ICT in rural Africa. I used the case of Macha Works in rural Zambia [20]. I lived in Macha, rural Zambia, with my family for a period of almost 10 years.

This research journey showed me that engendering ICT Access, whatever that means, is the sequential practice of:

1. Community Engagement
2. Workforce Development
3. Thought Leadership.

Figure 1, reproduced from [15], shows these strategic components within its environment of opportunities, culture, and context.

5.1 Community Engagement

Community Engagement is crucial, and it is seeping from Africa's pores [21]. Decades of Western support did not reduce the poverty that people face in many disenfranchised countries of the world [22]. The challenges due to the gap between rich and poor in the world is growing rapidly, even despite the structural economic growth rates in the developing world [23]. Inequality is rampant, when equality is to be preferred [24]. The world's response of foreign aid, soft loans and scholarships, has fostered a dependent generation [25].

Community Engagement in Africa is decidedly different from community engagement in Western environments [16, 26–28]. Due to the diverse cultural settings, views and operations of community engagement are remarkably diverse [7].

Positioning of interactions and activities in the local community must fall in line with cultural behaviour patterns motivated by the local culture (§4.1).

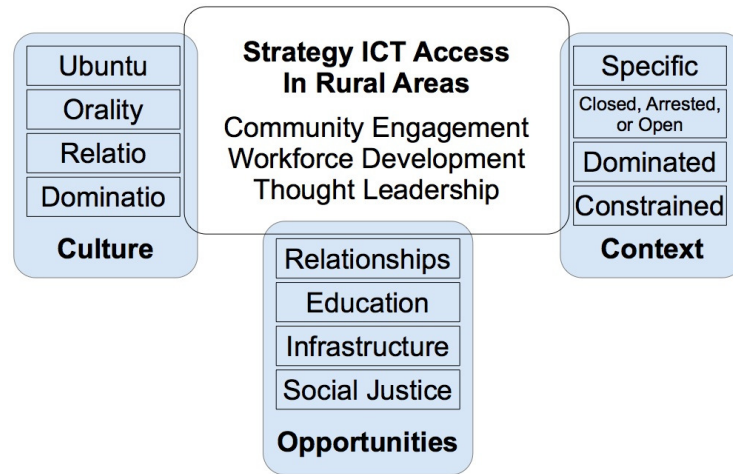


Fig. 1. Implementation Strategy Components ICT access

Consultation about needs involves the entire community. Individualistic action is discouraged and is mostly ineffective [16]. Observations show that blame, criticism, and shame have negative consequences for the reputation of actors within the community [15, §5.2.4]. Hence, the need for community engagement to assure inclusion with these contextual codes. Within an environment based upon balancing of relationships (§4.3), community engagement ensures reciprocity also.

In practice, the implementation of community engagement involves three steps that focus on stakeholder involvement and local capacity building [29].

The first step, *sensitisation*, creates awareness within the local community.

The second step *education*, empowers *actors* through skills development.

The third step, *implementation*, takes place when the local actor has completed the stages of sensitisation and skills creation.

The local actors work within the local community in order to define and build the necessary infrastructure, engenders and implements interventions, and guides an activity in a process of social innovation [30, 31]. This gradual and grounded process is a time-consuming endeavour that ensures the maximum of community adoption, viability and sustainability of activities.

Community engagement has two preconditions (vocation and commitment), and the five change elements (observe, model, wait, mentoring and connecting, and showing) [9]. Figure 2, reproduced from [32], shows the holistic approach with the three-step implementation process combined with the pre-conditions and change elements.

5.2 Workforce Development

Undoubtedly, contemporary fundamental changes in power and organisational structures are fuelling a revolution in *education* [33–35]. In rural Zambia, right

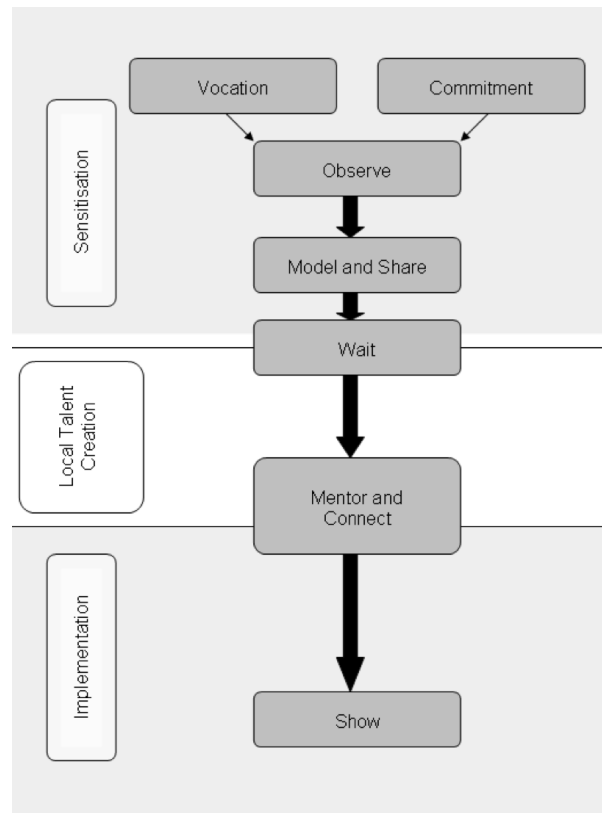


Fig. 2. Three Step Implementation Process. Preconditions and Change Elements Combined

from the introduction of ICT access in 2004, it was observed that most people with advanced education were using the internet for educational purposes [35]. The online survey revealed that after 7 years of ICT access in Macha, 71% of respondents were using the internet for learning [36].

ICT access is crucial for access to, and innovation in, education. However, Africa hardly features in the massive information production worldwide due to a lopsided geography of information in the world [37]. A significant increase in appropriate and contextualised human capacity in under-served regions is needed. This requires a breakthrough in the development of capable people [38, 39].

Workforce development, even in rural Africa, is feasible; in the village of Macha almost 600 rural persons have been trained in digital literacy and digital skills [40]. The need for Workforce development is crucial in view of the age demographics, with the majority of population being young people [25, 35].

Of course, Workforce Development requires an abundance of people with drive, vision, leadership capability and technical knowledge, grounded in the local context and culture. There is a lack of human capital with those skills [41].

Workforce development supports the emerging of capable, local actors with at least nationally recognised certification and accreditation that demonstrate capability and experience in appropriate approaches to interventions [34].

5.3 Thought Leadership

Thought Leadership is instrumental in guiding emerging processes through

1. *careful positioning*, attaining explicit rights to influence others
2. *expressed permission*, grounded in lasting relationships
3. *tangible production*, with sustainable achievements through commendable actions
4. *capacity development*, building abilities in individuals and organisations
5. *honourable representation*, through recognition of *wholesome being*

Migrating through these phases takes much time and effort. This progression harnesses the most important ingredient for leadership: integrity. Integrity is the prime basis for the credibility and trust of the people involved, and the systems implemented.

As good practice that informs strategy, thought leadership is about establishing an authority on relevant topics by delivering guidance to the biggest questions on the minds of stakeholders. The Macha Works case provides perspectives on topics relevant to the professions involved in ICT Access in rural areas. The key for its effectiveness is Macha Works' alignment with the agenda set by stakeholders [32]. This audience – in their specific context and culture – determines what the questions are, and these issues are thus specific and often highly diverse. The level of authority is determined by how well thought leadership facilitates interaction with important issues.

Thought leadership guides interactions within Communities-of-Practice and with stakeholders. It proves especially relevant to provide guidance in governance, education, and research. Without thought leadership, the complexity of the decision-making process and politics is often overwhelming, due to the large number of people and communities involved. Through exercising thought leadership, a local case of breakthrough in rural areas can become part of national and international conversations. Ultimately, thought leadership is a tangible tool to achieve African Renaissance (§4.4).

Positioning of thought leaders supports social engagement, where real people talk about real issues with real powers. Of course, thought leaders might represent a disruptive force. However, through this leadership, new ideas can flourish. It challenges assumptions and chews away at the status quo. Politically savvy, through thought leadership, the local community presents its case, engenders creativity, addresses social needs, works with people, is user-centric, utilises the potential of people, positions appropriate technologies as amplifier of human intent, and upholds collaboration within different worlds [42].

6 Concluding remarks

So, this is it. A Big Five that contains aspects of African nature influencing content, and Three Facets of African practice influencing operations.

I hope this paper motivates you to search even deeper, to allow ambiguity during knowledge creation and allow for local talent to flourish; for you to create space, to be a space-holder for new knowledge to emerge. If a Dutch engineer comes up with these kinds of thoughts, you must be way ahead of him! These are just hints at some rich heritage that exists ‘out there’. Most of them need further debate, study, strengthening and continuous validation.

I hope to inspire you to search deeper into your African self, utilising African thought and developing more African methodologies and African theories with the aim of discovering African views, explanations and possibly solutions for African issues. Again, ‘the World of Things’ is under the feet of ‘the World of Humans’, and since you are the esteemed scientists of the African World-of-Humans, I encourage you in your efforts to engage with African society, to develop the African skills needed to address African issues, and to provide for African thought leadership.

Together, we must overcome the legacy of colonialism, in whatever form, by continuous renewal of the mind, and in the African spirit that infuses humanness through pervasive caring and community, while aiming for harmony and hospitality, respect and responsiveness. These are all imperatives for sustainable progress.

May God Bless Africa, especially through you.

Thank you very much.

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