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Africa's Internet Stakeholding and Place in the Global Governance Forum

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Abstract

On June 20, 2012, the America's Cable News Network (CNN) posted a piece titled: "It's Europe and America's Internet. Africans just live in it."¹ The story captures a prevalent view about Africa's niche in the creation, innovation and adoption contexts of the Internet. It also raises questions about the ability of the continent to contribute significantly to global discussions when compared to Europe and especially North America, where the United States is not only the pioneer of the Internet but also a superintendent of the critical resources that sustain the system. Analysis of Africa's interests suggests a less consequential but growing profile. Recommendations for progress were composed from the juxtaposition of the results of analysis with the insight of experts from focus group discussions. One striking recommendation counsels that focus should be on being equally well off as a stakeholder rather than on equalized participation in the global debates which the United Nations is trying to promote.

Keywords: Adoption, Africa, Creation, Equalized Participation, Global Governance, Innovation, Internet, Stakeholding.

Introduction:

Africa is an integral part of the reality of the Marshal McLuhan's (1967) concept of "the global village." The continent's innovation and adoption contexts of Internet are remarkable in many respects. Several software applications originated from Africa and have been deployed all over the world while Internet penetration has increased tremendously in the continent with Nigeria alone having more than 45 million of its 160 million people connected (according to the Nigerian telecom

authorities) besides those of South Africa, Morocco, Kenya and Egypt just to mention a few. Thousands of service providers have migrated from the Internet Protocol IPv4 to the latest Internet protocol IPv6 which offers top level efficiency and security. Horizontal market forces are thriving in many fronts while the heavy reliance on other continents for technological solutions is waning. These entire achievements make things look up for Africa's place in the Internet.

In any typical human system – political, economic, cultural, educational, such things as access, diversity, openness and security have always been regarded as critical issues. Coincidentally, these are the recurring themes in the global Internet governance debates. They altogether, therefore, are a carryover from history for the continent. Unimpressively, what the future offers regarding their resolution is not certain in terms of global Internet control and management. But in spite of the challenges, Africa has always emerged as a stakeholder in every debate about global Internet governance.

However, the issue at stake goes beyond the pronounced word “stakeholder.” It is not the word but its implications. What does Africa have that could make her participate on an equal platform in a global Internet governance forum like those of other continents in accordance with what the United Nations is trying to promote. How can Africa square up with North America, for instance, where the United States – the birthplace of the Internet – and the United Kingdom are regarded as giants that house the world's highest number of websites and where the critical infrastructure that powers the system is concentrated and superintended? This paper focuses on an area with low visibility; it analyzes Africa's value in the cyberspace and how it supports her ability to speak out in a global internet governance forum.

Africa as Stakeholder in Global Internet Governance Forum

The stakeholder model (Freeman and Reed, 1983, pp.88-106; Freeman, 1984, p. 46; Schneider, 2002, pp.209-210; West, 2006, p. 434) supports equalized Internet governance by its perspective that an organization is responsible and accountable to a wide array of stakeholders whose contributions create the atmosphere needed for good governance. The descriptive, instrumental, normative and managerial contexts of this

model (Donaldson and Preston, 1995, pp.66-67) corroborate it, affirming the presence of a broad group of stakeholders whose needs should be adequately catered to as they (these stakeholders) are end in themselves, each with its values and attitudes.

Unlike the stockholder system which prioritizes the interest of the founder and funder of an organization, the stakeholder activity obligatorily promotes corporate social responsibility and an environment bound up by a fair distribution dividend among stakeholders - big or small. According to Kaler (2003, p.71), the stakeholder promotes a reformist stance with regards to capitalism, thereby moving it in the "direction of greater equity and a less single-minded concentration on owner's interests..." He adds: It is a "way of arguing for an enhancement of distributive justice within the confines of a basically capitalist structure for companies by means of a more extensive serving of non-shareholder interests relative to those of shareholders..." Though business establishments have featured most in the context of the stakeholder system, Kaler (2006, p.264) and Phillips et al (2003: pp.494-495) note and stress that the stakeholder theory has a universalistic characteristic as its application goes beyond businesses and extends to organizations in general.

Critics have pointed out various defects inherent in the stakeholder perspective. One of such is the challenge of determining which non-shareholders qualify to enjoy the benefits of equity and the extent to which these benefits can be enjoyed (Kaler, 2003, p.72). For instance, how much of equity can Africa enjoy in a global system that was established and is financed substantially in North America? This question is even secondary to the real issue of determining the *input* of these non-shareholding stakeholders in the scheme of things of the organization (Wolf and Putler, 2002, p. 64) especially when it cannot be quantified in terms of figures. This is a reason why critics (Sternberg 1997, 1998: 93-115) have argued that forming a community to which the organization relates to is playing to the gallery as the organization belongs to stockholders whose interest should be served.

Stakeholder engagement is crucial in the pursuit of organizational objectives. But engagement can only be determined on the basis of the relevance of such a stakeholder to the organization, to

the extent that it is able to influence the decision-making process. According to the criteria of identification presented by Mitchell, et al. (1997) a stakeholder can realistically lay claim to an organization by its role and its contributions which make it imperative for that organization to serve its interests (Kaler, 2002, pp. 94-95) or he can make the company behave in a particular strategic way even though he is not a role-specific contributor. Or he can be both. In transposing this to our case, can Africa be regarded as that continent whose interest “must” be served by a global system of Internet governance?

Without the active support of a primary stakeholder, the sustainable performance of an organization is not guaranteed. Primary stakeholders are those who “bear some form of risk as a result of having invested some form of capital (Clarkson, 1994:5). Survival of the organization in this case rests primarily on the response or otherwise of these stakeholders. Therefore, countries like the United States, Canada and the United Kingdom which manage much of the critical infrastructure (whether at the point of manufacture, distribution and maintenance, and management) that power the Internet are obvious primary stakeholders of any global forum on Internet. An effective primary stakeholder management does not only guarantee survival but also elicits “intangible, socially complex resources” (Hillman and Keim, 2001: p.127) that makes an organization outperforms the others in terms of value creation. Secondary stakeholders are therefore those stakeholders whose membership of the stakeholding community does not bear any appreciable difference to the survival of the organization.

The role of a primary stakeholder goes beyond generic definition (Carroll, 1996, p. 82). That role is also significant with regards to the power he wields. He can not only flagrantly flout the prescriptions of an Internet global forum, he also has the capacity to frustrate its operations and bring it to its knees. Such bullying sounds preposterous but is not impossible, especially in a situation of emergency or wars. The deliberations of such any global forum have not succeeded in contextualizing what the global Internet governance would be like during a catastrophic war situation whose occurrence is a possibility going by the unending stockpiling of weapons of mass

destruction by all cadres of countries – developed, developing, underdeveloped.

Assuming that the United States decides to put up an act in this regard, its stance may be premised on the fact that the Internet was invented by it as a war strategy. On the other hand, a secondary stakeholder in Africa cannot exercise such bullying powers. For instance, the West African nation of Gambia which is “equal” with the United States as member of the United Nations does not in any way have the capacity or capability to cause the Internet to cease, thereby making her competences of little significance and her voting a mere rubberstamping procedure should the opportunity for such arises. Secondary stakeholders are generally weak and have low bargaining power in the affairs of any forum or organization. Therefore, the statement that the Internet is like “a terrain of contested philosophies and politics” (Warf & Grimes, 1997, p.259) where players should be seen not necessarily as opposition or enemies but having the capacity to contribute to the wellbeing of one another” and as corroborated by Astier (2005, p.133), only sounds logical in a peacetime and can be farfetched if the world is enmeshed in an emergency.

Brief on Internet Governance Forum (IGF)²

Driven by the need for a requisite control of the Internet, world leaders, under the auspices of the United Nations (UN), floated the Internet Governance Forum (IGF) in November 2005 during the World Summit on Information Society (WSIS) in the Tunisian capital, Tunis. Its establishment was sequel to a number of ministerial committee meetings the first of which was held in the Gambian capital, Bamako in 2002. The forum, since its first meeting in Athens in 2006, has operated the multi-stakeholder model and proliferated discussion processes at global, regional and national levels through open forums, seminars, workshops and dynamic coalition meetings – most with remarkable achievements. The IGF, on its website, avers it brings together stakeholders in the internet governance debate – governments, the private sector or civil society, including the technical and academic community - on an equal basis and through an open and inclusive process to debate issues and formulate policies for a proper control of

the Internet. According to the Tunis 2005 Commitment statement released after the summit:

...goals can be accomplished through the involvement, cooperation and partnership of governments and other stakeholders, i.e the private sector, civil society and international organizations, and that international cooperation and solidarity at all levels are indispensable if the fruits of the Information Society are to benefit all (World Summit on the Information Society, 2005).

IGF's objectives include ensuring low-cost access to a truly global Internet, maintaining a multilingual Web, managing it and its vast resources, securing global cooperation for stability and security, taking care of the emerging issues and plotting the way forward. Most activities of the forum, including conferences or workshops, have been carried out along these objectives. Membership of the forum is not organized along continental lines but staggered along individual, organizational, regional and corporate lines. Africa's participation, for instance, should be seen as a panoply of all these.

The Objective and Method

The objective of this case is to determine Africa's influence in the global Internet governance forum and see if that influence is significant enough for her to play the role as an equal partner in accordance with the egalitarian posture of the United Nations, the background promoter of the IGF. Africa's history in terms of Internet technology creation, innovation and adoption was analyzed to determine her competences and capabilities. The variables were operationalized in the following manner:

- *Internet technology creation* – The process and technology that led to the founding of the Internet.
- *Internet technology innovation*: New way of doing things that have been done before through ideas and inventions

- *Internet technology adoption* – The process of acquiring an invention or innovation in a way that results in utility.

The analyses are juxtaposed with the findings from the discussion of three focus groups whose opinions converged with and diverge from those of the evaluated case in many respects.

Internet Technology Creation

The social architecture of the Internet is limited in terms of its creation. But it increases in the domain of innovation and expands dramatically in the sphere of adoption. The birthplace of the Internet is the United States with substantial work taking place initially at the University of California in Los Angeles before few other universities joined the research. The nurturing took place in the United States, Canada and Europe, notably the United Kingdom. The development of the Internet initially was part of a strategic defense project to neutralize the growing military power of another super power - the Soviet Union. The National Science Foundation of the United States expanded the scope by developing the Computer Science Network in 1981. This encouraged service providers who began to emerge in the late 1980s and early 1990s for pecuniary reasons. By 1995, the Internet had been commercialized as it expanded to Europe, Australia, Asia, South America and Africa. Therefore, while the history of the adoption of Internet technology in Africa is known, that of creation is hardly traceable. The birthplace advantage makes North America the pioneer of the Internet and positions her citizens and organizations at vantage positions in any global deliberation or forum about the system.

Besides the fact the Internet was born in the United States, the country has invested massively in infrastructure in the Internet more than any other nation in history. The basic programming language is English while the country is host to most of the world's websites. The syntax of Internet technology, which is basically American English, has significantly orientated the global Internet professionals and users to such an extent that the cyberspace "is shaped through place-routed cultures and in particular through processes of Americanization" (Holloway and Valentine, 2001, p. 153). The origination of the Internet

from the United States has positioned that country as the dominion of the cyberspace and this brings up the critical issues of network neutrality and the internationalization of critical Internet resources management, which have largely remained unresolved all global debates about Internet governance.

The founding of the Internet in the United States resulted in the unleashing of America's political oversight. The birthplace phenomenon, investments in cyberspace and the growing significance of information society have made the Internet a special interest of United States and a few Western countries including the United Kingdom. Kaase (2000, p. 267) notes that in 1997, the United States and Europe accounted for 65 per cent share of the global ICT market shared at 35 and 30 respectively. Besides that, The United States has managed the Internet through the Internet Corporation for Assigned Names and Numbers, or ICANN, established by the country's Department of Commerce in 1998. It superintends the critical Internet resources including the Domain Name System (DNS) and the Internet address space.

Several countries including Brazil, India, Cuba and the European Union (EU) (*Wall Street Journal*, 2005) have an issue with the domineering status of the United States and are trying to find a way round it. In fact, the EU has presented a proposal for the removal of the United States' oversight of ICANN which is being opposed by many Americans who probably are appropriating the obvious platform brought about by the birthplace advantage. China, with more than 500 million citizens connected to the Internet, is obviously a giant in the cyberspace but the birthplace advantage of the United States easily knocks China into a back position. The United States' birthplace advantage can make an issue of the *legitimacy* (Mitchell et al., 1997, p. 854) of other countries to the Internet. This advantage is comparable to an Olympic gold. If Internet creation is gold, innovation is silver while adoption is bronze.

Efforts have been made to allay global fears of the United States' control of the Internet. The Affirmation of Commitments was inaugurated in 2009 when the United States and ICANN formally recognized that no single entity has the sole right for the control or

influence over the Internet. To demonstrate that ICANN is not the sole stockholder of the Internet, it launched many structural adjustments to the Internet, including the Domain Name System Security Extensions (DNSSEC) which substantially undercut cyber attacks to some level. It also expanded the International Domain Names (IDNs) to the extent that allows the use of non-Latin scripts in top level domains such as Chinese (which China is taking advantage of) and Arabic scripts. With this liberalization, some 1.6 billion persons can claim some independence from a system that hitherto had been dominated by the United States which uses the Latin scripts. The advantage that accrues to Africa in this regard is not yet known because much of the continent, as a result of colonial legacy interference, has configured their language expression in the Latin-based script which cannot be changed easily in the short run.

Internet Technology Innovation

The impressive work on the Internet by the United States' National Science Foundation elicited interest in several other countries of the world. This led to the development of new networking technologies. The core protocols of the Internet which were developed mainly in the United States and Europe have been an activity of the United States based Internet Engineering Task Force (IETF) which allowed a great deal of contributions of technical expertise from the international arena. At this point, the Internet began to have the outlook of a global enterprise that any interested individual, organization or government could be part of. It also led to the development of standards by the various contributors the most prominent of which was the Internet Protocol which provides the addressing system of the Internet. The first popular version of the protocol (IPv4) was designed to take care of addresses of about 4.5 billion websites but the astronomic increase in the number of those who use the Internet made the Ipv4 incapable of meeting demands by the end of 2011. This led to the coming on stream of a fresh protocol – IPv6. With the new protocol came routing policies, network infrastructures - hardware, operating systems and software that put the Internet in a continuum of an immense, highly engineered and complex system (Willinger et al, 2002).The deployment of the top level

protocol has resulted in the multifariousness of technological innovations across Africa. Innovators from Africa, particularly from Kenya, Nigeria, South Africa, and a few other countries have developed various software that allow connections from several devices, including mobile phones, cellular routers and data cards while maximizing the opportunities provided by the traditional modem and broadband accesses.

The critical issue here, however, is about the context in which innovation is carried out. As mentioned earlier, openness, access, diversity and security are the recurring themes about the Internet. Many innovators in Africa (and indeed elsewhere) are innovating in such a manner that orientates these themes towards the individual or organization rather than the system that sustains either of them. This means that the commercial value of the Internet rather than the wellbeing of the system is promoted and this has its implications. One, is that the various components of Internet - email, the World Wide Web, directory service, social networking and others attract innovators rather than the system that make these components work. Secondly, while African innovators are more visible and sometimes revered in the development of valuable Internet products and solutions, their achievements are less known to such influential organizations like ICANN which controls the domain system and the World Wide Web Consortium (WWWC) which develops standards for Web sustenance. More worrisome of the implications is that Africans are only influential in the downstream side of the Internet rather than the upstream when it is certain that without the latter, the former does not exist. To minimize this challenge and become more relevant in any global forum, Africa, as a stakeholder, needs up-to-date information relevant bodies (Owen et al., 2001, p. 265) in order to function effectively an innovating continent.

Internet Technology Adoption

The reason for the quick adoption of the Internet in Europe and North America is that the culture of the people and governments who created it is not at variance with that of the people who adopted it. This scenario is farfetched in Africa where many potential adopters have viewed the

Internet as an external influence. Several studies on the continent have proved the assertion of several issues such as regulation environments, level of education, rate of diffusion and adoption, infrastructure, including expansion of broadband and development disparities across the regions of Africa. For instance, a study by Soremekun and Milgwa (2013) explores the adoption and use of mobile phones on the basis of the United Nations Millennium Development Goal (Number) 8, using the Kohonen Self Organizing Maps and discovers the existence of a digital divide with northern and southern countries making significant progress while the western and eastern regions having unimpressive records.

But it is important that any discourse about Internet adoption in Africa should take cognizance of this cultural impediment. Distortion is therefore indicated in the Internet creation, innovation and adoption logic unlike in the United States where Internet has succeeded because its creation and innovation are matched by a corresponding adoption, thereby making key issues such as the freedom of expression, access, diversity, openness and security less complicated. The criticalness of these issues notwithstanding, the adoption in Africa is a great boost to the diversity of the Internet.

One way that adoption can be determined is to display how much of the continent is connected to the Internet and the technology that powers it. This sounds simplistic but it nonetheless gives a clue of note. According to statistics by Internetworldstats.com, which is an agglomeration of figures from the United States Census Bureau, International Telecommunication Union (ITU), Nielsen online and others and therefore considered reliable, a total of 139, 875, 242 persons were connected to the Internet in Africa out of a population of 1,037,542,058 as at the end of 2011, representing a penetration of 13.5 per cent. This represents a magnificent 2,988.4 per cent over the figure 4,514,400 at the turn of the millennium. It is interesting to note that only four countries share a chunk of this figure. These countries are Nigeria which has the highest number of 45,039,711 followed by a distant second Egypt with 21,691,776, then Morocco with 15,656,192, Kenya 10,492,785, and South Africa with 6,800,000. It is important to stress that the advent of mobile devices, especially in mobile phones

contributed to the massive increase in penetration in these countries. This growth, according to Soremekun and Malgwi (2013) was most noticeable during the years 2001-2007.

While history does not favor Africa in terms of bringing the Internet into existence, the continent can make history by looking at another dimension of creation in terms of the contents that drive the system. Internet without content is *Internot*. Africa's late entry to the Net is a reason for low content why lack of infrastructure also contributed to this. However, with the installation of fiber optic cables in all parts of Africa, opportunity is believed exists for Africa to increase her penetration not only by simply using but also by contributing contents.

Representation of Africa in Global Internet Governance Forums

Africa's representation at the global Internet forums has always been an issue as the following table shows over a four-year period:

Table 1: Representation at IGF Meetings (2007-2010 in Percentages

Region	2007 Rio	2008 Hyderabad	2009 Sharm El Sheik	2010 Vilnius
Africa	10	5	32	7
Asia	13	71	17	8
Eastern Europe	7	3	5	37
North America	13	5	12	11
Oceania	2	1	2	2
South America	35*	3*	5*	5*
Western Europe	20	12	27	30
	n = 1661	n = 1280	n = 1480	n = 1451

*Latin America and Caribbean Specifically Source: www.intgovforum.org/

The table shows that Africa's participation is generally low. Though the figure for 2009 shows 32 per cent, it is so because of home advantage. Sharm El Sheik is a town in Egypt. A high proportion of this figure (18 per cent) came from Egypt while the remainder of 12 per cent is from the rest of Africa. In 2008 when India hosted, a whopping 71 per cent attended from Asia with 56 per cent of that figure coming from India, to confirm the benevolence of home advantage. Many Africans also participate remotely and have had their participation enhanced by this. In 2010 for instance, Africa had a significant presence (of both remote and physical) bringing its overall participation (physical and remote) to 18 per cent, the same figure as that of Western Europe. But the influence of remote participation in any meeting is limited owing to the sheer physical absence of participants.

Representation in forums is more highlighted in presence of governments and the private sector - the supply end of the chain - but not impressive in terms of the market that drives the Internet. The global Internet governance forum is supply driven rather than demand driven. What that means is that service providers, government, government agencies and regulators constitute most of the membership while it makes sense to say that representatives of users of the Internet do not have a voice. If they do, it is not heard. The demographics of the Internet in Africa easily prove that the youth are in the forefront of use. This justifies several industry and academic studies that have established that the Internet *user* is young and educated (Donthu and Garcia, 2001, p. 130). To economic geographers, these are people who regard the cyberspace as a separate space in which people reside and earn their livelihood (Kitchin, 1998). However, the Internet should not be only for the use the educated people only. The system should also spare a thought for those who cannot communicate in the major languages of the world. Both sides should have a voice at any global Internet governance forum. A multilingual Internet is therefore a necessity.

Focus Group Discussions

This paper also explored the *degree of consensus* (Morgan & Kreuger, 1993) and extent of divergence among members of three focus groups

of Internet technology and management experts on the following four variables: *Internet technology creation, Internet technology innovation, Internet technology adoption and Global internet governance*, which comprises Management and control acts and processes involved in the administration of the Internet across the globe.

The discussion wanted to determine how the first three factors affect the fourth. Discussants were mostly university lecturers who significantly were conversant with the ground rules of the focus group method. The first and second group had five and eight members respectively while the third had nine. The first and second groups discussed for 36 and 43 minutes while the third group discussed for 49 minutes. The third group had more robust participation in terms of time available for discussion and number of participants owing probably because the first and second discussion took place during exam marking period while the third occurred after the marking was completed as faculty had fewer things in their hands.

The discussion contains a lot of paraphrases in accordance with the extra rule that the moderator established. After each person spoke, he or she was asked by the moderator to capture his or her statement in a short statement – not more than 20 words. This helped substantially in note-taking and made transcribing of recorded audio far less laborious. Each group had at least two senior faculty members who were technology and industry experts and had experience in academics. One group particularly had the privilege of a continentally respected professor who consults with two nations' computer societies and a domain name registration council in another country. Both sexes were represented even though all groups had male preponderance. The fact that all discussants had an appreciable degree of expertise in the area of concern implied that a well informed response to research questions was expected. The objective of focus group discussion was transposed into the following questions:

- *RQ1: What is Africa's contribution to Internet technology creation?*

- *RQ 2: Rate Africa's Internet technology creation profile as Low, Average or High.*
- *RQ 3: What is Africa's contribution in Internet Technology Innovation?*
- *RQ 4: Rate Internet technology innovation profile as Low, Average or High.*
- *RQ 5: DC1: What is Africa's contribution to Internet Technology Adoption?*
- *RQ 6: Rate Africa's Internet technology adoption profile as Low, Average or High.*
- *RQ 7: What are your recommendations regarding Africa's participation in global Internet governance forum?*

Synopsis of Responses

RQ 1: Internet Technology Creation

- Africa's contribution towards Internet technology creation is almost unknown as most discussants were not aware that such existed.
- The technical capacity and capability did not exist or was not yet developed to warrant Africa's participation at the time Internet technology was being created.
- The events that led to the creation of Internet technology had less to do with the African continent unlike Europe which necessarily must be part of the creation as fallout from Cold War era.
- Africa should not be dismissed as not contributing to the creation of Internet technology creation entirely. Internet creation should not be looked at simply from the point of view of countries or continents. If the names of individuals who helped in creating the Internet were listed, it was possible that Africans were included, having been resident in the United States and its Western allies.

RQ 2: Rating

- The three group members rated Africa's contribution low compared to other continents in terms of participation in the creation of Internet technologies.

RQ 3: Internet Technology Innovation

- Africa's Internet technology innovation profile is rising but it is difficult to contextualize owing to lack of the appropriate standard for doing so.
- Africa's innovation is bedeviled by lack of promotion and visibility, which may affect her rating in this area.
- Africa's innovation always takes a cue from what was created elsewhere which makes the originality of such innovation open to discussion.
- Africa's innovation depends on the platforms built from other continents in order to have value. One member for instance said: "No matter how powerful the porter you build in Africa, it must run on a browser whose origin is not African; no matter the software application that emerges from Africa, it must run on an operating system whose origin is either United States or somewhere in Europe. This in my view makes *cloud computing*³ a more critical case."
- Inadequate or poor leadership in terms of laws, regulations and direction by governments in Africa slows down innovation and the competitiveness of Africans in Internet technology. This they said was because governments were generally new to the technology as many of them even looked up to the private sector for assistance in this area.
- Comparing the rate of innovation in Africa with Europe and North America is unfounded because the continent is relatively new to Internet technologies.
- Low level of education, improper skills, and slow process of learning which is compounded by the improper understanding of the standards that are associated with Internet Technology hampers innovation.

- All the groups agreed that Africa's Internet innovation is slow because the resources and financial wherewithal to do that is limited. They pointed out that since large firms are guaranteed a sufficient market response, they are the ones empowered to undertake innovation which in many cases are risky. Lack of market and resources are a cog in the wheel for innovating Africans.

RQ 4/Rating

Two groups rated Africa generally low while one rated her average.

RQ 5: Technology Adoption

- Africa's Internet technology adoption is stifled by technological determinism, meaning that designers and producers of ICTs make linear assumptions about user prejudices and idiosyncrasies with regard to the adoption of technological innovations. This linear approach applies one-size-fits-all systems to products and assumes that adopters of innovation should be able to cope with the challenges of that adoption with its attendant costs. Many of the discussants in the three groups were conversant with the concept of technological determinism.
- The most senior faculty in one of the groups said: "owing to the factor of determinism, there is an improper and slow diffusion of Internet technological standards, which hinders adoption and slows down growth."
- Two groups unanimously agreed that while demand behavior is crucial in technological adoption, supply behavior is even more germane owing to the fact of determinism.
- Though the costs of Internet technology access for the average user are affordable, infrastructure deficiency in electricity supply and remote locations make Internet inaccessible to millions of Africans.
- Internet innovators should develop solutions that promote development and when such solutions are applied, the development they bring should be measurable. One group

member adds: “the idea of Internet Governance Forum for Development” makes some sense.

- Internet adoption in Africa will be massive in the coming years owing to the increasing predominance of mobile phone technology.
- Adoption should be looked at from three perspectives namely institutional, organizational and individual. A major reason why the rate of adoption has been slow is because adoption in government institution is slow, which imparts negatively on organizational and individual rates of adoption. Many governments in Africa believe that Internet can be used to destabilize them, thus discouraging its adoption among citizens.
- In the area of education, business and commerce, Africa has done significantly well. Even though transactions are facilitated and carried out on many platforms provided from outside the continents, the fact that Africa has keyed in to the Internet as viable market is noteworthy.
- Africa's rate of Internet adoption has been facilitated by the world's biggest Internet portals and search engines such as Yahoo, Google, etc. all based in the North America. Social media have also significantly boosted the rate of adoption.
- The availability of Internet expertise has encouraged many big associated companies to set up shops in Africa thus increasing the capacity of the continent to compete.
- Bogus adoption of Internet technology hinders Africa's adoption and competitiveness. This was explained in all groups as email scams which originate from the continent and which appear to be giving some countries of West Africa a bad name.

RQ 6: Rating of Internet Adoption in Africa

Cumulatively, six persons rated Africa low in terms of Internet technology adoption, 10 rated the continent average while six also rated the continent high.

RQ7: Recommendations

- Since it is obvious that Africa does not have control over her non participation in the creation of the Internet and has recorded less significant success in the innovation context, the adoption context offers the potential to make Africa strong enough to be an equally recognized equal governance member. There should be a deliberate policy to make Africans adopt the Internet and contribute contents.
- Governments in Africa should look critically at the issue of infrastructure for the development of infrastructure. Electricity and the expansion of bandwidths are crucial in this regard.
- It is unreasonable or a misnomer in the first instance to preach equality of stakeholders' in the global Internet governance. The idea should therefore be discarded and another one promoted.
- Rather than equalized participation, a reasonable option is to ensure that each stakeholder is well off as a participant whether as a creator, adopter or innovator. Being well of is better than being an equal participant.
- A process that will engender diffusion should be put in place to promote adoption as the former is directly proportional to the latter. If diffusion is directly proportional to adoption, it is so also to utility.
- Building the capacity of stakeholders should be a good way to promote or enhance the equality that is being promoted in global Internet governance forum.
- Countries in Africa must put in place an effective policy that encourages Internet participation by Africans in the areas of adoption and innovation. This has to be backed up by a proper mobilization of citizens for the policy to work well.
- Countries and organizations in Africa should not limit adoption to mere numbers such the number of websites that originate from Africa. It should also be looked at from the perspective of the visitors to sites. Said a discussant: "if there are only ten sites that originate from Africa and those sites

have millions of visitors, it is better than millions of sites with ten visitors!”

Remarks

A juxtaposition of the case study and the findings from the group discussion produced a robust convergence but one area of note is the recognition of North America and Europe as the domineering powers of the Internet. Another interesting area of note is rather than seeking the equality of stakeholders in Internet governance debates, focus should actually be on ensuring that stakeholders are well off and it wouldn't make much of a difference whether they creators, adopters or innovators. “Being well off” perspective is seemingly in line with the teleological egalitarianism school as represented by Derek Parfit (1997), in a thought provoking presentation on “Equality or Priority.” He remarks that democratic values such as equality before the law, political equality, equal rights and the like are quite important but that the concern should actually be citizens being *equally well off*.

References

- Astier, S. (2005). Ethical regulation of the Internet: the challenges of global governance. *International Review of Administrative Sciences* 71(1), 133-150.
- Carroll, A. B. (1996). *Business & Society: Ethics and Stakeholder Management* (3rd edition). Cincinnati: South-Western College Publishing.
- Clarkson M. (1994). A risk based model of stakeholder theory: Toronto. Proceedings of the Second Toronto Conference on Stakeholder Theory, Centre for Corporate Social Performance and Ethics, University of Toronto: Toronto.
- Clarkson M. (1995). A stakeholder framework for analyzing and evaluating corporate social performance. *Academy of Management Review* 20, 92-117.
- Donaldson, T.J. and L.E. Preston (1994). The Stakeholder Theory of the Corporation, *Academy of Management Review* 20 (1) 65-91.
- Donaldson, T.J. and Preston, L. E. (1995). The Stakeholder Theory of the Corporation. *Academy of Management Review* 20 (1), 65-91.

- Freeman, R.E. and Reed, D.L. (1983). Stockholders and Stakeholders: A New Perspective on Corporate Governance. *California Management Review*, (25) 3, 88-106.
- Freeman, R. E. (1984). *Strategic Management: A Stakeholder Approach* . Boston: Pitman
- Hillman, A. J. and Keim, G.D. (2001). Shareholder Value, Stakeholder Management, and Social Issues: What's the Bottom Line? *Strategic Management Journal*, 22 (2), 125-139.
- Holloway, S. L and Valentine, G. (2001). Placing Cyberspace: Processes of Americanization in British Children's Use of the Internet. *Area* , (33) 2, 153-160.
- Kaase, M. (2000). Political Science and the Internet', *International Political Science Review*, (21) 3, Cyber Politics in International Relations, 265-282.
- Kaler, J.(2002). Morality and Strategy in Stakeholder Identification', *Journal of Business Ethics* 39 (1-2), 91-99.
- Kaler, J. (2003). Differentiating Stakeholder Theories. *Journal of Business Ethics* 46(1), 71-83.
- Kaler, J. (2006). Evaluating Stakeholder Theory. *Journal of Business Ethics*, (69)3, 249-268.
- McLuhan, M. (1967). *Understanding Media: The Extensions of Man*. New York: McGraw-Hill.
- Mitchell, R. K., Agle, B. R. and Wood, D. J. (1997). Toward A Theory of Stakeholder Identification and Salience: Defining The Principle of Who and What Really Counts. *Academy of Management Review* 22(4), 853-886.
- Morgan, D.L. & Kreuger, R.A. (1993). When to Use Focus Groups and Why. In D.L. Morgan (Ed.) *Successful Focus Groups*. London: Sage.
- Owen, D. L., Swift, T. A. and Hunt, K.(2001). Questioning the Role of Stakeholder Engagement in Social and Ethical Accounting, Auditing and Reporting. *Accounting Forum* 25(3), 264-282.
- Phillips, R., Freeman, R. E. and Wicks, A. C. (2003). What Stakeholder Theory is Not. *Business Ethics Quarterly* 13(4), 479-502.
- Persson, I. (2001). Equality, Priority and Person-Affecting Value. *Ethical Theory and Moral Practice*, (4)1, 23-39.
- Schneider, M. (2002) A Stakeholder Model of Organizational Leadership. *Organization Science*, (13) 2, 209-220.

- Soremekun, O. and Malgwi, C. A. (2013) Exploring Patterns in ICT Growth and Development in Africa: A Kohonen Map Analysis. *Review of Regional Studies*, 43 (2/3), 175-190.
- Wall Street Journal* (2005) EU, Developing Nations Challenge U.S. Control of Internet. October 25, p. B1.
- Warf, B and Grimes, J. (1997). Counterhegemonic Discourses and the Internet. *Geographical Review* , (87)2, Cyberspace and Geographical Space, 259-274.
- Wolf, A.W., and Putler, D.S. (2002). How tight are the ties that bind stakeholder groups? *Organization Science*, (13)1, 64-80.
- West, A. (2006). Theorising South Africa's Corporate Governance. *Journal of Business Ethics*, (68)4, 433-448.
- Willinger, W., Govindan, R., Jamin, S., Paxson, V., and Shenker, S. (2002). Scaling phenomena in the Internet. *Proceedings of the National Academy of Sciences*, (99)1, 2573–2580
- [World Summit on the Information Society. \(2005\). Tunis Agenda for the Information Society \[online\]. Retrieved from: http://www.itu.int/ws/is/docs2/tunis/off/6rev1.pdf](http://www.itu.int/ws/is/docs2/tunis/off/6rev1.pdf)

Notes

1. The site is <http://www.cnn.com/2012/06/20/tech/le-web-africa-technology-inovation/index.html>
2. www.intgovforum.org/
3. Cloud Computing is the service that enables an end user store data at a remote location that is accessible through a browser or other means. The service allows quick deployment of applications with less maintenance and better management.

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