

7. The Discourse of Digital Inclusion of Women in Rwanda's Media

A Thematic Analysis of *Imvaho Nshya* and *The New Times* Newspapers.

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Abstract

Rwanda has positioned ICTs towards its vision for an all-inclusive society. These tools are critical for empowering women and the youth, the envisaged key participants in the knowledge society. While Rwanda's news media is replete with stories on the potential transformational effects of ICTs on women, how they represent the discourse on women's digital inclusion in the Rwandan context has not been explored. Departing from the philosophy that news media routinely affirm the reinforcing dominant public norms and values, this chapter explores how two Rwandan dailies represent the digital inclusion by examining the themes and news sources in ICT stories on women. Findings reveal that the media depict Rwandan women's digital inclusion as attainable through capacity building, literacy, participation, speed in embracing ICTs, and mindset change.

Key words: Rwanda, Women, ICTs, Digital inclusion, Digital divide, Imvaho Nshya, The New Times, Themes, Thematic analysis

Introduction

Information and Communication Technologies (ICTs) have virtually transformed livelihoods in communities across the globe. In Africa and in developing countries, ICTs are widely recognised as powerful tools for the socioeconomic transformation of women. 'They facilitate informed decision-taking and communication among women and other dispersed

networks and mobilise them to participate in [public debates] [...]’ (Macueve, Mandlate, Ginger, Gaster, and Macome, 2009, 21). ICTs have also tackled infrastructural barriers in resource-poor contexts in Africa (Nyamnjoh and Brudvig, 2016). The 2003 World Summit on the Information Society (WSIS) in Geneva positioned ICTs as central to women’s empowerment (Hafkin and Huyer, 2007). Regrettably for Africa and other developing areas, the digital divide still exists. In most of these societies, women are generally marginal users of ICTs (computers, cell phones, social media, Internet, and emails), whereby main users are young males and an insignificant number of elite and relatively young women (Nyamnjoh and Brudvig, 2016; Buskens and Webb, 2009). This presents a gap between the discourse and the reality of women empowerment through ICTs.

Rwanda, a landlocked East African country, has made remarkable economic progress over the last 20 years. Despite its significant strides towards an all-inclusive information society, the digital empowerment of Rwandan women remains constrained particularly by sociocultural values, among other impediments (Wamala, 2012). Nevertheless, Rwanda is making deliberate efforts to bridge the gender digital divide through several policies and initiatives to promote and encourage women and the youth to use ICTs for their socioeconomic transformation. The national digital transformation strategies geared at realising this goal are clearly outlined in the National Information Communication Infrastructure (NICI) (see MIGEPROF, 2010). Thus, the NICI informs the various discourses on digital inclusion of women.

In a bid to fulfil their public interest mandates, the Rwandan media have reinforced the above initiatives through their news reporting. A review of selected news media outputs reveals substantial coverage of ICT-friendly policies for women. What remains unknown is how the discourse of digital inclusion of women is represented. Departing from the perspective of news media’s habitual performance of an affirmative function in reinforcing dominant public norms and values (Ross, 2010), this chapter engages with a thematic analysis of stories published in two leading news dailies – *Imvaho Nshya* and *The New Times* – to identify the prominent themes, the topics of focus, the news sources, and how these issues are constructed.

Media studies on gender and the media have often focused on gender representation in media texts/images, audience research, and media ownership and employment. This research focuses on how media, as forms of ICT, represent the women’s digital exclusion discourse in Rwanda. Overtly, media coverage on gender-related issues have been argued to perpetuate

the dominant discourse on gender and marginalisation widely attested in media and journalism practices (Geertsema, 2010), policy, debates, and similar discourses. In most cases, fact-bearers (sources) are male authorities, or, at least, the powerful, bestowed to represent the dominant ideological discourse and representatives of their institutions (Ross, 2010). The chapter progresses with a brief literature review on ICTs in Rwanda, including the existing strategies and challenges to empower women through ICTs. As this examination also considers the nature of sources drawn on to articulate the discourse of digital inclusion for women, the chapter will also review how dominant mainstream voices are deployed in the media. An outline of the theoretical and methodological approaches adopted precedes the analysis and recommendations.

Contextualising the Digital Inclusion of Women in Rwanda

Since the late 1990s, Rwanda has committed to transforming itself into a middle-income, knowledge-based economy by 2020, emphasising ICTs as a cross-cutting priority. The potential of ICT is considered a 'powerful represent work for bringing diverse stakeholders together to define challenges and find solutions' (President Kagame, May 2017). ICTs are increasingly relied upon as a crucial means towards social and economic development and growth by broadening their reach, through, for example, high-speed Internet, mobile broadband, and computing (Farrell, 2007). The argument is that 'expanding these technologies creates growth [...] and makes it easier for people to interact and make workers more productive' (MYICT, 2015, 44). Within this context, policies that accentuate the use of ICT for inclusive socioeconomic transformation, have been developed and implemented in 'a manner that not only attracts more private investment for ICT infrastructure development, but also enables universal service obligations to be met' (MYICT, 2015, 44). Plans are in place to provide universal access to Internet infrastructure to facilitate broad-based Information and Communication Technologies for development (ICT4D).

In the education sector, Rwanda's 'Vision 2020' prioritises capacity-building for teachers in ICTs (Farrell, 2007). The NICI underscores equipping schools and students with computers, first by lowering the student-computer ratio to at least 10:1 by 2005 (Farrell, 2007). The *One Laptop per Child* programme (OLPC) launched in 2008, aiming to equip all P4 to P6 pupils with laptops (REB, 2016). Higher educational institutions were also required to make computer studies a compulsory subject. Since 2013, government-sponsored

students in public universities have also received computers on a credit basis. Despite these initiatives, the success of the computer project in schools is yet to be fully realised, owing to certain challenges. Most schools in the remote countryside, for example, do not have electricity let alone computers and telephone lines.

The Smart Rwanda Master Plan 2015-2020 (SRMP) is another ICT4D initiative that aims to provide a platform for increased private sector participation in ICT investment and development, through public-private partnerships (MYICT, 2015). It aims to increase ICT skills among Rwandans to achieve Sustainable Development Goals (SDGs). SRMP specifically focuses on digitising the economy, positioning ICT among the key exports of the country, and contributing to job creation and GDP growth. The role of ICTs to empower women is foregrounded in the SRMP (see SRMP, 7, 17, 21, 23, 50, and 55). Objective seven in particular (SRMP, 23), underscores the promotion of women and youth socioeconomic empowerment through ICT, with a principle objective of promoting the development of ICT applications to increase women's productivity.

Consequently, various initiatives to encourage women and girls to join ICT as a career have been introduced. A *Girls in ICT* Day, for example, is an International Telecommunications Union (ITU) event during which the best companies and solutions in ICT are shown to high school girls to expose them to the various career paths in Science, Technology, Engineering and Mathematics (STEM) subjects as well as to discuss how rural schools can be empowered to access and use ICTs. ICT awareness campaigns have also been organised by the MYICT in partnership with *Girls in ICT* in high schools throughout the country. During these campaigns, ICT experts share their own experiences and encourage the girls and young women to embrace ICTs. *Techkobwa* is a one-week activity targeting high school girls from remote schools (with limited access to ICTs), to acquire basic computing and Internet skills. The activity is spearheaded by Peace Corps with *Girls in ICT* in partnership with *K-Lab*, an ICT innovation hub in Kigali, and other stakeholders. *Ms Geek* Competition is an annual event purposed to inspire creative and innovative solutions to current issues facing the society – through new apps, business ideas, etc.

These initiatives demonstrate that girls and young women can also excel with ICTs by building their confidence to compete in the market. The introduction of ICTs into basket-weaving for rural women (2009-2010), proved that rural women can learn to use ICT if the activity that it is applied to is relevant to them (Wamala, 2012). It should be noted, however, that, while Rwanda has been developing national action plans on ICT since

2001, only recently has the need for women's participation in the sector been magnified.

Other parts of Africa are also advancing in the inclusive adoption and use of ICTs in all sectors. Kenya, Uganda, and Tanzania, for example, acknowledge the power of ICTs to harness the valuable knowledge and innovations that women possess. Consequently, several projects to empower women's self-help groups through ICT activities have been initiated (see Wamala, 2012 on these initiatives) with successful outcomes. Still, women's access to and use of ICTs – from the newer ICTs (mobile phones and computers) to the traditional forms (print media, radio, and television) – is still limited particularly in the remotest parts of Africa (Nyamnjoh and Brudvig, 2016).

In Rwanda's efforts to integrate ICT use in all sectors fully, various challenges (mainly structural and cultural) abound. These, according to MYICT (2015, 44-45) include limited awareness of ICT benefits, a low ICT-skilled labour force, and a private sector that has not yet developed an ICT base independent of government and donor funding. As earlier noted, sociocultural values have constrained the digital empowerment of women. Yet, the digital divide in Rwanda is well acknowledged in official discourse, including in the highest office, confirming a commitment to bridge it, as epitomised in the following quote:

Access to technology and information must also not distinguish between rich and poor or between urban and rural people. If technology in entrenching divides, rather than equalizing opportunity, then we are not harnessing it well and there will be negative consequences. (Paul Kagame, 2017, 3)

During the first Smart Africa Women Summit held in Kigali in May 2017, which sought to highlight the existing strategic interventions to empower women and girls in ICT, African women leaders pledged to bridge the gender digital divide. These leaders included Rwanda's First Lady Mrs. Jeanette Kagame; Vice President of Zambia, Mrs. Inonge Mutukwa Wina; UN Under-Secretary General and Executive Director of UN Women, Mrs. Phumzile Mlambo-Ngcuka; Mali's First Lady, Mrs. Keita Aminata Maiga; and Sao Tome and Principe's First Lady, Mrs. Nana Trovoada. Mrs. Kagame called for joint efforts to ensure that women and girls are put at the heart of ICT revolution, by creating 'enabling environments characterised by a better access to and affordability of technology' (Kigali, 2017).

Media and the Gender Digital Discourse

Ideally, journalism's paradigm follows a science-like model, wherein 'reporters gather news and present it without taking a side in the discourse' (Berkowitz, 2009, 103). Skilled news coverage, however, is argued to go beyond mere reporting of facts, by offering analysis and evaluations to identify gaps or inconsistencies (Berkowitz, 2009). A common trend in Rwanda's media in reporting gender and ICT-related issues is the plain reporting without giving context to the existing digital divide. For example, one key activity of the inaugural Smart Africa Women Summit, which also paved way for the Kigali Smart Africa Women and Girls Declaration, was the awarding of 'Miss Geek' Africa (*TNT*, 2017). This event prominently featured in media reports but none made an effort to analyse its socioeconomic and political implications to all women in Rwanda.

As this study also considers the sources drawn on to articulate the discourse of digital inclusion of women, it is important to understand the extent to which dominant mainstream voices control the information that journalists gather on the subject of digital inclusion and how much chance deprived women, such as rural women, appear in the news on these issues. It has been argued that, when journalists turn to influential and powerful news sources, then those believed to possess authority have a better chance of having a voice in the news (Berkowitz, 2009). Berkowitz contends further that, when high prestige sources appear in the news, the reporter-source relationship tends to legitimate and reify the power structure of society. As the work of journalists is to produce news content that is accurate, statements from prestigious sources may be taken as fact, certifying the news without the need to verify. Examining media representation of digital inclusion of women in a developing context therefore becomes pertinent.

Methodological and Theoretical Underpinnings of Thematic Analysis

The study applied an inductive approach underpinned by a grounded theoretical framework (Corbin and Strauss, 2007) to discover themes that emerge from selected stories. We interviewed women and ICT inclusion discourse in the stories to discover general patterns that informed the generation of broad themes and, ultimately, generated a theoretical understanding from the data interpretation. A keen reading of the stories generated conceptual and theoretical ideas informing the broad themes that emerged. Coded

emergent excerpts were critical to explaining themes that helped to identify the most significant meanings from the stories. In essence, a thematic analysis of such stories served to unravel the patterns or codes that define the meanings and interpretations of the latent and manifest content of the newspapers. The main challenge of this data analytical approach is the lack of empirical support on what amount of data is needed to constitute a theme. Charmaz (2000) advises that such decisions can be left to the researcher's subjective judgment. Although the themes identified in the following analysis cannot claim to be exhaustive, they together capture an important element of the way the women and ICT inclusion debate was represented in the media.

From an interpretative thematic analysis, we explore how two Rwandan dailies, *The New Times* (English) and *Imvaho Nshya* (vernacular) represent the discourse of digital inclusion in their news reports. The sample is derived from a corpus of news stories published between January 2015 and January 2017, two years after the launch of the previously discussed Smart Rwanda Master Plan 2015-2020. *The New Times* was established in 1995 as the first English private daily in Rwanda. Although its editorial policy is not explicit, content tends to be more of informative and educative nature, with an analytical approach to government policies and community interest issues. *Imvaho Nshya* was established in the mid 1980s as a government daily published in the local dialect. The now online-based paper is biased towards government policies and largely publishes content that aligns with national policies. Both newspapers have sustained a fairly wide circulation and readership for more than a decade (RGB, 2016). *Imvaho Nshya* is keenly followed owing to its use of the *Kinyarwanda* language, spoken by all Rwandans.

Corpus Selection and Theme Identification

The newspapers were accessed online through their website addresses and the Google search engine. The ability of Internet sources to provide 'global access to low cost and instantaneous volume of online content' (Illingworth, 2001, 6) ensured easy access to the relevant content in both newspapers. A corpus of all articles on ICTs in the two Rwandan newspapers was targeted. Then, explicit filtering was conducted to identify the dataset of articles that exclusively featured women and technology in Rwanda within the period of study. The key search words on Google search engine included: 'women and ICTs in Rwanda', 'girls and new technology Rwanda', 'women empowerment Rwanda', 'girls and ICTs Rwanda', and 'women and ICT policy Rwanda'.

A senior linguist at the University of Rwanda, experienced in Kinyarwanda-English translation, helped to identify the equivalent meanings of the key words or phrases in *Imvaho Nshya* newspaper. While Rwanda's strategic positioning of ICTs for national transformation is well documented in the press and policy documents, this research focused only on news articles on women and ICTs. Images found in articles were excluded due to space constraints. The analysis was done in a recursive process involving the researchers' immersion in the stories to get a deeper understanding of the meanings or patterns which eventually defined themes from the texts. Consistent with Braun, Clarke, and Terry's (2015) and Corbin and Strauss's (2007) essentialist and constructionist paradigms, we applied our judgment to derive the codes that defined the main themes. The main themes were therefore derived as they emerged from the selected stories through a careful scrutiny of the data.

Results

Overview of the Selected Stories

A close analysis of both newspapers produced 22 relevant stories; 14 articles from *The New Times* (*TNT*) and 8 articles from *Imvaho Nshya* (*IMV*). Details of the story titles are presented in the table below.

Table 7.1 Selected Sample

Story title	Format	Date	Article code
Articles from <i>The New Times</i>			
<i>Empowering women: The Akilah model</i>	Feature	28 Jan. 2015	<i>TNT1</i>
<i>Ms Geek: The mustard seed inspiring girls in ICT</i>	Feature	23 April 2015	<i>TNT2</i>
<i>Sibo on how Ms Geek competition opened doors to her dream'</i>	Feature	23 April 2015	<i>TNT3</i>
<i>Why women should be at the forefront of digital revolution'</i>	Editorial	13 May 2015	<i>TNT4</i>
<i>Female students tipped on ICT use, reading culture</i>	News	09 June 2015	<i>TNT5</i>
<i>Girls told to shatter the myth of their capabilities</i>	News	27 July 2015	<i>TNT6</i>
<i>Ten "Imbuto school girls" scoop Indian varsity scholarships</i>	News	01 Aug. 2015	<i>TNT7</i>
<i>Two years later, is University of Rwanda's College of Science and Technology up to transformation mandate?</i>	Feature	02 Aug. 2015	<i>TNT8</i>
<i>Digital inclusion is the way to go</i>	Editorial	22 Oct. 2015	<i>TNT9</i>
<i>MTN Rwanda pledges more support to women in ICT</i>	News	06 Oct. 2015	<i>TNT10</i>

Story title	Format	Date	Article code
<i>Africa: How Women Can Leverage ICT to Claim the Front Seat in Transformation</i>	News	12 May. 2015	TNT11
<i>Girls urged to use ICT for national transformation'</i>	News	24 Aug. 2016	TNT12
<i>WDA in renewed effort to encourage girls to join TVET</i>	News	01 Dec. 2016	TNT13
<i>Meet UK's most influential Science Academy</i>	Feature	12 Dec. 2016	TNT14
Articles from <i>Imvaho Nshya</i>			
<i>Abakobwa 29 bahuguwe ku gukora mudasobwa</i> (29 girls trained to maintain computers)	News	12 June 2015	IMV1
<i>Afurika: Umunyarwandakazi muri ba rwiyezami-rimo 30 batanga ikizere'</i> (Africa: A Rwandan woman among 30 promising ICT entrepreneurs)	News	19 June 2015	IMV2
<i>Abagore biga ikoranabuhanga ni mbarwa'</i> (Women who train on ICTs are rare) (feature story)	Feature	28 June 2015	IMV3
<i>Jeannette Kagame yasabye abakobwa ba Afurika kudasigara inyuma muri ICT'</i> (Jeannette Kagame urges African women to be part of the ICT revolution)	News	21 Oct. 2015	IMV4
<i>Abaherwe 10 bakiri bato b'ahazaza u Rwanda rufite</i> (Ten rich youths are Rwanda's future)	Opinion	04 Jan. 2016	IMV5
<i>Ubabasha bw'abagore bukoreshwe</i> (Women capacities should be fully exploited) (opinion story)	Opinion	10 March 2016	IMV6
<i>Jeannette Kagame yasabye ko havaho icyuho mu ikoranabuhanga'</i> (Jeanette Kagame roots for the removal of ICT gaps among women)	News	13 Jan. 2016	IMV7
<i>Imishinga y'ikoranabuhanga igamije iterambere ry'abagore yahembwe</i> (ICT projects for women development recognized)	News	10 Jan. 2017	IMV8

It is evident from the above table that the print media in Rwanda has inadequately covered the women digital inclusion. Twenty stories in two daily newspapers over the period of two years, is not representative of the importance attached to these issues in Rwanda's ICT vision, as emphasised in Smart Rwanda Master Plan and other policy documents. While the content of the stories is clear in most of the headings, it is hidden in others. For example, titles in *The New Times* such as 'Empowering women: The Akilah model', 'Sibo on how Ms. Geek competition opened doors to her dream', and 'Girls told to shatter the myth of their capabilities', may suggest a focus on women empowerment, but not necessarily on their empowerment through ICTs or digital inclusion. Similar representations were also found in *Imvaho Nshya*, including titles such as: 'Ten rich youths are Rwanda's future' and 'Women capacities should be exploited'. In addition to missing the focus, these titles are also contradictory to conventional news production discourse, in which

headings should be presented promptly, and simply to capture or hook the reader's attention. The reliance on the powerful elite to represent the digital inclusion discourse is also evidenced by the above titles including their high positions and identities – in this case, Rwanda's First Lady (*IMV*₄ and *IMV*₇ in Table 7.1). Although women were the main story sources in both publications, the authorship of the articles was skewed in favour of men. Only 5 out of the 22 articles came from female authors. This can be seen in the wider Rwandan sociocultural context in which women are rare in the media and their voices largely suppressed.

Prominent Themes

A deeper analysis of the content uncovered five key cross-cutting themes in both newspapers including:

1. Women digital inclusion as game changer for development;
2. Multi-pronged approach to digital inclusion;
3. Digital literacy for digital inclusion;
4. Women as role models in digital inclusion and;
5. Demystify barriers to digital inclusion.

Digital Inclusion as 'Game Changer' for Women's Empowerment

The women's digital inclusion discourse in several stories represents ICT with descriptors such as the 'driver', 'missing link', 'enabler', 'panacea', and 'opportunity to participate' for and in women's socioeconomic development. By being digitally included, the media position Rwandan women as key to Rwanda's transformation agenda. Women's exposure to new technology is represented in the context of 'socio-economic emancipation' where technology allows them to 'innovate and become more productive' (*TNTn*) in their businesses. This 'technology as driver of development' philosophy is reinforced thus:

For everyone, women inclusive, reaching development in this age and era definitely requires some bit of technology as it is now the driver of almost everything, therefore women need to think and act accordingly. (*TNTn*)

To exemplify the notion of 'digital empowerment', *The New Times* also depicts successful women who benefited from sponsored ICT courses as having been positioned to take a 'front seat' in national transformation to initiate

their own ICT businesses and also to make decisions about the sector. In the testimony of one entrepreneur, use of ICT has made all the difference in her economic empowerment:

I do not think I would have started my business without ICT because most of the work was done through Skype and the Internet. It has helped a lot with my research and implementation of my business (*TNT7*).

The 'game changer' theme is further enhanced by the notion of participation in ICT innovation competitions. This is to encourage women to 'take up the challenge' to prove their 'capability' according to one source. In the feature story (*TNT3*), one woman's experience (Vanessa Umutoni) is used as an 'eye-opener and platform' for others, since ICT helped her to 'sharpen her skills for even better innovation and exposure to more opportunities'.

The empowering role of digital inclusion for women is concretised in 'Africa: How Women Can Leverage ICT to Claim the Front Seat in Transformation' (*TNT7*). This news story views such inclusion as an 'opportunity for Rwandan women to engage in online marketing, e-payment to market and sell their products or services beyond physical boundaries' (*TNT7*). This theme locates women's digital inclusion in the country's broad vision of a knowledge economy by 2020. It also supports scholarly arguments that foreground ICTs as panacea to women's socioeconomic development (Wamala, 2012). Consider the opinion of the Director General of Rwanda's Workforce Development Authority on how ICT can be harnessed to realise Rwanda's vision:

The country wants to be an ICT hub, this requires everyone's involvement to create companies and be the catalyst of development in ICT as the country promotes the 'Made-in-Rwanda' programme. (*TNT12*)

Several articles in *Imvaho Nshya* were found to represent women participation in ICT-related competitions and trainings as a 'test of readiness' for the job market (*IMV1*, *IMV3*, *IMV5*, *IMV6*). Such events are also framed as 'door-openers' for participating women to access jobs, to network, as well as to improve existing innovations or develop new ones. From a sociocultural perspective, participation in ICTs is not only positioned as an 'inspiration to young girls' but also helps them to move out of their 'comfort zones into more challenging fields dominated by men' (*TNT3*). Another source portrays the digital inclusion as 'goodwill' in the opportunities presented to Rwandan women, thus:

There are significant efforts from both public and private sectors to encourage more girls to study ICT. Women in Rwanda who are interested in ICT, or are already in the field, are in a good position compared to other countries. (*TNT7*)

The theme of game changer represents the digital inclusion discourse in a positive discrimination manner that favours women, especially the urban elite. These women are well-positioned to participate in ICT-related contests and trainings.

Multi-Pronged Approach to Digital Inclusion

The study showed that *The New Times* positions the responsibility for women's full digital inclusion as a 'joint effort' by multiple players to develop a critical mass of women and girls in ICT and STEM disciplines:

While I believe that schools are key players in inspiring more women to join technology, this should be a collective effort to encourage and inspire women to join STEM. (*TNT7*)

The media's repeated allusion to 'collective responsibility' in achieving Rwandan women's digital inclusion also emphasises the globalised nature of the campaign. This runs in tandem with Jeanette Kagame's view that the drive for digital inclusion of women in Rwanda (and in Africa as a whole) requires 'all citizens of the world' to leverage their positions to support all efforts 'to put women and girls at the heart of the current ICT revolution' (*TNT4*; see also *TNT 11* May 2017). *The New Times* also identifies these efforts as avenues of creating and enabling 'future leaders in ICT to reach greater heights' (*TNT9*) in support of Rwandan society's transformation agenda espoused in the National Information Communication Infrastructures (NICIs) through a rollout of several multi-sectoral initiatives (MYICT, 2015).

Developing Digital Literacy for Digital Inclusion

Both newspapers frame the digital inclusion as achievable through ICT competencies among young girls, akin to 'sowing a seed and watching it flourish' (*TNT5*). Nurturing digital awareness in young girls is viewed essential to 'tap the ICT talent and interest in women and girls from an early age' (*IMV8*). These representations strengthen the discourse of ICT as

key tools in women empowerment. Developing the digital literacy theme is further reinforced by another source thus: 'Knowing the basics of using computers, maintaining them and creating new things with them can build the required confidence. This is how I personally grew to love technology' (IMV8). Personal experiences in news production are often drawn on to appeal to audiences' emotions and imagines and to create a sense of reality in a given argument (Garrett and Bell, 2001)

The newspapers also represent the sustainability of digital literacy by way of 'technology learning is fun' wherein the youth interact with 'technology, trouble-shoot it and innovate with it thereby strengthening their belief in their ability to work with ICTs in the future' (TNT5, IMV2, IMV4). Here, media seem to suggest that exposure and training are not enough but real inclusion is 'innovating with the technology'. These representations are aligned to the belief that digital inclusion for women needs to be tangible and need to address their development concerns directly (Buskens and Webb, 2009). While supporting innovation as an expected outcome of digital inclusion, one source in *The New Times* opined that technology should 'motivate you [people/readers] to seek more knowledge' by reading and discovering about new ways of using the technology (TNT5). *The New Times* uses examples of ICT trainings as 'avenues of inspiration' (TNT12) for young girls to appreciate their ability to venture into this domain.

Real digital inclusion is also constructed as 'full exploitation' of ICTs such as mobile phones that, for example, enable farmers 'to produce products, press orders, negotiate contracts, and acquire market information' (IMV8). This runs contrary to an observation in *Imvaho* that some Rwandan schools that benefited from the One Laptop per Child project 'prioritised safety and security of the machines at the expense of their full exploitation by students' (IMV1).

Demystifying Barriers to Digital Inclusion

Barriers to women's digital inclusion are sometimes framed as 'self-inflicted', as exemplified by lexicons such as 'technophobia', technology as a 'man's domain', and 'self-doubt' (TNT8). A source in a TNT8 article laments that 'even though the College of Science and Technology is expanding, there remains a challenge of increasing the number of female students in this field'. That women's solution to digital exclusion largely resides 'within themselves' seems to underpin the dominant gender discourse in media narratives that puts women as followers in men's footprints (Jemaneh, 2013). In this case, women are urged to take advantage of their 'innate ability' to perform

'like men', to be 'bold enough', and to take advantage of the advancements in ICT and propel their lives forward and 'stop doubting their capacities' (Jeanette Kagame, *IMV4*).

The themes that favour boys' technological orientation are also evident in the newspapers, where it is suggested that 'girls are not studying ICTs [...] because they are not up-to the requirements of the domain, but that they are inadequately encouraged to pursue such courses' and that 'the environment is largely tilted in favour of boys in ICT at the expense of girls' (*TNT4*). Girls' digital exclusion has been attributed to structural and cultural factors (MIGEPROF, 2010; MYICT 2015), where, in most African contexts, girls are considered as good organisers, homemakers, caretakers, and family unifiers.

Contradictory to themselves, there are also themes that position girls and women as capable of debunking the myth of gendered technology since 'active girls have the power to become strong entrepreneurs' (*TNT6*) as well as 'to do greater things [...] even better than boys in all disciplines including programming and robotics' (*TNT10*). The Director of ICT at MYICT reinforces the equality of women to men in digital inclusion thus: 'girls have as many ideas as men in using ICTs' (*TNT2*). Overtly, the demystifying barriers to women's digital inclusion theme is largely represented in the context of women's perceived 'complacency' that portrays ICTs as not their domain.

Digital Women as Role Models of Future Generations

Generally, the news media depict digitally included women as potential 'role models' for upcoming generations. The role model construct is given a historic-cultural context where traditionally only few women have fared well in ICTs. Articles foregrounding this representation suggest that, since most Rwandan women in technology 'tend to be geeky and shy away from the limelight' (*IMV8*), young girls do not have enough women to look up to in this sector. To generate interest in ICTs, a source argues that the educated women needed to play a more active role for the next generation:

I know that most women need expert role models in technology. These should reach out to girls who are interested to come on board in the technology sector. (*IMV3*)

In a similar line of argument, another source in the article 'Girls urged to use ICTs for national development' (*TNT12*) argues that the country counts on digitally endowed women to 'put your skills to good use as you

go back to your communities [...] and ensure that you play a role in national development'. The newspaper implies that this is 'homework to groom the next generation of women entrepreneurs that will benefit from existing opportunities' (*TNTn*).

The news story 'Africa: How Women Can Leverage ICT to Claim the Front Seat in Transformation' (*TNTn*), depicts learning from role models as 'rewarding to other girls' as shown in the following quote:

I believe if girls are inspired and motivated to embrace technology, most especially by those who have reaped big from the field; the journey will be rewarding. (*TNTn*)

Jeanette Kagame also likened women's digital inclusion to 'empowering our young sisters to use ICTs to discover their potential in this digitally-connected world' (*IMV7*). This construct espouses the idea for creating role models for the youth. It also shows that digital inclusion of women bestows on them a higher responsibility to chart the path for future generations. The media's acknowledgement of very few or no women ICT role models clearly indicates the urgent need for women to harness their efforts to lead the ICT revolution. There are recurring representations, which seem to suggest that giving girls and boys equal ICT decision-making opportunities quickly influences digital inclusion for all. Overall, the five themes can be argued to support Rwanda's roadmap to achieving a knowledge-based economy and empowerment of women (MIGEPROF, 2010; MYICT, 2015).

Story Sources and their Treatment

The discourse on women's digital inclusion in the selected news articles drew insights from several sources represented in the stories through direct quotes or paraphrased statements mainly obtained through interviews. Sources ranged from (elite) officials (elite), upcoming ICT experts, and entrepreneurs. Voices from the ordinary readers (through opinion stories and letters to the editor) were scarce.

In analysing the contributions of sources in the news texts, it was evident from both newspapers that the prominent voices came from the official elite who were also heavily quoted in some instances (e.g. in feature stories). Elite sources included the First Lady; the minister in charge of youth, gender, and ICT; the directors of ICT-related institutions; and ICT unit heads. This

implies that the 'women's digital inclusion agenda', has mainly been set by opinion leaders in positions of influence.

The dominance of official voice in a subject such as 'technology' negates the notion of participatory information technology for development where voices of the beneficiaries need to be heard. This supports the argument that mainstream media dominated by the elite voice perpetuates the elite ideology on an issue through the language they use (Jemaneh, 2013). In Rwanda's case, the articles analysed seem to suggest that the technology discourse is still controlled by the policy-makers, regulators, and, to a lesser extent, the ones charged with building capacity for it (*TNTi*).

Expert voices were evident in a number of stories that profiled young female start-ups; for example, Iribagiza Clarisse, the proprietor of *Hehe Limited*, an applications development venture (*IMV2*); as well as participants in competitions such as Ms. Geek Africa (*TNT2*) aimed at rewarding women who demonstrate promising ability to innovate through ICTs.

In terms of gender representation, the 22 stories analysed in this study present a striking finding that more than 60% of the quoted sources (including expert and lay) are women, with a clear dominance of women elite as news sources. Where men were featured as sources, these were mainly as heads of ICT units, ministers, and technical capacity development, etc. (see *TNT2*, *TNT6*, *TNT8*, *TNT11*, *TNT12*, *TNT13*, and *IMV1*). It was common to find some news and feature stories with all-female sources. This was evident especially in *Imvaho Nshya*, which had more all-female voices in stories than *The New Times* (see *TNT4*, *TNT10*, *IMV4*, *IMV7*, and *IMV8*). Examples of the rewarding effects of digital inclusion also drew from practitioner sources such as female entrepreneurs and winners in ICT competitions. In essence, this gender imbalanced voice in the debate creates an impression that the digital inclusion/exclusion campaign is a women's prerogative.

A deeper analysis of stories revealed that most sources were derived from interviews during major events such as International Women's Day, Smart Africa Summit, ICT trainings, and other avenues relevant to women and digital inclusion. A few opinion and feature stories sought mixed gender sources for opinions about the main issues behind these major events (*TNT6*, *TNT11*, *TNT12*, and *IMV1*). The general representation of voices in the stories paints a picture of a privileged minority (mainly leaders and politicians) leading the discourse of socioeconomic emancipation of women through new technology.

Conclusion and Recommendations

This thematic analysis has uncovered five key prominent themes: 'Women digital inclusion as game changer for development', 'Multi-pronged approach to digital inclusion', 'Developing digital literacy for market readiness', 'Women as role models in digital inclusion', and 'Demystifying barriers for digital inclusion'. The study has revealed how Rwandan media represent ICTs as 'enablers' and 'drivers' of women's progress. Participation in digital inclusion is considered as a test of women's ability to adapt in a rapidly changing environment. However, the media also represent women's digital inclusion in a way that depicts them as passive and disconnected despite various efforts to include them in ICT activities. Where participation in ICT capacity-building tends to exclude the rural and urban Rwandan women, the media does not adequately highlight this divide. Elite voices generally dominate the stories on the digital inclusion necessitating efforts to address this imbalance.

This study thus sets the stage for defining how journalists in Rwanda can meaningfully engage the digital inclusion discourse. To achieve the diversity of voices, the Rwandan media should go beyond policy-makers and prominent sources and reach out to the seemingly suppressed contributions of the majority ICT stakeholders who are rural-based. Engaging with such audiences would encourage them to participate in the decision-making process about ICTs access, adoption, and use. The women digital inclusion discourse will then be well articulated.

The imbalanced contribution of stories by gender in this study (only 5 out of the 22 articles were from female authors) underscores the need for increased women participation in ICT reporting. In addition to creating ICT beat reporting, specialised forms of reporting and news desks should be introduced in newsrooms and more women should be encouraged to report on ICTs. Trainings on gender and ICTs in newsrooms and other training institutions could increase the quality and quantity of media reports on these issues.

While this research complements theories that relate to the activities of stakeholders interested in shaping the media agenda, with the impact on both the volume and character of news reports about certain issues and ensuing actions (e.g. Berkowitz, 2009; Ross, 2010), issues of women, gender, and ICTs are very broad and complex, and research on them is still thin, hence the need for more research to understand them more fully.

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