

Doing Digital Journalism

How Southern African
newsgatherers are using ICT

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This book consists of studies into the use of ICTs—especially Internet and cellphones—in selected newsrooms in nine Southern African countries. It is based on research by the 2004 MA class at Rhodes University's School of Journalism and Media Studies, Grahamstown, South Africa. Although the project does not lend itself to generalisations, it does provide qualitative insights. These are into the infrastructural and policy institutional environments in which many Southern African journalists work, and into the way they regard and utilise new technologies in respect of their work.

The original aims of the project were:

- a. To develop bottomline data that can serve as a standard against which subsequent research can be done that will feed into the World Summit on the Information Society processes, and also in terms of which international comparisons can be made.
- b. To develop a typology of African journalists' use of ICTs in newsrooms, based on categories of commonality and distinction;
- c. To evaluate limits and possibilities in this area;
- d. To produce insight that will inform various interventions by stakeholder groups and in particular by Highway Africa and other African journalistic organisations;
- e. To identify examples of best practice for publicisation at relevant fora and through various platforms.
- f. To disseminate findings through various means to targeted stakeholders in newsrooms, training institutions, research establishments, NGOs and the like.

It is for the reader to assess the extent to which these objectives were achieved.

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Powering African newsrooms:

theorising how Southern African journalists make use of ICTs for newsgathering

by GUY BERGER

1. Introduction

African media are frequently defined in deficit as regards the emerging global information order. This sense of backwardness, which is part of a Modernisation paradigm, is confirmed in this study of ICT use in nine Southern African countries' newsrooms. However, as against this impression, the findings recorded in this book also reveal another side which gives credibility to additional theoretical ways of assessing how journalists deploy ICTs in Southern Africa. The findings also highlight aspects of the Dependista and Participatory paradigms, which compensate for some of the limits and problems of the Modernisation one.

The cumulative and integrated insight of the three paradigms highlights the challenges, but also holds out some promise, for Southern African journalists to use ICTs to enrich their information output, and thereby develop the region as a vibrant part of the unfolding global Information Society.

The study was conducted in 2004 by MA students at Rhodes University under the auspices of the Highway Africa initiative in the School of Journalism and Media Studies. The findings set out in this book can be seen against the backdrop of prevalent development discourse which addresses the digital divide and Africa, and which is generally conceived in terms of the [one-sided] assumptions of Modernisation theory. Thus, the research reveals poor skills and worse ICT infrastructure in many newsrooms.

However, there are also indications that some significant media in countries like Namibia, Botswana and Zambia do have functioning facilities. And across all the countries, journalists are far from being mired in 'backwardness' or passively awaiting external salvation in regard to attempts to use ICTs. Nor are they lacking when it comes to critical perspectives with ICTs and global information networks. There is a spirit of participation in the global movement of media uptake of ICTs.

In short, when seen in comparison with the First World, there are indeed shortcomings and a dire need for catch-up in the newsrooms that were studied. But there is also another dimension visible which reflects internal creativity, strengths and adaptations. This counter-balances the 'subject-object' and development-manqué paradigm of Modernisation, and instead holds up the credence of alternative paradigms which sensitise us to practices that counter dependency, promote participation and build endogamous capacity.

The resulting picture is one that contributes towards a reconstituted vision of a global information order. In this view, the value of African experiences is validated. It shows how ICT uptake not only boosts African stories, information, and representations for African audiences, but also for the global Information Society.

2. Development discourse

2.1 Three paradigms: Modernisation, Dependency, Participatory.

The dominant discourse about the emerging global Information Society is that 'some of us have arrived in the land of plenty; the rest lag behind, empty-handed and hopeless, and urgently need to play catch-up or even leapfrog' (Berger, 2003).

Fundamentally this is a one-dimensional model. 'It sees the digital divide as a chasm that prevents the Third World from drinking at the fount of information in the First. Accordingly, Africa is seen as backward, and in danger of getting even further behind' (Berger, 2003). This perspective is a powerful, even compelling, theme in much thinking about Africa and the global Information Society — even by African journalists themselves. In order to locate and critique it, one can helpfully turn to the history of analysing the role of media (and now ICTs) in society. This bigger picture casts light on the issue of internal development within the media, and particularly on the corresponding question of ICT use in the newsrooms.

Underpinning much development discourse is the Modernisation paradigm notion progress is premised on external aid. In this view, agencies are the subject, and targeted people (often conceived monolithically) are the object. There are the developers and what could be called the 'developees'. The latter are assumed to be all uniformly awaiting and desiring development along the lines of those who are successfully 'developed'. Too often, they are also taken to be empty receptacles waiting to be filled. In the case of African newsrooms, this view projects an image of helpless journalists hoping that someone will bring them the necessary ICT technology and skills that will bring them closer to the purported level of their First World colleagues.

Another aspect of common thinking about development is what is chiefly conceived as needed for development is to expose 'backward' man (and that is literally 'man' in the gender sense too) to the benefits of 'modern' behaviour, institutions and technology, with the expectation that 'he' will then adopt them with beneficial effects.

In the Modernisation approach, if the aim is to disseminate information, carriers such as the media (and subsequently ICTs) need to be developed. Putting such infrastructure in place is seen as a precondition for the necessary messages to reach people otherwise seen to be 'in the dark'. This meant a one-way flow of communication from development agency (or country/ies) to the audience, preserving the old subject-object assumption endemic to developer-developee thinking. It means, at root, that the Third World needs to emulate the ways of the First. In short, if 'we' use ICTs in our First World newsrooms, so should 'they' in Southern Africa.

The roots of this Modernisation vision lie in the pre-Internet age. It was an age, however, that did not deliver the expected results. Most Third World countries showed little sign of 'take off' (Rostow 1960), no matter a media injection. Perhaps, for some, it was a matter of too little media medicine, and thus that more information dissemination would have done the trick. At any rate, the lack of success led to some discrediting of communication being conceived as the singular agent for development. Still, this failure did not deter a revival of the basic paradigm when the age of ICTs began to dawn in the 1990s.

It follows from this general logic that media could be a 'magic multiplier for development' (Rogers 1976:226; see also Schramm 1964, Schramm and Lerner as cited in Sonaiké, 1988:87). This sometimes comes close to suggesting that development problems can be solved by throwing information at them (see Melkote, 1987). Want to help African newsrooms? Throw computers and an Internet

connection at them, and all else will follow. Of course, it is a lot more complicated than this.

And the persistence of this thinking was further not too bothered by a major political critique that had emerged in the 1970s, viz. the 'Dependista' school. While Modernisation proponents saw media technology (eg. number of TV stations in a country) as a powerful force for development, the Dependistas argued that it was a powerful contributor to underdevelopment. Their critical focus was on the media as agents of cultural imperialism that foisted individualistic, escapist, consumerist, anti-democratic and pro-American ideology on the media consumers of the Third World (see Berger, 1992). In a way, this turned the picture upside down: Modernisation enthusiasts believed that media could deliver development, Dependistas blamed media for underdevelopment. In the modern version of the Dependista critique, Internet in Third World newsrooms would be seen as a recipe for information that is inappropriate, irrelevant and even indecent, and a prescription for lazy journalism, plagiarism and an agenda that is out of kilter with local priorities.

This is not to say that Modernisation thinking was left untouched over time by its own lack of results or the Dependista critique. There was some learning. Accordingly, it was thus gradually realised that the role of mass communication in development was probably more likely to be indirect, and only contributory, rather than direct and powerful (Rogers, 1976). Thus there were theories of two- and multi-step development communication flow, which regarded the population as divided between the active and the passive, the opinion-leaders and the followers. In addition, the perspective came to take into account the role of culture (see for example the Blair Commission here, Blair 2005). It was recognised that culture in the target group impacted on the diffusion and adaptation of innovations, individual values and attitude changes. (The previous idea was that

tradition was an obstacle to modernity, and the media could prepare individuals for change by establishing a climate for modernisation (Rogers, 1976, cited by Melkote 1987:41)). As a result, the Dependista critique failed to entirely displace the Modernisation approach.

In some ways, this was also because, despite their different orientations, both Modernisation and Dependista views shared the conception that people were primarily inert consumers of meanings, composed of individuals responding in Western (supposedly rational) terms, and as such passive 'suckers' who were ripe for the reception and absorption of messages. The difference for the Dependistas lay in the view that communication technologies should be used not to assimilate the Third World into the modernity, but as a tool in building self-reliance as against dependencies on the First World. For the Dependistas, the people were objects of imperialism, and they needed to be mobilised by outside animators to become subjects.

Communication in this Dependista paradigm thus plays a role in fostering national pride, and in integrating traditional and modern systems (Rogers, 1976). This approach gave rise to the unsuccessful Unesco New World Information Order (NWICO) strategy, which aimed to change the international imbalances in the flow of media content. The vision was that the Third World state should create, defend and advance national culture(s) in the face of cultural imperialism. It also led newly decolonised countries to nationalise media in the interests of nation-building and local content. In many cases in Africa, however, this strategy became one of central control, and perverted into propaganda to persuade the masses that the dictatorship of the day was working in their interests. As a result, both NWICO and the parallel notion of 'development journalism' became discredited (Okigbo, 1985). What endures, however, is the Dependista interrogation of the assumption that 'West is best'. It correctly counters the inferiority-

complex mentality. Indeed, a Dependista approach would highlight that even in First World newsrooms, many journalists have low ICT skills (For instance, as Swedish media trainer Mark Comerford observed to me in a personal communication, they do not know that Google, for instance, does not do truncation searches—thus, you cannot use *Afric** to search both for Africa and African; you have to spell out both words. Ask them if they have used search engines like Clusty.com and you'll get a blank look). The Dependista approach would also recognise that First World journalists are not exactly in the land of info-plenty: the online content and expertise available to them is very far from reflecting the rest of the world's information resources.

Although both Modernisation and Dependency approaches operated typically in regard to classic mass media (radio, television and newspapers), they did encompass what became one of the early media to be seen as an ICT, i.e. satellite. This mainly transmission-oriented technology was seen by the Modernisation approach as transferring Western scientific information and 'democratic' [civilised?] values to much of the Third World. The same technology was desired by the Dependistas as a means to deliver their own national information to the masses. As indicated, both perspectives persist in regard to the newer ICTs of Internet and cellphones.

However, the Modernisation and Dependista views of the role of media in development also stimulated a third approach, which questioned the shared fundamentals of the first two. This new position critiqued the notion of 'development', saying that this had to incorporate a level of equity, else it was mere growth. It further argued that human rights and democracy were a concomitant, and even a precondition, for development. This gave media a role beyond that of transmitting either foreign or national 'development' content.

Subsequently, this theme was even taken up in a particular form by the World Bank (World

Bank, 2003; Wolfensohn, 2005), and recently echoed by Unesco (2005), such that media was recognised as an essential ingredient (especially in the watchdog model) of the good governance required for development. This particular concept of media role raised the need for the media to have a critical independence of elites and the state.

More fundamentally, though, this third approach typically went beyond this to uphold horizontal communication, i.e. between groups of people, as contrasted with the vertical top-down model of both Modernisation and Dependency. This emphasis saw one writer declare in favour of communication that was horizontal, decentralised and access-orientated - 'only the concept of the right to communicate provides a suitable standard to achieve the goals of development by means of appropriate communication' (Servaes, 1986:2; see also Servaes 1999). In this vision, ICTs in the newsroom can serve to build communities of journalists on a global scale, as well as network them and civil society on a South-South basis.

This third wave, following the spirit of Paulo Freire (1972), argued that development (in the allround sense) could only succeed if the target communities or countries themselves participated in it—including in defining what it was. People were seen as always-already subjects, not as objects. The development challenge was therefore not to misguidedly seek to initiate, but rather to increment their extant capacities. Rather than imitation, the focus was on origination.

In this perspective, then, instead of the media acting upon them, mass audiences should be empowered with their own media or have access to democratised mass media. Instead of being viewed as recipients of information, they could be makers of their own messages. Community radio became the classic strategy here, offering as it did a platform to this effect. Conveniently, the medium merged Dependista and Participatory

development features. This particular technology and social institution started moving to the African centre stage of development and communication about ten years ago. It remains a major focus, and still something that activists continue to struggle for in many despotic African countries.

Despite some years of operation, however, it has not yet been clearly established whether community radio, in its provision of access at the local level, i.e. the fostering of horizontal communication, actually—i.e. in practice - impacts on either democracy or on the development of productive capacity. The phenomenon is still sufficiently untested to run into discredit within the development industry. However, it is plausible to argue that any question marks over the actual impact of community radio have been kept within that sector and not extrapolated more broadly to the Participatory development paradigm as such.

Community media is of course a welcome development in Africa, but it is also still a small sector as compared to the kind of mainstream print and broadcast newsrooms focused on in the case studies of this book. The influence of participatory thinking on these newsrooms in terms of both their internal and external relations seems to be rather limited, with old models of owner-editor control still prevalent, and audiences conceived solely as markets rather than potential colleagues or suppliers. But the introduction of ICTs into the newsroom does signal one way in which this could begin to change. For example, when journalists start to publish their email addresses and open up to online dialogues with their audiences, so participatory development thinking can begin to permeate.

Although the Participatory position arose very much in relation to radio, it has found a strong contemporary resonance in the medium of ICTs in the stand-alone form of the Internet and cell phones. The wave of ICT (for which read Internet) enthusiasm has been barely influenced (either negatively or positively) by the experience

of the community radio movement, although the general optimistic principles are common to both communication platforms. The thinking is that here, finally, is the key to unlock people-centred development.

2.2 The 'new' ICTs

While community radio puts its stress on horizontal (peer-to-peer) communications, the Internet and cellular telephony are often seen somewhat differently.

First, these forms of communications are seen as more individually rather than mass-communication based, even although institutions (or their representatives) are very much engaged in their use. It is true that these are often one-to-one communications, but as this research shows there are very often—by necessity - common facilities plus there is a sharing of skill and collective experience in African newsrooms.

Second, the horizontality and Participatory potential of the new ICTs is typically overshadowed in the case of the Internet. Instead, the dominant development view is that this technology will enable those at the bottom, the ones living in information darkness as it were, to access information from those at the top. This applies both to the inside of newsrooms, and society as a whole. It is a case of the 'Return of the Modernisation Paradigm' where the conventional wisdom is that the greatest benefit of Internet connectivity is to give the information-impooverished access to the wealth of (Western) information. It is often only at a secondary, and different, level, that Internet is seen as a medium that can enable participatory and horizontal communications (such as in chat fora, interactive links between journalist and reader, blogging, e-governance, e-learning, etc.) within a given society.

ICTs in the form of Internet, and belatedly cellphones, reached the apex of their development appeal when the International

Telecommunications Union (ITU), on behalf of the United Nations, convened the World Summit on the Information Society in December 2004. Substantial lobbying was needed in order for the agenda to include the mass media, whether in the form of mainstream broadcasting or community radio or print. The institutional conditions for flourishing journalism, such as media freedom and pluralism, were not on the initial radar of the narrow concept of ICT when the Summit was first conceived. This was in part a simple omission resulting from over-attention to the newer ICTs, and in part a political consequence of the institutional interests of the ITU itself and the political conservatism of many UN member states (including China and the Arab countries) which had little interest in the democratic questions concerning information environments. The outcome of intense wrangling was, however, a recognition that a concept of an Information Society needs to include the full range of media technologies and platforms (including print), as well as the creation of enabling environments for their functioning in the interests of democracy and development (see WSIS 2004a; 2004b).

ICTs, however, in the form of Internet and cellular telephony have not been toppled from their leading position. The focus is upon Internet and cellular, which - to co-opt a phrase - are the 'new new thing' (Lewis, 1999) which could bring about intensified development (and democratisation) when much else has failed or is taking too long. It is true that in recent years, the bubble has subsided somewhat, and the notion of ICT4D[development] has become a little subdued. ICTs may no longer be seen as an instant panacea for poverty, but this does not at all mean they have been discredited in a way akin to what happened to the model of state-owned media that practised 'development journalism'. Instead, optimism persists, drawing its rationales from elements of all three development communication approaches: Modernisation,

Dependista, and Participatory.

One rationale is the Modernisation insight that information could combat ignorance in underdeveloped communities, even if the same point confirms the Dependista critique by ignoring that such information may be Eurocentric and paternalistic, in short, simply inappropriate. There are, however, those advocates (see WSIS 2004c, Civil Society declaration) who take the Dependista alternative—that the very same technologies can, and should, be used to counter any cultural (and linguistic) imperialism. And while the Modernisation view may also sometimes be taken in isolation of the insights of the Participatory approach, and especially the importance of promoting democratic values, justice, etc., this does not rule out Participatory potential in ICTs.

In fact, a case can be made that understanding ICTs (and indeed the aggregate landscape of media) in development and democracy can draw from all three approaches. There is indeed value in international information dissemination as per the Modernisation approach; but it also needs to be approached critically and complemented by substantial local and national information as per the Dependistas. An autarchic perspective, i.e. an exclusively Dependista approach, would entail an unrealistic, and undesirable, isolation from globalisation, and indeed an artificial and self-damaging constriction on the potential of new technologies (see Berger, 2002). On the other hand, the Dependistas would also be correct to stress that the national state does have a critical role to play as regards developing and implementing appropriate ICT policies that will promote local infrastructure and content (see Van Audenhove et al, 1999).

As for the Participatory approach, it is valuable to celebrate and promote the democratic flourishing of community (and individual voices—as in the case of blogging, and grassroots shaping of the meaning of 'development'). However, Participationalists

would also do well to recognise the contribution of 'expert' mainstream global and national information as highlighted by the Modernisation and Dependista approaches. As should therefore be evident, a synthesis—or rather, a complementarity - of the three paradigms is possible.

Even so, two points need to be made. First, the current mix is uneven and the Modernisation thrust has tended to eclipse the other two. Arguably, the key discourse issue has thus been giving the 'information poor' access to the 'information rich' (See WSIS, 2002, on WSIS themes of Vision, Access, Application; and Van Audenhove, 2003a, 2003b). This downplays the issues raised by the other two paradigms. It also obscures discussion about a serious lacuna such as the lack of knowledge of Third World issues among the 'information rich'. Other blindspots are the issues of power and property, and the contribution (and intellectual property rights) of the 'information poor' as regards the global Information Society.

Secondly, even a combined approach still includes some debateable assumptions. These are (i) that media systems and ICTs are neutral technologies, (ii) that they are developed and disseminated from elite institutions at the centres, and (iii) that information constitutes power (See Van Audenhove et al, 2003; Van Audenhove, 2004; Wilson, 2003). ICTS come from particular societies, with particular design constraints and possibilities concerning scale of use and social/individual role. They may bubble up from below, and be self-developing. And while information is a factor, there are a myriad of ways in which its power is probably far less significant than any notion of Information Society might suppose. These are important points. However, the key point for now is that analysis of ICT use in African newsrooms should ideally be sensitive to the issues raised by all three paradigms, and avoid being blinkered by a single one.

Against the theoretical background sketched above, one can now move on to interpret in broad terms the research project constituted by this book.

3. Laggards on the input side?

ICTs in the view of many development commentators are supposed to be able to raise the efficacy of practice in many sectors, and the media is a particularly important sector. This importance lies in the way that media output can impact on the role of information and ICTs in other sectors, given that journalists are central information vectors within a given society. This use of ICTs is especially highlighted for its potential benefits in news gathering and production—i.e. the input side of the process (Pavlik 1996; Reddick and King 1995; Garrison 1998).

The subject of ICTs on the input side is further relevant in that one can assume that successful usage of ICTs by journalists in their day-to-day practice ought to promote their own understanding of the significance of these technologies more broadly and therefore to other sectors of their societies. Against this background, the Highway Africa project (www.highwayafrica.ru.ac.za) at Rhodes University's School of Journalism and Media Studies considered it relevant to investigate the adoption of ICTs by journalists and newsrooms. The working question was to try to interrogate where this impacted on the 'productivity' of their work.

This research project was informed in part by an early idea that has been taken up within the Modernisation approach. This notion was that media could be the leading edge in promoting the innovation of a technological idea or device. The idea fitted in well with the focus on technology transfer as the key to development (Rogers, 1976:229; 1986; 1995; Soong, 2004). Where the Highway Africa project differed from the assumptions of Modernisation was that it did

not assume intrinsically positive results arising from the spread of ICTs within the newsrooms. Instead, it also explicitly enquired into whether there were various problems involved - such as faster journalism meaning less time for quality considerations; the potential for easy plagiarism; possible use of ICTs for consuming pornography rather than for media research, etc.

There have been continuous quantitative annual surveys of ICT use by journalists in the USA by Ross and Middleburg over the past ten years (see <http://www.mediaroom.com/>). But such studies have not been the case in Africa, and so this project was conceived to help fill the gap.

In order to operationalise the research, the initial idea was to utilise another concept popularised by the Modernisation approach, i.e. that of 'early adopter'. Elaborated by Everett Rogers, this highlighted how diffusion of technological innovations depended inter alia on the role that 'early adopters' play as opinion leaders in the innovation-decisions of later adopters (Rogers 1995: 264). Accordingly, the project sought to identify the external markers of early adopters within the newsroom by locating the first people in the newsrooms to use ICTs and who taught others in the newsroom how to use ICTs. They would be individuals who were an integral part of the local social system (insiders), and be looked up to for advice from potential adopters look to early adopters. They would be people who believed that ICTs increase effective

productivity and that they are good and should be promoted.¹

Besides the early adopter issue, the research further aimed to assess:

- Newsroom policy on ICT usage, including training
- Types of ICTS available and conditions of access
- Newsroom size and access to ICT infrastructure
- Age and gender among journalists
- Attitudes towards ICT and meanings given in that regard
- Purposes for which ICTS were being used (such as email, research, transferring/ exchanging information, editing;
- Effects of ICT use

The attempt to focus on the 'early adopters' was informed by Rogers' 'three intrinsic elements of an innovation': 1) form—the physical appearance and substance of an innovation (e.g. Internet connectivity); 2) function—the contribution made by the innovation to the social system (e.g. whether Internet is used to enrich stories through online research); 3) meaning—the subjective perception of the innovation by members of the social system (e.g. whether using Internet means a new—and desirable—status, etc.). This provided a useful landscape map which this project's research could try to cover.

The actual fieldwork was conducted by MA students, with support from the IDRC, into

¹ The research took cognisance of possible alternative readings of the early adopters, providing a mirror image of dominant assumptions to explore during the fieldwork:

- Early adopters are useful role models/Early adopters are techno-junkies.
- If widely used, ICTs will counter negative perceptions of Africa in western media/ICTs can provide a conduit for cultural imperialism.
- Individ[ua]l training.
- Early adopters promote the use of ICTs/Early adopters intimidate others into using ICTs.
- Access to ICTs increase social status/ ICT users are nerds.
- Afr[ican] Africa.

the following nine southern African countries: Tanzania, Lesotho, Mozambique, Swaziland, Botswana, Zimbabwe, Zambia, Malawi and Namibia. Sampling proved to be a complex matter. In Swaziland and Botswana, for example, the researchers found they had to take a relatively random pick of individuals in several newsrooms to interview. What this means is that many of the results are not indicative of 'early adopters', but instead reveal a range of ICT uses in the newsrooms. Various factors mean there is also great unevenness in the size and representativeness of the research subjects in each country, and the questionnaire instrument (which was clearly too cumbersome in its original form—see Appendix) was adapted differently in several cases. While all this means that generalisation is not possible, and therefore that the use of percentages in some chapters is based on a very small sample, some qualitative insight can be suggested.

On infrastructure results, the researchers produced the pertinent fact that it is necessary to go beyond establishing the actual existence of computers in southern African newsrooms. In many cases these devices do not work, and a great many more are not even connected to the Internet. This is not even to investigate the models and performance of those devices that are wired. Even as regards unwired computers, in many cases journalists queue to share these rather than have personal workstations.

Where there is access, such as in one Malawian newsroom, it is only permitted for 30 minutes per journalists per day. Namibia and Botswana are exceptions in regard to providing universal and always-on access to most of the journalists in the newsrooms surveyed there. In other countries, many journalists resort to using cybercafés to go online. In most countries, journalists do use cellphones extensively for their work—but a disincentive to this is that most of those interviewed are not subsidised by their workplaces for doing so. Surprisingly, the only

a few countries produced information about functionalities other than voice being used—in particular SMS communication.

In almost every case, there was no formal policy in the newsrooms about training their staff to use Internet. Most users interviewed were self-trained—but also assisted by their peers. Actual use of the Internet varied. All journalists made use of it for email, but in many of the countries surveyed, only half of the respondents also utilised it as a research tool. In general, the researchers found extensive underutilisation. But a common use of the email was to subscribe to list-servs to receive information about training courses and scholarships, evidence of a proactive and community-building character of ICT use in some newsrooms. The advantages of email and cell phones were seen to be their direct communications potential, breaking the dependence of journalists on gatekeepers and secretaries to get access to key sources. The use of blogging (as seen as part of the participatory paradigm) was not registered in the surveyed newsrooms at the time of this research being conducted.

Respondents' understanding of Internet research was limited. For those claiming to use Internet to this end, several included in the name of 'search engines', the trivia website ananova. (It is probable that the 'research' done at ananova amounts to content piracy). There was an admission by some of the journalists that they plagiarised off the Internet.

An interesting finding—which somewhat ameliorates the Modernisation diagnosis and gives credence to Dependista concerns—was the critical attitude of the journalists to the WWW. Many complained about a lack of African information online—which may help account for the limited research utility of the Internet that was noted by this project. Some journalists complained specifically about the lack of African languages online. The findings suggest that there is not a romanticisation of ICTs by journalists, but

rather an ability to put some critical perspective on the resource. At the same time, it would appear that there is insufficient awareness of the productive power and potential of ICTS, even despite the limited quantity of African content online. That there is little online research may be a function of both limited access plus the relative lack of relevant African content online. But these difficulties on their own are not a reason to disregard the research riches that are online.

Pornography was cited as an abuse of Internet by several respondents, but none saw harm in using company connections for personal communications. In one Mozambican newsroom, the Internet-connected terminal was said to have been put in public view to deter staffers from accessing pornographic materials.

There did not seem to be particularly significant distinctions in ICT use along gender lines. However, most newsrooms were still male-dominated. In regard to age differentials, it was suggested by some respondents that younger people might have more lenient values on plagiarising online content than their more experienced colleagues. No patterns emerged concerning a generation gap in terms of use.

The research indicates that ICT use is integrated unevenly into newsrooms, and there are major variations across the region in regard to problems of access. This, and the lack of proper training, constrain the use of these technologies to their fullest.

Attitudes to ICTs seem to be positive, suggesting a constituency that is not only receptive to innovation, but also actively—as subjects - seeking to optimise their Internet use. There was no evidence that users were seen as techno-junkies or ‘nerds’, or that they intimidated those with lower skills. There was also not a sense that ICTs per se conveyed negative images of Africa, nor that ICTs were a distraction from more important needs.

It appears that there is a large proportion of peer-to-peer learning and self-teaching in the

newsrooms, which suggests that interventions to train individuals in this regard may have a multiplier effect back in the workplace. On the other hand, there is clearly a need for a policy environment that would also elaborate on both constraints and capacities that should guide ICT use by journalists. The non-existence of systems around reimbursement for use of personal cellphones, is an example.

In summary, the research, notwithstanding its limitations, reveals a picture wherein many African newsrooms and journalists are very far from the optimum use of ICTs. From a Dependista vantage point there is also some awareness of cultural and language limitations concerning what is available on the Internet. But there is no escaping one conclusion that underpins a Modernisation point of view: there is an urgent need to play catch up. There is a need for African media to participate in the Information Society. At least, however, this research also shows that many of the journalists surveyed are interested parties, and that they are proactive subjects trying to utilise ICTs in their work. Defining this in appropriate and sustainable ways is still a way off, but adoption and adaptation is well underway. The ingredients of participation are there, and contributing the interpretation and realisation of ‘development’ in a way that is driven by its stakeholders.

4. Conclusion

This chapter has reviewed three paradigms relevant to media and development, and related these to the findings that are set out in this book. What the research project strongly signals is the Modernisation need for access and training to improve utilisation of ICTs in southern African newsrooms. It is unclear from the research to what extent journalists are early adopters in the sense of being expert pioneers who blaze a trail which others can follow, but it is evident that many of those who can use ICTs take pride

in this, and enjoy appropriate status. It is also apparent that all the journalists surveyed are not inert objects waiting on external salvation. They are proactive professionals who use their own initiative in utilising ICTs in order to better do their jobs. This is through actions like visiting cybercafés at own cost to do email, deploying cellphones at their own expense and being sceptical of the content on the Web. Accordingly, any interventions need to start from this point—not from an assumption of intrinsic inadequacies, passivity and backwardness.

Thus this book shows the limits of an exclusively Modernisation focus. It demonstrates that there is more than simply 'catch-up'. Instead, we can see that African journalists have something valuable to contribute to a global 'Information Society'. The vision therefore should be to see Africa's digitally excluded journalists not so much as needing to enter the 'Information Society' and share in its benefits, but as helping to change that self-same society (Berger, 2003). This is in line with the 2002 WSIS preparatory meeting in Mali, where participants spelt out a pertinent dialectic that mentions not only the benefits that global Information Society development could bring to Africa, but also what Africa could contribute to it (Berger, 2003).

As will be clear from the arguments above, a key blindspot in Modernisation thinking was, and is, about the suitability of media content. However, it would be wrong to take Dependency theorists to their logical extreme, and reject out-of-hand all content emanating from the (First World) Information Society. There is of course enormous value in much of it, just as there is also a volume of trash or simply inappropriate content. On the other hand, it remains critical that Africa does develop its own online information resources - reflecting its own issues, and presented in its own languages. The Dependistas were right here. Yet, this matter on its own is still insufficient for building a global Information Society that includes African voices. Thus, taking on board the lessons

of the Participatory approach, it is apparent that capacity should be increased to produce and access indigenous online content—in the interests of both Africa and global knowledge resources. For example, if many problems of underdevelopment are precisely because of the unequal terms of globalisation (eg. foreign debt, tariffs against agricultural exports), then information about this has to be inserted into the international agenda. In other words, participation is part of ensuring that the global public sphere includes the interests of the underdeveloped. Again, media as a whole has a critical bridging role to play - not only to channel First World information to the Third, but also the reverse. And here the Web, with its global potential, is a unique medium.

Participation too is part of getting buy-in and co-construction by African journalists into our own national and regional questions of development and democracy. The chat forums on many web sites may be used largely by diasporas and local elites, but that does not diminish their relevance at all. The challenge is to see to what extent Internet access and cellphones can be disseminated to broader communities, and be accompanied by the quality information that African journalists could be providing through them. And to be open to interaction between those involved in the exchange. In this way, information's place in development becomes not just a vertical matter between suppliers and receivers, but also one where receivers themselves interact both vertically and horizontally.

A caution is in order here, however. It would be wrong to over-stress the Communications component at the expense of the Information component of ICTs. This would be to render professional journalism and expert communication redundant, whereas these all complement and enrich each other. Using ICTs without the content that is collected and presented by specialists is to impoverish the

proceedings and risk the danger of reducing them to interpersonal chatter. (By the same token, producing professional information without considering the value of communication and participation, is to slip back into the old Modernisation stimulus-response paradigm).

Journalists are doing it digitally in southern Africa, despite difficult conditions in many cases. We should celebrate this. And the people who participated in this project—both the researchers, the interviewees and the editors—should also be saluted for helping us to publicise this. The challenge now is to strengthen the use ICTs, and the conditions for their deployment, building on the insights recorded in this book.

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Mozambique

by ALISON STENT

1. Introduction

This chapter investigates how 'early adopters' among Mozambican journalists are using ICTs in their work at various media in this country: Zambeze, Noticias, Savana, Radio Mozambique and the Mozambican News Agency. An online AIM report dated 22 June 2004 puts Zambeze 2003 circulation figures at 6 000; the Noticias circulation at 12 793 and Savana's at an average of 14 000.

2. Research methods

Gathering baseline data for assessing how African early adopters are using ICTs in the newsroom was done using a questionnaire, observations and interviews. For various reasons, discussed more fully below, the questionnaire proved more useful as a rough guide for interviews. Observation also proved a rather limited tool in the Mozambican context, since it tended to be more hurried and informal, and less systematic, than desirable. It focused more on visible technology than practices in using it. Nonetheless it was useful for triangulating data from questionnaires and interviews, and for gathering contextual information.

Eight questionnaires were completed; seven newsrooms were observed, none in a formal sense and 11 interviews were conducted, some in more depth than others.

Publication communities were selected on the basis of being based in Maputo city.

The Mozambique news agency, (Agencia de Informacao de Mocambique or AIM), was the only contactable newsroom found via the World Wide Web.

Through AIM, contact with the independent company Mediacoop was initiated by email and through the project co-ordinator, contact with the public broadcaster, Radio Mozambique (RM), was initiated by email. All other contacts were made by phone or by face to face meetings.

Seven newsrooms were visited. These included two in RM; Noticias, the country's largest national daily; two independent weekly newspapers; the state-funded news agency; and an independent daily fax/e-sheet. Six in-depth interviews and two others took place in newsrooms.

Three interviews were conducted in other contexts: with a former journalist and journalism lecturer; with a freelancer/Reuters correspondent at her home and via email, and with two women journalists on gender issues. Selection of candidates for in-depth interviews was partly ad hoc and contingent and partly intuitive, based on the interest they showed in the project, their experience in journalism and above all, their fluency in English.

To quite a large extent this meant that not all early adopters in the sample newsrooms were necessarily interviewed, and not all questionnaire respondents were necessarily early adopters.

Below are two tables (1&2) detailing the participants in the study and research tools used.

Table 1: Newsrooms in the study showing research tools used:

Newsroom	Details	Interview	Qu.
Radio Mozambique (state-owned public broadcaster) 4 channels—other 2 are Maputo Province (Shangaan) and Antenna Nacional (Portuguese) No website	Maputo Corridor (English channel) 9 reporters broadcast noon-midnight in depth current affairs & news on the hour		3
	Producer of programmes for two channels	Julieta Musanhane	1
	Radio Cidade (youth channel) 3 reporters lighter entertainment content Language: Portuguese	Zenaida Machado (journalist)	2
Journal Zambeze No website	Privately owned weekly tabloid Language: Portuguese Circulation national 10 000 12 city reporters, 9 correspondents, 1 in each province	Rafinaldo Correno da Manha (journalist)	
AIM (Agencia de Informacao de Mocambique) Functional website	State-funded news agency Supplies local news to Mozambique, Africa & internationally English and Portuguese 15 reporters	Gustavo Mavie (director)	1
		Paul Fauvet (English desk editor)	1
Noticias Plans for website	Privately owned, main national daily Published daily Language: Portuguese Circulation national 20 000* 54 journalists—33 city, 21 in provincial bureaux	Rogério Siteo (director) Gil Filipe (journalist)	
MediaCoop Private ownership Website under construction	Savana, Privately owned weekly tabloid Language: Portuguese Circulation national 15 000 - 20 000 11 journalists—5 in provincial bureaux	Fernando Goncalves (editor)	
	Mediafax Daily news sheet, 1500 sent daily Language: Portuguese 4 reporters		

Source: Fieldnotes 17-21.05.2004

Table 2: Interviews outside the newsroom context

Respondent	Detail
Fatima Vieira, Freelance correspondent (Reuters, CNN)	works from home with laptop and infrared cellphone that takes digital pictures most local publications don't buy Reuters copy—too expensive
Gil Louriciano, lecturer at International Relations	Co-founder of MediaCoop with Carlos Cardoso Former editor of Mozambique Inview Former lecturer at School of Journalism
Women radio journalists Zenaida Machado and Rosa Maciel	Gender issues

Source: Fieldnotes 17-21.05.2004

3. Findings

Patterns of access in newsrooms were:

- Access to the Internet in the newsroom is restricted.
- There is no digital photography in evidence.
- Websites are few and unsophisticated
- Hardware and software are often out of date, particularly at the public broadcaster.

At Radio Mozambique, the Maputo Corridor (English Channel) newsroom has seven reporters. Each of them have their own computer, but only two are on-line. In a second newsroom four computers are shared between ten people (organised in shifts); of these one is broken and one is on-line. In the Radio Cidade (Youth Channel) newsroom three journalists each have their own computer and a fourth one, on-line, is shared. There is a satellite connection but the ISP drew many complaints.

Both hardware and software are old and slow and individual reporters store their data on 3½ floppies. Power and telephone connections both drew complaints—power cuts are frequent and cellphone interviews for broadcasts are unintelligible due to the line quality. These problems were succinctly phrased during an interview: ‘We don’t have the machines we need. Shouting with the listeners is not good enough.’ Most communication—with listeners and sources—is by phone and fax.

Journal Zambeze, a 32-page weekly in tabloid format, has twelve city reporters who work in two shifts. The premises are in an old house near the harbour and the newsroom, a converted sitting room, has two teacher’s desks pushed together in the centre with six computers on it. One other computer, set apart, is on-line.

There are bureaux in each of the nine provinces (one reporter per bureau). Some print out and fax their stories from the post office—‘It’s not just the expense—there is no Internet connection there’. Other correspondents send by

dedicated modem. Zambeze has no photographic facilities and black and white film gets developed ‘down the road’.

AIM occupies two large floors of an old state building next to the massive Radio Maputo building. In a total staff of 60 there are 15 reporters who share eight computers, working in shifts. ‘When I came in 2003 after [investigative reporter Carlos] Cardoso [was murdered in 2000] there were no computers; there weren’t even chairs. The Chinese ambassador worked hard for us’, said one employee.

Though AIM is state-funded, the budget has recently been drastically cut. Eleven computers are on-line via satellite. Five of these are in the newsroom. ‘There is a policy to prohibit access to pornographic websites - but it is impossible to police this policy, and I have frequently come across evidence that some of our journalists and/or technical staff have been viewing pornographic images (usually at night).’ According to this interviewee, more than half the reporters have private cellphones; probably three or four (about one fifth) have computers at home.

AIM has a darkroom and two developers. There is a digital camera but it was not yet in use. AIM has a relatively good website and bureaux in Lisbon and London.

As an international news agency much of its production is electronic, but special event publications (like on the recent election) are published from time to time. Staff can communicate via an intranet system.

The library is meticulously kept with a treasure of Mozambican documents. No plans to digitalise the library were spoken of. There is a scanner and CD writer. The director has a cellphone and a personal laptop as well as a new-looking desk computer. His personal assistant also has a new computer. In stark contrast another senior management figure prefers a ten-year-old machine—‘There’s nothing wrong with it’—and does not want a cellphone. ‘What for? I’ll just use it for work, and work won’t pay the bill.’

Noticias is the largest daily in the country. About 30 reporters are organised in six 'desks' in the newsroom, most in groups of four tables with a computer per table. The desks are sport, politics, society (eight computers), economics, international, and culture grouped with opinion and letters. Each is connected for internal communication via intranet. About 90% of letters to the editor are snail mail, 7% fax and 3% email.

At one end of the long room two computers are placed in prominent isolation, monitors facing the room. One has dial-up access, the other a satellite connection.

Two of the nine provincial bureaux have five or six reporters, one has two and the other six have one each. Some fax their stories while some email via a dedicated modem. Noticias had no website.

'Noticias has been trying to get a website for some time now, but the problem is know-how,' (director Rogerio Siteo).

Savana and MediaFAX have separate newsrooms and editors. Savana has eleven reporters, MediaFAX four. The Savana newsroom has nine computers. Three were not working, one is for scanning, one for layout and two are on line (satellite connection).

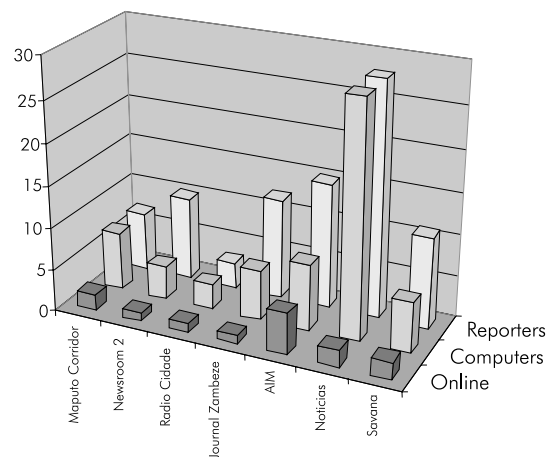
Savana puts out a weekly tabloid with a national circulation of 20 000 at month-end and 15 000 midmonth. MediaFAX sends an electronic news sheet daily to 1500 clients, some of whom receive it by email and others by fax. MediaFAX layout is done on Pagemaker and distribution by Winfax ProMessage.

MediaCoop has bureaux in five of the nine provinces. Two send stories by email, three by fax. The two newsrooms share bureau news.

MediaCoop has a website but it has been under construction for some time. Black and white photographs are developed in a darkroom. A twice-monthly English language newspaper, the only one in the country, Mozambique Inview, was discontinued recently through lack of readers and writers.

Below is a chart [1] showing Internet access in the Mozambican newsrooms visited.

Chart 1: Internet access in Mozambican newsrooms



Source: Fieldnotes 17-21.05.2004

As regards patterns of access and usage outside newsrooms, the following findings were made. Few people choose to connect to the Internet from home even when they have both computer and fixed line facilities.

All this is the infrastructural context. The next issue is who works in it, and how do they do so?

'I saw a modem at work for the first time in 1987. I was travelling with a friend and he filed his story to New York from the hotel room. With all the money I made that month I bought one, a better one. It just puts the world at your fingertips.'

This remark came from a media researcher, anthropologist and leading figure in Mozambican journalism who co-founded MediaFAX. He also was editor of Mozambique's only English language newspaper, Mozambique Inview, and now lectures at the Maputo Institute for International Relations.

Based on the above quote and brief curriculum vitae, he fits the early adopter

profile, although he is no longer a practising journalist. However he would not be among the respondents if he had not been coming to the Sindicato Nacional de Journalistas (SNJ) to check his emails at the journalists' Internet cafe.

Another early adopter, a 27-year-old male journalist on the cultural desk at Noticias, said: 'I saved for a computer while I was still at school.' He taught himself English in a country where it is not widely used, and is one of a few young journalists who has a computer and a landline at home.

He said all his colleagues have cellphones but only about half have landlines. He, too, is among those with a free webmail address.

All respondents use email for both work and contacting friends and family—in the words of another senior journalist, 'It's taken over from letter writing'.

Below is a table (3) indicating that the practice of emailing crosses variables of age, gender, level of seniority and even home access to computers. It also indicates that cost is a barrier to owning a computer.

Data on uses of cellphones indicates that almost half—four of ten respondents—use their cellphones for more than simply calling or sending short messages.

As is evident from this table, the sample of interviewees had no formal training in ICT use.

Table 3: Indicators of age, gender, authority and training with email and cellphone practices

Age	G	Yrs w ICT	ICT Trng	Level	Computer a/h	Cell use	Email address	Email activities
33	F	9	N	Middle	N	calls	Hotmail	Friends; arrange interviews, receive info
24	F	7	N	Junior	N	Calls, sms, calendar, games	Yahoo	Friends & colleagues, reader/listener interaction, apply for training courses
50+	M	17	N	Senior	Y	—	Hotmail	Friends, family, business
50+	M	18	N	Senior	laptop	Sms, calls, send data from laptop	Hotmail	Friends & family, send stories & pix to clients
54	M	19	N	Senior	Y	No cell	Tvcabo (work)	family & friends, news distribution to clients, source content, deal with queries, receive press releases
29	M	7	N	Junior	N	—	—	Filing stories to international news agencies; friends and family
24	M	4	N	Junior	N	Sms, call	Yahoo	Friends
34	M	12	N	Middle	Y	Call, sms, diary, other	Yahoo	Sources and friends
28	M	1	N	Junior	N	Sms, call	Yahoo	Friends
45+	F	10	N	F/lance	laptop	Call, sms, send data, take pix,	virconn	Friends, family, work

Source: Fieldnotes 17-21.05.2004

Gender imbalances in newsrooms are extreme. In a sample population of 117 journalists in seven newsrooms, seven journalists were women. All seven newsrooms had no women in positions of authority. These skewed power relations possibly reduced the statistical probability of finding women who are early adopters. Below is a table (4) of the newsrooms visited, together with some opinions on gender issues.

Table 4: Gender breakdown in newsrooms

Newsroom	Quote
Radio Mozambique Maputo Corridor: total 9 reporters, 2 woman assistants/ trainee reporters Radio Cidade: 3 reporters, 1 woman	We can't send them out to get stories, their English isn't good enough. But English is compulsory from Grade 6 as from this year. 34-year-old male duty editor at Maputo Corridor (English Channel)
School of Journalism	Twenty-five percent of my class were girls. I gave them excellent testimonials. They were better students. About four of those are in newsrooms today. Former lecturer, 50+.
Journal Zambeze 21 reporters, all men	
MediaCoop: Savana & Mediafax 15 journalists, 1 woman	Print is more demanding. There were more women—the number is declining. Savana editor, male, 45+
AIM (Mozambique News Agency) 15 journalists, 2 women	There's higher paid work in NGOs, the WHO, Lisbon. Women are more visible on TV than in print. AIM English desk editor, male, 54.
Noticias 54 reporters, 1 woman	There are three women in my newsroom. One is a sub, she's married to the chief editor. One does the letters page. The other is a reporter. Noticias director, male, 45+.

Source: Fieldnotes 17-21.05.2004

Next to be analysed are the attitudes to ICTs and perceptions about constraints to using them for news coverage. In general, ICTs are seen as a useful tool for development, both personal and in a wider societal context. Their scarcity is sometimes seen as a political injustice beyond the respondents' control.

Concern with widespread poverty and underdevelopment in the society pervaded respondents' attitudes to ICTs and their impact on individual performance—indeed to the extent that opinions about lack of development were often inextricable from opinions about lack of ICT diffusion. Below is a table (5) containing quotes taken from interviews, questionnaires and informal conversations in support of the above findings.

Table 5: Attitudes to ICTs, constraints to their diffusion and their links to development and improved performance

Societal development/ Constraints to wider use in news coverage	Personal development/ improved performance
<p>'Malaria, AIDS—people are dying of ignorance here. Internet access will help.'</p> <p>'The money for a computer could buy a car.'</p> <p>'The problem is poverty.'</p> <p>'People cannot afford the machines.'</p> <p>'The elite [here] get them first of course—the government and the rich—while every kid in Europe has one.'</p> <p>'The decision-makers think of computers as power, status, an expensive luxury.'</p> <p>'The main constraints are political, not technological.'</p> <p>'The problem is not money—those in power are still conservative.'</p> <p>'Many sites are from out of Africa which makes us influenced by international policies.'</p> <p>'You need a European language'</p>	<p>'It's a tool that saves time and money—you don't have to retype so you save paper and you get clean copy.'</p> <p>'You can send the same piece with small changes to different markets.'</p> <p>'Why should I feel inhibited? It's a glorified typewriter. I've seen several technology waves in my time, this is just another.'</p> <p>'Using technology helps you on doing a faster job, rich job.'</p> <p>'Yes, the computer for extance [sic] it helps me on writing easly my news [sic], and sometimes it automatically corrects my mistakes.'</p> <p>'They're useful for reporting from the frontline. They would have been useful during the war here.'</p>

Source: Field notes 17-21.05.2004

Turning to use of the Internet for research, the findings are:

- Respondents use the Internet extensively to keep informed about international current affairs.
- Some respondents are critical of local and regional news coverage on the Internet.
- Some abuse of access is evident.

Table 6: Websites and e-lists recommended by Mozambican journalists

Websites and e-lists	Recommended by
Brazilian and news sites, International Women's Media Foundation	Radio programme producer, 33
Angolapress.com, journalism.co.za, Tvm.co.mz, AllAfrica.com, Channelfrancia.org, Imensis.co.mz Unaid, Safaids	Radio journalist, 24
New York Times, Washington Post, Guardian, Mbendi. SABC for African news. PNA is copied from Reuters & Sapa	Former journalism lecturer, 50+
Financial Times, Independent, Guardian, Chinua, Pana, e-news clippings from London	Managing editor, 50+
AllAfrica.com, Mediafax, Diaro de Noticias, SA govt, IPS, luso-Africa	Senior editor, 50+
Yahoo; Imensis.co.mz useful on Mozambique.	Junior editor, 34
New Musical Express, Def Jam, O Elefante Electronic Agenda, African news: Pana Press, SABC, Ebonet, Imensis	Radio journalist, 24
New York Times, La Monde, BBC, AIM, Lusa, jeuneafrique. Africaonline.com not up to date—Pana & Sapa better.	Print journalist, 27
Sunday times, Business Day, The Star. AllAfrica.com don't generate news, just use what newspapers have'	Senior editor, 45
'PNA don't cover Africa. The net is a problem for African news. We get news on Africa from Reuters, AIM and SABC2.'	Director, 45+

Source: Fieldnotes 17-21.05.2004

The table above shows Internet use as a research resource, but there is also some abuse. Said one interviewee: 'Porn is a problem. They spend too much time playing, and then the problem is viruses. Radio Mozambique connected everyone, and look what happened, with the games and the sex everything was taking twice as long.'

We now turn to findings on policy-related restrictions to Internet access in newsrooms, and gender in newsrooms. In the course of these discussions the attitudes and opinions expressed in Table 5 will be addressed.

Newsroom policies deliberately restricted and controlled access to the Internet in most newsrooms visited. This was in spite of the fact that the prohibitive dial-up costs before satellite connection became available were no longer a factor.

The restrictions were enforced by limiting the number of machines online and sometimes by placing those machines apart. They were put in strategic positions by those in senior positions, two of whom explained that it was to try to prevent younger journalists accessing porn and games sites (although one editor said he had seen no sign of it).

There were some indications that more senior journalists viewed plagiarism very seriously while younger people shrug and say 'Sure we lift things from the net when under pressure' and freely admit to accessing games during work time.

The data gathered on power relations in Mozambican newsrooms indicates strong gender imbalances as noted above. This is in line with those in the Regional Gender & Media Baseline Study (GMBS) released by the Media Institute of Southern Africa (Misa) in March 2003, which found that women were under-represented in print, especially hard news, producing only 22 percent of the stories. The highest level of representation of women in the media was as TV presenters—as long as they were young,

indicating their looks were the criterion for the job. Older women were 'invisible'—an observation certainly borne out in this research (see Table 4).

Two years earlier, Rupa Damodaran, in her on-line article *Scenting Out the Gender Imbalance in Journalism*, quotes similar findings from a survey of 40 countries presented to the International Federation of Journalists 24th World Congress in Seoul in 2001: 'The numbers range from less than 10 per cent in Mozambique to about 30 per cent in Zimbabwe or Tunisia.' She adds: 'despite the fact women comprise at least 38 per cent of the workforce in journalism, less than one per cent of media executive posts are held by women. The survey found that while more women work in media, they only make up a fraction of management and editors.'

How, despite policies promoting the advancement of women, do such staffing discrepancies arise? An explanation was offered by the director at Noticias:

'The problem is a cultural one. What culture? Shangaan, Ronga, Portuguese—all of them. Women have to look after the home, even if they are working. Men don't like the hours of her job here. ... One [woman] was forced to choose between her husband and her job. Another lasted a year. The boyfriends would sit outside here hooting at 6pm.'

However Delfina Mugabe, sub-editor at Noticias, (see Table 4) does not let the editors off the hook. Speaking at an SNJ workshop, Mugabe points out:

'The newsroom environment is not conducive to women. The relationship between men and women in the newsrooms is not good; the working timetable does not accommodate the triple roles of women; when a woman enters the newsroom and the editor tells her she has to travel on an assignment that day, she often cannot because she has not been given adequate time to prepare at home.

'For these reasons, most of the women in the media are either single or divorced.... The

assignments are given based on what editors think should be covered by men and what should be covered by women.'

This research found that with respect to ICT usage both inside and outside the newsroom: digital photography is not in use; few publications have websites; few people are on-line from home or even have computers at home and that technology is generally run down, particularly in the public broadcaster.

Other findings point to a longing for better access to technological developments and reasonable proficiency in basic utilisation of what was available—although not one respondent had received any form of training, either formal or informal. This data, indicating that Mozambicans feel more than ready for a higher grade of more affordable information technology, is solidly supported in the prolific literature on Africa's digital divide.

However, a significant point is made by the AIM English desk editor and colleague of the late Cardoso: 'I don't believe in technological fixes. It's the integrity of journalists that determines the quality of news.'

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Namibia

by HUGH ELLIS

1. Introduction

This report presents the findings of an investigation into the use of information and communication technologies (ICTs) in two of Namibia's best known news institutions: the Namibian Broadcasting Corporation (NBC) and the largest national privately owned newspaper, The Namibian. The data were collected using questionnaires and interviews, with a limited amount of direct observation, during the months of May and June 2004. The investigation showed that journalists in general have a high level of awareness of the Internet and its potential, but are also wary of excessive reliance on the medium, owing to worries about credibility and lack of content about Africa produced by Africans. In general, journalists have restricted themselves to the use of a number of sites, search engines and, occasionally, e-mail discussion groups which they perceive to be reliable. Other news providers and United Nations (UN) agencies were the most common sites referred to by most journalists.

The issue of use of the Internet by journalists has even greater ramifications as it relates to their sourcing of information. While many Western studies have observed the Net has potential to widen the source base journalists use (see Garrison 2000), it is also widely acknowledged that Africa lacks sufficient representation online, and foreign online content about Africa often lacks depth and has been accused of portraying the continent in an excessively negative light (Kyazze 2003; for

a discussion on Africa's representation in the media in general, see Carlsson 2003: 39-40).

Similar, though more advanced, surveys have been undertaken in many Western countries, especially in the USA. They have revealed a high level of general web-literacy and web use, but somewhat limited experience using advanced web search and database tools. Respondents to 1997 and 1998 surveys in the USA said they frequently used the web and made some use of commercial online resources such as databases, and comparisons with data from other surveys in previous years (1994 to 1996) revealed this was steadily increasing (Garrison 2000: 500).

Despite the increasing use of the Net, the surveys also indicated problems with verification of facts, sites containing unreliable information, badly-sourced information, and lack of source credibility. That study also found a growing need for ongoing newsroom training and development of online research skills (Garrison 2000: 500; 507-511). Interestingly, as will be shown in more detail later, many of the same questions and problems came to light in this survey of Namibian journalists. Another key problem identified by the Namibian journalists was the lack of sufficient local content, a problem identified in USA surveys in the early 90s, but regarded as less of an issue by 1998. In the USA, at least, technical issues did not present a major problem to journalists (Garrison 2000: 505-507). One might think, at first glance, that Namibian journalists would not have the same access to training and resources, or the same level of 'web literacy'

as their US counterparts. This survey sought to establish if this were true and found that the picture is rather more complicated than might be assumed.

2. Research methods

This study concentrates on two newsrooms: the Namibian Broadcasting Corporation (NBC) and The Namibian. The two newsrooms were chosen as together they represent the biggest audience in their respective sectors, namely broadcast and printed media. The NBC is the national state-owned broadcasting network, which has transmitters covering all urban centres and most rural areas in the country. At the moment, it is the only significant local TV news broadcast operation, although foreign news is widely available by satellite and a private free-to-air station, One Africa Television, plans to start making current affairs programmes soon. In radio news, the NBC competes with a range of community and commercial broadcasters, but few of them can command the national broadcast coverage the NBC has (Namps 2001). The Namibian is the country's largest newspaper, with an estimated readership of over 200 000, and has been listed in national surveys as the country's most popular newspaper. The newspaper is a tabloid-size paper of about 20-32 pages, with a number of supplements (Namps 2001).

These two organisations represent a fair sample of the national Namibian media, and provide the researcher with interesting results and information. As a journalist at The Namibian from 2001 through 2003, the researcher had also made contacts there, and this played a role in the choice of that organisation.

The respondents to a pilot survey felt that, although the survey was useful, there were several problems with it.

A slightly revised questionnaire was then distributed to about 30 people across the two

newsrooms. The respondents were chosen based on editors' views and my own knowledge as to who was more conversant with ICTs and who might describe themselves as 'early adopters' of the Internet and related technology. They were either reporters or, in some cases, 'middle management' personnel such as copy editors and radio producers, many of whom, due to limited staff, also often gathered news themselves.

There was generally a poor rate of response to these questionnaires, with only seven out of about 30 handed out being completed, and these responses were often only sparse in the detail they contained. Later, a revised and much simplified questionnaire was sent to some of those respondents who had not responded to the first one.

Other potential respondents said they would prefer to be interviewed instead of filling out a questionnaire, and this was duly done during the third and fourth weeks of June 2004.

These questions were generally similar to some of those on questionnaire forms, but an effort was made to try to tease out more detail than was generally received in completed questionnaires. This was largely successful, as journalists were more often willing to give details and relate their own ICT anecdotes in conversation than they were to do so on paper. The majority of the results and conclusions that follow are based on these interviews, particularly in the case of the NBC. A number of short follow-up interviews were also done, mainly with respondents who had already filled in questionnaires, in order to obtain more details and clarify what was meant by some of the answers in the forms. In the end, just over half of the original 30-odd chosen participants (and possibly half to a quarter of the newsroom staff) had either filled in a questionnaire or been interviewed. Only four people, however, had both filled out a questionnaire and been interviewed. It had been planned to do both for all respondents,

but because of the above-mentioned constraints and lack of time, this proved to be impractical.

Observations consisted chiefly of scrutiny of what happened in the newsrooms during working hours. Informal observations of newsrooms were conducted, each lasting about a morning.

3. Findings

In general, the results reflected that journalists in the two newsrooms chiefly use the World Wide Web for backgrounding complex stories and research into complicated topics. They use e-mail mainly for communication with institutional sources (say, corporate officials or Government spokespeople) and to a limited extent for communication with other journalists working in the same field (economics or health reporters, for example). Generally, e-mail listservs and discussion groups are not widely used, and where they are they are generally seen as only moderately useful. WWW-based chat rooms, forums and bulletin boards are used by a small minority of those surveyed.

The most common use of the Web was for 'background information', while searching for stories from abroad was also a common use. Using the Web to get foreign stories was particularly important for those journalists at The Namibian whose job description included the layout of and compiling of pages (the economics journalist, for example, is responsible for compiling the economics pages as well as reporting local economics stories). Producers at the NBC also said they looked for foreign content for news bulletins—both in itself and in order to supplement local stories.

Reporters at the NBC and at The Namibian said they used foreign stories off the web to enhance local reporting. A story mentioned often was the arrest of alleged foreign mercenaries in Zimbabwe, some of who were of Namibian origin. In this case reporters closely monitored the Web for news, while also using e-mail and the

telephone to correspond with their Zimbabwean colleagues. The NBC and their Zimbabwean counterparts reportedly also exchanged information on the story through e-mail and other channels.

For both foreign stories and backgrounding local stories, the Namibian Press Agency (Nampa—www.nampa.org) was the most widely used resource. This was followed by such sites as CNN (www.cnn.com), Canal France Internationale (www.cfi.fr) and BBC News (news.bbc.co.uk). Entertainment and features journalists made more diverse choices, including such sites as Black Planet (www.blackplanet.com), Ananova.com, cush.co.za, and not least the National Enquirer Online (www.nationalenquirer.com) which was used by editors of The Namibian's supplement The Weekender to obtain celebrity gossip.

News services run by iAfrica (iafrica.com) and Independent Online (www.iol.co.za) were frequently used for background information, as was News24 (www.news24.co.za), a news organisation linked to the Naspers group of companies, which often reports on major Namibian political and economic events. A reporter at the NBC said News24 was often the first to break Namibian stories, a case in point being the recent sacking of former Foreign Minister Hidipo Hamutenya. Business and economics reporters, particularly at The Namibian, made use of Mbendi (www.mbendi.co.za) whose business directory was seen as useful for information about listed companies in Africa, and both local firms and foreigners who had expressed interest in investing in Namibia. However, it is one of the few African business directories online, and reporters said business information on other sites would have been useful to cross-check information found at Mbendi.

The UN websites (www.undp.org and various other sites) were widely used for obtaining statistics and development information on both Namibia and southern Africa. The UNAIDS

website (www.unaids.org) was frequently mentioned as a useful source and information on these sites was widely seen as reliable.

The majority of journalists used Google and its Namibian subdivision (www.google.com.na) to search for background information on local stories. Nampa was also used for such searches, as was The Namibian's web site (www.namibian.com.na), although the search engine attached to this site was described as 'poor' by journalists in both newsrooms. Several reporters at The Namibian said they preferred to use Google rather than the paper's own search engine even when looking for stories that the newspaper had posted to the web in the past. Many journalists at the NBC, however, said The Namibian's website was the best source of current, detailed local information, but agreed the search function let them down when looking for older stories.

Ask Jeeves (www.askjeeves.com) was also listed as a useful search site, as it could retrieve answers to specific questions typed in, rather than just 'key words'. AltaVista (www.altavista.com) was used quite widely as an alternative search engine to Google, and was liked because it tended to provide fewer responses, allowing one to avoid 'information overload'. The downside, however, was that the sites displayed by AltaVista were not always helpful. An overload of sites in response to search engine queries was mentioned as a problem by virtually all respondents.

Journalists were concerned about a general lack of credibility of information on the World Wide Web. To deal with this problem, certain 'trusted' sites were used very widely, especially at the NBC. About eight respondents said they used several such sites almost exclusively. Information from sites other than these, when used, was rigorously checked, but information from trusted sites was not often checked against other sources. These 'trusted' sites included the BBC international news site, UN websites, reports obtained via the Nampa and Reuters

(www.reuters.co.za) websites, and to an extent statistics from the official Namibian Government website (www.grnnet.gov.na/intro.html).

One senior radio reporter said he checked reports from sources he was not sure about with three other (online or offline) sources, although occasionally he did not have time to do this. Although this is probably an extreme case, most journalists said that they double-checked web-based information from 'non-trusted' sites. The Namibian Government and other local institutions were usually contacted to respond to critical coverage on the Web, and sometime embassies were called to double check foreign news items, or for additional comment on these, or, sometimes in the case of the national broadcaster, for advice on correct pronunciation of names.

Of the sites mentioned, the use of the National Enquirer site by entertainment journalists stands out from the other sites regularly used as not having a well-established reputation for accuracy. The journalists concerned said that it was used only for 'celebrity gossip' or other more 'frivolous' news and that they avoided it when researching news or features on more 'serious' topics.

Journalists were highly critical of the lack of sufficient Namibian and African information on the Web, and felt that foreign representation of African issues may well be biased. Sites such as CNN were especially felt to be uncritical of American and British foreign policy. It was felt that Namibian businesses (particularly small and medium sized enterprises), political parties and community-based welfare organisations would benefit from a more substantial online presence, and that this would be of help to journalists looking for information on them. Big corporations and a few big non-governmental organisations had substantial online presence.

E-mail was widely used as a communication tool, especially with well-established sources. Rarely, however, was it used on its own. Rather, it was more commonly used in conjunction

with faxes and the telephone. E-mail was most often used to maintain networks of sources in the business community, and those non-governmental organisations based in the main towns. For example, a senior writer and copy editor of The Namibian's motoring supplement sends a regular email 'newsletter' to his contacts in the motoring industry, telling them which issues are to be looked at in the next week's edition of the supplement and inviting them to contribute their opinions and make suggestions. This content is often linked to advertising, and this newsletter is seen as encouraging advertising related to each week's specific focus (for example, it could garner advertising for environmentally-friendly fuel technology in an upcoming issue on motor vehicle pollution and efficiency).

A major use of e-mail in both newsrooms was to receive stories from outlying regions. Staff members of the national broadcaster said this was the preferred method of receiving stories where no visuals were involved, but that visuals could now also be sent from some outlying offices to the head office as well. One NBC staffer said in the past such stories were received by fax, which caused delays and frustration at the head office because the stories were retyped before being edited. Both newsrooms used email for editors to give professional support and advice to journalists in the regions, and to discuss news diaries with them.

E-mail is also used to communicate with some Government sources, but this seemed to be highly variable. Most e-mails sent to, say, a Government Minister, were followed up by a call to his or her secretary, as it was feared that the e-mail might not get through or that the Minister might not read it in time. Business and economics reporters frequently used email to correspond with corporate sources, and often did email interviews with executives. This was seen as being better than telephone interviewing, as the chance of misquoting could be eliminated,

and there would be a record of the interview to refer back to. Many journalists, including those writing economic news, still preferred face-to-face interviews where possible, however, owing to their immediacy and the fact that follow-up questions could be more easily asked.

E-mail listservs and online discussion forums were not widely used. Several journalists did belong to such forums, usually those grouping journalists working in a specific field, such as health, education or economics. Some listservs were established after conferences or workshops held by various institutions for certain groups of journalists, but activity on them was sometimes reported to have diminished a few months after the conference or workshop closed.

Few journalists had the time or inclination to actively post messages to these groups, and only in a minority of instances (two people mentioned it out of four who regularly use listservs) did journalists find ideas for stories from these groups. From time to time, however, such forums gave journalists knowledge of experts in the field, who they then contacted directly via telephone, fax or e-mail, for comments on local stories.

A number of these forums were related to journalistic conferences attended, or to networks established by universities, such as the Africa Economic Editors Forum, established through Rhodes's journalism department. The Columbia School of Journalism in the US attracted a number of subscribers to its listservs, and at least one journalist is a regular visitor to its web site (www.columbia.edu). However, these journalists did not often participate in these discussion groups either, although they found the discussions of journalistic ethics useful and informative.

Plagiarism of stories using the Internet was often listed as a concern for the journalistic profession in general, but, perhaps not surprisingly, the majority of reporters said they did not think it was a big problem within their own organisations. Several, however, said they

knew of cases of plagiarism frowned on by management and by the majority of journalists, who would reprimand a colleague who was consistently guilty of it. The use of Internet copy with attribution but without significant changes was reported more often, with a lot of reporters saying this was all right where statistics and other 'official data' or 'neutral information' were concerned, but that it should be avoided for information that could be re-written 'in one's own words', and for controversial statements that had to be double-checked. One said it must be remembered that 'facts are facts' and that re-using information verbatim from the Web was not 'illegal or unethical', as long as proper attribution was made.

Other frequently mentioned ethical issues concerned the use of company Internet facilities for the downloading of pornography, other personal Net surfing and sending of frivolous e-mail messages.

Journalists were asked whether or not they saw themselves as 'early adopters' of ICTs such as the World Wide Web, and why they did or did not. Less than half of those questioned considered themselves early adopters, even though most people in the sample group seemed to have a reasonably good knowledge of the Internet, and to use at least some part of it regularly. Those that said they were 'early adopters' – two in one newsroom, three in another – were generally very Web and computer literate. One of these, an employee at The Namibian, related how he and a friend had sent one of the 'first-ever' e-mail messages from Namibia to the United States in 1985 using a Sinclair ZX81 home computer. He also estimated that up to 90 per cent of his regular contacts (he is a motoring reporter) had some access to the Internet. Another reporter said he viewed the Internet as part of 'the future of communication', and added that he expected more Namibian users to come online in the next few years. This reporter began using computers at high school,

and said he was conversant with 'most Internet technology'.

Other 'early adopters' however, said they had become acquainted with new technology for practical, work-related reasons, rather than for love of ICT gadgets in themselves. The fact that time could be saved – sometimes – using the Internet, and the view that Namibian content online would increase in coming years were two of the main reasons why some journalists saw it as important to train themselves in the use of ICTs and keep abreast with new technological developments. The concept of the 'information society' was expressed as a backdrop to the need for journalists to be connected the Net.

Only some journalists – five out of fifteen – said they had been exposed to in-depth ICT training. Generally, where training had been provided, it had been a part of an external training course or part of a polytechnic diploma and in a few cases had been a module of a university degree. Most said they had learned on the job, by 'trial and error'. Little in-house ICT training, beyond the basics of how to use the computer system, appears to have been provided. There was a widespread feeling at the NBC that staff would benefit from more ICT training, but this was not so strongly felt at The Namibian.

The majority of journalists in both newsrooms thought that the Internet and other ICTs would never replace face-to-face communication or the telephone, which would remain the main methods through which news-gatherers would obtain information.

In general, slightly more women than men (a 60:40 ratio) responded to the study. In general, both newsrooms appear to have about equal representation of men and women, although The Namibian's hard news section (as opposed to features and supplements) has slightly more men than women. There seemed to be little difference in response to this study as far as gender was concerned, with both men and women falling into the 'early' and 'late adopter' categories. In the

rare occasions where 'early adopters' tended to be interested in technology for its own sake, the majority were men. However, this sub-category consisted of very few people.

The age range of the sample was from about 21 to about 45. There seemed to be a greater number of younger respondents who liked using new technology, as opposed to those who used it because they had to. But in general terms there was little variation in people's computer and Internet literacy with regard to age. This may, however, have been so if the sample had been broader, and had included people in their late forties, fifties and sixties as well.

4. Conclusion

One might expect that Namibian journalists do not have the technology and training to access the Internet to the same extent, as their colleagues in the United States. But this seems only to be partially true. From this study, it seems that Namibian journalists in the big national media companies have relatively easy access to the Internet, and often use it for newsgathering. The most common use was in backgrounding stories and getting international context, rather than using the Net as the major source of stories, at least not when it comes to local events. Garrison (2000: 506) found that the same was broadly true of USA journalists. They also made use of the Net to locate 'difficult-to-find' information, a use also made by Namibian journalists, especially economics reporters.

Many USA journalists, however, used the Internet a lot for 'finding sources', 'extending Government coverage' and 'bringing online (academic) research into the newsroom' (Garrison 2000: 506). Namibian journalists, by contrast, did not use the Internet for news sources. Most seemed to use stories on the Internet more as background and as a way to find out more information to use to question or interview existing sources. Few mentioned they

contacted sources quoted on Internet sites for more information.

Many Namibian journalists said they used the Net to background stories on Government. However, the official website, GRN-Net (www.grnnet.com.na/intro.html – GRN here standing for Government of the Republic of Namibia) was not often used, and those who did use it listed a number of faults, including poor searchability. By contrast, 54.1 per cent of journalists responding to the USA 1998 survey by Garrison said they used the USA portal for regional and district authorities, 'Local Government Online'. Over 24 per cent of USA journalists visited State Government sites. The Federal USA Census site was also widely used. (Garrison 2000: 506-507).

Namibian journalists mainly used freely available sites for Internet research, while some also used sites that require subscription (in the sense of entering one's contact details) but no significant payment for articles. While Garrison's survey mentions a 'decline in the use of proprietary commercial services in favour of the Web', journalists still frequently accessed information databases to which their newsrooms had subscribed. The databases of wire copy kept by the Namibian Press Agency (Nampa) seem to have been the only example of this type of source which is widely used in Namibia, with GRN-Net used by some journalists.

Despite some differences over levels of access, it is noteworthy that the main concern of US journalists was 'unreliable' and 'badly sourced' information online. This was also of concern to many Namibian journalists. However, the lack of local content, particularly Namibian and African news written by Namibians and by Africans, was as big a concern as lack of credibility amongst Namibian journalists. The two concerns sometimes fed into each other. If, as one reporter argued, a news report on Namibia was written by a foreign correspondent covering three countries at the same time, and edited by a sub-editor in New York before being put on a

web site, how reliable could one expect it to be? It was also argued that because one did not know who, or which organisation put an article on the Net, it was too risky to quote it without getting confirmation.

Because of the perceived unreliability of online information, Namibian journalists tended to use a few 'trusted' sites, including the BBC, News24, Reuters and Nampa. This is likely to have both good and bad effects. Good, in the sense that information gleaned off the Internet is likely to be factually correct, if slanted in interpretation, when it comes from these sources, as they have a professional reputation to uphold. However it is bad in that these sources tend either to be from Western countries (e.g. BBC, CFI, Reuters) or tend to concentrate on short 'hard news' stories (e.g. the News24 web site) which only give the bare facts of a situation but often little else.

Confirmation of the accuracy of information on the Net was identified as crucial by most respondents. However, time constraints did not allow for all information to be counter-checked, especially not information from the 'trusted' sites mentioned above. While this may be justified in that so-called 'neutral' information such as statistics may be quoted correctly, it limits the possibilities of alternative interpretations of news events. There are a great many alternative perspectives on international debates which affect Namibia and other developing countries on the World Wide Web, not least from both sides of the globalisation debate. But it seems that few journalists had both the knowledge and the time to access them.

Listserv and email discussion forums could be a useful means of communicating with fellow journalists and gaining fresh insights on the profession and the issues about which it reports. Several journalists were members of such groups but only two had active contact with journalists in other countries through such groups. Out of necessity, however, some journalists had established contacts via e-mail

without going through listservs. One example of this is the links Namibian journalists established with their Zimbabwean counterparts for the sharing of news on the capture of alleged mercenaries in that country. This news-sharing happened largely via e-mail, while journalists also monitored the Web for news on the latest happenings in this case.

Some e-mail discussion groups of reporters in certain fields, such as health, did exist, but most respondents did not fully exploit them. One local journalist said she would like to become more involved in such discussions, but did not have the time as she was constantly faced with meeting a daily deadline for 'hard news' stories and she did not have any Internet access outside the office. Another had accessed a US-based forum attached to Columbia University, but said he was not aware of any similar forums in southern Africa. It would seem that for this resource to be used, those groups that exist must promote themselves more vigorously, and editors should allow reporters time to investigate general issues and to get involved in the setting up of online and off-line 'networks'.

From the conclusions of this study, it appears as though the much talked-about 'digital divide' does indeed exist. In Namibia's case it is subtle. At both the newsrooms investigated, all writers (and in The Namibian's case, photographers as well) had access to the Internet and e-mail from their own workstations, something that is still not universal in places like the USA (Garrison 2000: 510-511). As in the USA studies quoted, problems with the credibility of information were more of a worry to most journalists than technical questions on how to use the Internet.

However, when one looks at the information that is available online, and what the journalists accessed, it becomes clear that the digital divide is a real concern. Namibian journalists do not have access to many of the search tools, databases, user-friendly Government websites and local authority information sites that web-

savvy US journalists do. Rarely do they have access to subscription databases with in-depth information, and if they do these are often foreign-based. Most Namibian organisations are perceived not to have a significant presence online, which seems to have caused some journalists to doubt the usefulness of the Internet as a reporting tool, especially where stories do not have an obvious 'international' angle.

Training was another area where a divide appeared to exist, with the majority of Namibian journalists' entirely self-trained in the Internet and e-mail use. The USA studies described by Garrison (2000), found that most journalists in USA had had some training on advanced web use. While the use of the Net is largely straightforward, training on advanced searching techniques or assessing the validity of Web-based information, may have been useful to some of these journalists.

This research identified a few people keen to explore the potential of the Internet and other ICTs. These 'early adopters' do not appear to be sharing their knowledge with their colleagues. They should be encouraged to do so, not least because training is expensive and the media industry in Namibia is small. This need not involve much: a simple exchange of a web site address could lead to new contacts and eventually, new stories and new perspectives in the media.

One can make the case for a more complete study, covering other Namibian newsrooms, and studying the two in this research in greater depth.

Such a study should look at the other national printed news media and ICT use at commercial radio stations and the burgeoning 'community' print media.

Another study could look at what Namibian or southern African content is on the World Wide Web. The perceived paucity of local online content was a common complaint among journalists. It may be that this is true, but there also may be new sites which have sprung up recently with which journalists are not familiar.

If not, at least such a study would estimate the scale of the problem and possible solutions.

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Botswana

by LUCAS LETLHOGILE

1. Introduction

Information and Communication Technologies (ICTs) have become part of the modern newsroom, from receiving and sending information to processing and storage of data. Even small developing countries like Botswana find themselves in an inevitable struggle to catch up with the developed western nations in the use of modern tools such as cellphones and digital cameras. It is believed that ICTs make the modern newsroom, whether it is for television, radio or press agency, more efficient and better able to deliver a competitive and newer product that can sell faster and better because of its quality.

This research examined several factors. One was the way journalists use ICTs in their day-to-day duties in three newsrooms in Botswana. Second, how these technologies have impacted on efficiency, productivity and ability to cover stories and general issues which are of interest to the readers and listeners. Third, how the different technologies in the newsrooms overlapped and influenced one another and possible implications for ethics and the training of journalists. Fourth, the use of ICTs in the newsrooms by the different genders. And fifth, the research examined the kind of policies the various newsrooms have on the use of ICTs.

The research was carried out in the context of a country that has seen a rise not only in the number of newspapers and other independent media organisations, but also a remarkable

increase in the use of modern technologies in various aspects of human activity. In this context also, there has been a rise in the numbers of people being trained as journalists and media people as well as an improvement in the quality of the journalists themselves. Many practicing journalists in Botswana, whether employed by the government or private entities, are in possession of some tertiary training, which means that the processor and disseminator of news is better skilled in understanding and processing news given the level of training and exposure acquired during training.

The objectives of the study included examining who the users of ICTs were, how these technologies were being used and what kind of impact these technologies had on the work of journalists in the newsrooms. The use of these modern technologies has a bearing on a whole range of issues including the national policy, issues of convergence as well as the level of training of newsroom journalists in the use of communication gadgets. The study also revealed the level of understanding and appreciation by journalists and the role of such technologies in improving journalistic work including processing, packaging, repackaging, and disseminating stories and other information.

2. Research methods

In gathering data on the use of ICTs in the newsroom, an elaborate questionnaire was administered to the participants. The

questionnaire was handed to various participants in the newsrooms. Newsroom observations were carried out by the researcher. The observations would fill in the gaps left by the questionnaires and also capture activities related to the use of ICTs in the newsrooms.

The various processes associated with the research activity included identifying news organisations, starting with the oldest in the country. The researcher settled for the newsroom at a government-owned news agency, which feeds a daily newspaper and the state-owned radio station. Interviews were also conducted at the state's daily paper, the Daily News, and at the only television station, Botswana Television, which is also state-owned. The third newsroom was that of the privately-owned Mmegi. Questionnaires were then sent to participants and then dates for newsroom observations set and agreed upon with the newsrooms management, most of them being editors and assignment editors. They were followed by newsroom observations and interviews with key people.

People considered to be "early adopters" and people who interact with information and communication technologies were approached to fill in the questionnaires. Once the journalists were identified, they were informed, mainly through their principals in the workplace. Prior appointments were made with the editors who then communicated with their staff about the research. The sample included journalists, assignment editors and senior editors. The bulk of the participants in this study were young professionals, many below the age of 40 and with some of them having been in the business of writing news for more than a decade. Many have seen technologies evolve from the time when journalists used to type stories on manual typewriters. Until the early 1990's, the art and graphics departments used computers, while the rest of the staffers used manual typewriters.

Upon arrival at a selected newsroom,

the editor would be contacted to announce the researcher's arrival and then official introductions were made with the journalists. The questionnaires were handed out and then observation was employed. Interviews then followed so to fill in the gaps and give a fuller and more rounded picture. During the interviews, the researcher took notes and these were then compared with the notes made during observations. It was important to stay with the same journalists throughout in a given newsroom situation because that sharpened the researcher's focus on the individual journalists and their interaction with ICTs.

The people interviewed could be split into two distinct categories. The first group was journalists in the newsroom who interacted with ICTs on a daily basis. They could offer explanations on what they were using the ICTs for, and discuss issues related to the usefulness of the technologies for a practicing journalist. The second group interviewed included newsroom managers. The group shed some light on issues related to training of journalists on the use of modern ICTs, and on policy related to the use of technologies in a particular newsroom context, as well as ethical issues related to the use of ICTs. Ethics are important in that they act as deterrents specifically for those journalists who may be tempted to plagiarise or use quotations without accrediting the relevant sources of the information they lift from websites and other sources of journalistic information. The interviews also centered to some degree on issues related to the use of technologies, issues like to what extent the use of these technologies has resulted in journalists being creative, innovative, productive and efficient.

3. Findings

One site of research was the Botswana Press Agency newsroom, which is a government-run news agency that feeds state-owned media

such as the Daily News and Radio Botswana. The newsroom is fully equipped with modern communication facilities ranging from computers, radios, television sets, phones to faxes and telegraph machines. The newsroom also has cellular phones that are used by reporters to update their stories from the field if need be or are called from the field if clarification is needed on some story. The availability of cellphones and the fact that journalists can be reached in any location when they are following a story or are coming back from the scene and can be redirected to another breaking story means that general efficiency in the newsroom is realised. Cellphones are also used to link with and follow up on important sources like business people and politicians. This is because these two categories of sources are highly mobile and tools like cellphones are handy in tracking them down and sourcing information from them.

All these technologies are used to receive news, process, package, repackage and disseminate news to a variety of recipients, in and out of the country. Radios and television sets are used to receive news from other parts of the world and journalists in the newsroom said that sometimes they use stories that break in another country to give them a local angle or research on their implications on the local situation.

The availability of computers in the newsroom also means that facilities like the Internet and email are also in place for journalists to use. They use the internet for research in providing background information for stories. Emails are used to collect information and sometimes to do interviews. Journalists say that some of their sources like politicians and ministers prefer a situation where a set of questions is sent to them in advance and then they provide answers to every question asked. Journalists then send the questions by email and get the answers from sources the same way. In addition journalists use email to pass on information among themselves. According to Nathaniel Motshabi, Assignment

Editor at the Daily News, email is also used by government and private sector agencies and organisations to send them invitations to media briefings and press conferences. That way, according to Motshabi, “the senders of invitations can be sure that the information will not be lost or forgotten on some desk by a busy editor or journalist on deadline”.

At the Botswana Press Agency newsroom, there were 14 journalists, nine of them male, that manned the newsroom during the day of the researcher’s investigations. All of them had unlimited access to a computer. Each staff member had his or her own machine and used it to send and receive emails, browse the Internet at least twice daily and write copy using the same computer. So from the above, it can be said that computers and other forms of modern technologies that journalists have access to in the Botswana Press Agency newsroom are used to communicate with the outside world and sources for information, write and process new and incoming stories as well as edit copy before it is released for consumption to news outlets like Radio Botswana and the Daily News.

The Botswana Press Agency newsroom is also linked to the news agency’s Francistown bureau in the north of the country, which also emails stories to headquarters to be edited and dispatched to organs of the Department of Information and Broadcasting. The aim is that before long all the districts in the country will also be sending news through email. Once the stories reach the editor’s personal computer, they are sub-edited and placed in a new folder that can be accessed by the Daily News. Copy on the paper also moves electronically between sections – from individual journalists who wrote the stories, to the sub-editors and editors and then the art and graphics department which does the final layout before the newspaper is printed.

Older journalists in the newsrooms said that the advent of modern technologies such as the Internet have helped them in doing research.

In the olden days, the only sources of additional information or different perspectives were sought from in libraries and print newspapers. With the availability of the Internet, several websites of organisations, universities and other local and international agencies can be visited and alternative thoughts and ideas learnt from there. Therefore the Internet has come in handy in that it complements other sources of information like radio, television, news magazines and newspapers.

Central to the use of modern technologies is training in the use and general appreciation of the value and meaning they add to one's professional life. At the Botswana Press Agency, it was said that no formal training was given to new staff members who join the editorial section or the newsroom. However, the young journalists who join the news agency from various universities and colleges from where they received their journalism training always brought skills associated with the use of computers and related technologies. Therefore, that becomes an advantage to the employing organisation in that the journalists who come to join are computer and technology literate.

The Daily News' Motshabi also stated that it is a 'house rule' that every journalist in the newsroom must browse the Internet at least twice a day, when the day starts and sometimes during the day, preferably mid-afternoon, to check the latest development on the international scene. Browsing the Internet helps them appreciate international issues that are of journalistic interest and also what bearing these issues have on the local scene.

Another newsroom that was studied was Mmegi newsroom, a privately-owned daily news publication. Like the government news agency, both male and female journalists work in the Mmegi newsroom. On the day the researcher was at the newsroom, there were 12 journalists, five of them female. The newsroom is equipped with a photocopying machine, faxes, computers

with Internet and email facilities as well as a photo studio that had the latest digital cameras. The newsroom is networked with the graphics department, which is in turn linked to the photo studio which supplies the photographs that are used in the newspaper. When the photographer came from his fieldwork, he downloaded pictures from the digital camera into the computer and usable pictures were then sent through a networked computer to the graphics department for layout in the newspaper. Likewise stories written by reporters were sent to a folder in the editor's machine, again through networked machines, and the sub editors accessed them to edit and he then forwarded the stories to be laid out by the graphics department.

The researcher also observed that the Internet and email are commonly used facilities in the Mmegi newsroom just like at the government news agency. The Internet, among other uses, serves as a pool of information that is used to update stories, provide the needed background materials on a variety of issues from international politics to sport and environment. With Google, Yahoo.com and Hotmail.com being the commonly used search engines, journalists in the newsroom are always equipped with additional materials, which allow them to better the quality of their journalistic writings. The Mmegi newspaper also has a bureau in Francistown, to the north of Botswana, which relies heavily on email to send in stories to their headquarters. Email is also used to receive mail and other information from media related organisations in Botswana, the southern African region and internationally. Mmegi, like many newspapers and other local radio and television stations, depends to some extent on foreign copy from international news agencies, which is also received via email and the Internet.

The third newsroom to be studied was the state-owned Botswana Television, which is the only television station that can be accessed by the general population in many parts of the country. It is free and can be viewed with the use

of an antenna mounted on the roof of a house. At the television station, which is part of the government mass media complex, a newsroom equipped with modern ICTs is at the heart of the operations of the station. In the newsroom, computers are put to multiple use: for writing stories, Internet use, accessing news from international news agencies that the television station subscribes to, emailing colleagues in the newsroom as well as writing television scripts for documentary and magazine programmes.

Perhaps one of the most interesting observations made by the researcher during the day's visit to the newsroom was that as soon as journalists came back to the station with their footage from the field, they immediately loaded it into the networked technical system which then made it possible for them to access their footage from various points in the television station including the newsroom. The journalists are able to choose sound bites, which can be incorporated into the overall news pieces. Having viewed his or her footage, each writes the story with a picture in mind of what parts of the footage are useful in the story. Once that is done they can go to the editing suite and do the final editing and the ultimate mixing of the reporter's voices and clips from the footage. Thus, computers are not just used for word processing but rather serve a variety of purposes. This therefore means that instead of them crowding into the editing suite and wanting to view their footage from a single point, as was the case some years ago, journalists can now sit at their individual computer stations and work at their own pace without delaying other colleagues. With this kind of technology therefore, efficiency and effectiveness as well as general productivity of the newsroom workforce is enhanced by the availability and use of modern ICTs.

The other point worthy of mention here is the issue of convergence of technologies—a computer that is not just able to process words, but also for screen footage to be viewed,

reviewed and processed. Also, sound can be heard and specific bits thereof chosen to be part of the story. Like other newsrooms in the country, journalists at the television station rely on the Internet for additional information and new leads in terms of possible stories for the day. On arrival at the station at the beginning of the day, each journalist browses the Internet and checks possibilities of a new angle to pursue with emphasis on local relevance. Likewise journalists have to check what wire services are carrying so if there is anything of relevance, then the story can be pursued immediately. Mobile phones are also part of the tools that are employed to make work faster and more efficient.

The old forms of communication - fax and telegraphs - are used alongside the new ones. According to Felicitus Mashongwa, head of news and current affairs at the station, the use of modern ICTs is inevitable in that they help to narrow distances between people and nations of the world, hence the need for institutions to be connected. She said that at Botswana television, the acquisition and use of modern ICTs is part of the main strategic direction chosen by her organisation. "If we are to inform the nation adequately about what is happening, which is our core business here at Botswana television and indeed at the Department of Information and Broadcasting, then we ourselves have first to be informed." She added that the use of ICTs has allowed them to work faster and that work is less laborious. With 30 professional news people and six of them in the districts, Botswana television is positioning itself to be able to offer quality and fresh news to its viewers relying heavily on transmission vans equipped with satellite connections that are able to feed the station with news and other programmes of interest to the population. Journalists can shoot, edit and voice their pieces and send the materials from anywhere in the country.

On the relationship between innovation and the use of ICTs, Mashongwa believes that:

“It depends on the individual journalist. Some of them have benefited even from the daily editorial meetings that we hold in the morning. At these meetings, story ideas are discussed as well as possible sources.” What makes the television station stand out compared to the two newsrooms discussed earlier is that the station offers training in the use of ICTs. Aware that they now employ professional journalists from universities and colleges, the station still insists that all of them be put on an induction course during which they are exposed to several issues including the value and use of ICTs. The station is also conscious of gender balances and the general advancement of female journalists in the newsroom. Said Mashongwa: “We now have four female editors and one assignment editor as well as three women correspondents out there in the districts. This means great responsibility for them and they have the positions because of their worth.” She is also of the view that the presence of ICTs offers opportunities and challenges for practicing journalists in the newsroom. One

opportunity is that journalists have unlimited access to information because of the Internet and can reach out to sources through a variety of means including using email. The challenge is that journalists must look beyond the Internet and also appreciate that there are sources of information other than electronic ones. In the newsrooms investigated, newspapers also subscribe to local and international newspapers and news magazines, which are themselves, additional vital sources of information.

One other opportunity offered by a facility like email is that some journalists at Botswana Television thought that in future email could replace daily editorial meetings because journalists can communicate from their workstations without having to leave their computers to attend an editorial meeting elsewhere.

The research in the three Botswana newsrooms shows that all have moved towards embracing the use of modern technologies as illustrated by the table below.

News organisation	Number of journalists	Number of female journalists	Available technologies	Uses of technologies
Mmegi- The Reporter	8	5	Internet, fax, phones, mobile phones, email, digital camera, computers	To receive, send, process, package, repackage information and distribute it. Link up with filed journalists and news sources. Digital camera used for taking pictures
Botswana Press Agency	14	9	Computers, Internet, email, fax, photocopiers, faxes, landline phones and mobile phones	To receive news stories from the field, process and package and distribute news. Internet and emails used to receive stories from within and outside the country
Botswana Television	16	7	Computers, Internet, email, faxes, mobile phones and landline phones, digital cameras, digital studios and broadcast vans	Computers used to process news, access Internet and email services. Phones used to link with sources and field correspondents. Computers used to review footage and listen to recorded interviews. Broadcast vans are used to send in stories from the districts

From the table above, it is clear that many newsrooms have moved towards embracing not just technology, but the latest digital technology that they use to send, receive, process, package, repackage and disseminate stories and information. In all the newsrooms, email has now replaced what secretaries used to do. Email is used to communicate with colleagues and provide general information on an issue of common interest. Mobile phones have also come in handy for many journalists, assignment editors and editors because journalists can be reached wherever they are. In the case of Mmegi newspaper, like the rest of the newsrooms investigated, bureaus in the districts use email to file their stories and any other materials needed by the stations such as national announcements especially those dealing with district tours by politicians and other top government officials.

The other trend that is developing is the total embrace of digital cameras mainly because of the quality of sound and pictures that they produce for newspaper pictures as well as television pictures.

One theme associated with the use of ICTs is efficiency. Apart from the state-owned Botswana Television and the Botswana Press Agency, the other newsroom journalists have not been able to exploit the use of ICTs to send stories home from other parts of Africa. It is only when such journalists are recipients of external sponsorship from organisations like United Nations agencies that they would use ICTs to cover news events in Africa and elsewhere. As for government-owned newsrooms, life is much easier there for journalists because while they cover international visits by the head of state, they are able to send television stories, agency materials and pictures using the latest technologies.

Within Botswana, a news story that is written by a correspondent at a district bureau several hundreds of kilometers from headquarters gets there within a few minutes and the editors edit and process the story accordingly. In some

instances, the story is re-sent to the original writer so that they check that there are no misrepresentations as a result of the editing process. The writer of the story at the bureau reads the story and immediately sends it back. That means less time is spent working on a single story and because of the availability of technology the editor is able to deal with lots of copy in a few hours without the hassle, as it was in the past, of going to the fax machines and sometime having to use more labour in the form of an editorial secretary to re-type the work.

The same thing can be said about the journalists at the television station. When they bring back materials and raw footage from the field, they load the materials in a central system in the control room and can access all their materials from their computers in the newsroom.

The fact that journalists have mobile phones means that they can be called to update running stories without having to come back to the office. The fact that stories for newspapers and television can be updated and edited around the clock means that the standard and quality of news is greatly improved. This is because quality of news is often associated with the news being fresh especially if the television news links up with a journalist by phone to do a live piece on a developing story.

The issues of quality and standards can also be seen in situations where journalists are able to browse the Internet and use the information from there to improve upon their stories in the form of background materials. Quality is also enhanced when journalists are able to use the information acquired from the Internet to bring additional views and perspective to the subject matter. Given the massive data that can be accessed on the Internet, journalists are able to compare issues and be better informed when they present their journalistic works. The use of modern ICTs and the availability as well as accessibility of the tools has empowered many journalists. In other words, when they deal with issues, they treat

and write them from an informed standpoint. This happens especially when the news editor or somebody senior is handling a story from a young correspondent and would like to cross check the facts and figures. So the Internet and other technologies have opened new possibilities for newsroom journalists and many of them feel enabled by these technologies. There are also issues related to a journalist's status. As the adage goes, "information is power". Journalists who have the ability to browse the Internet have a high status.

The research also established that the use of ICTs cuts across gender lines. Male and female journalists all have equal and unrestricted access and use of ICTs which gives them all an opportunity not only to compete in producing the best journalistic works, but also to be knowledgeable and conscious about the world around them.

Gideon Nkala of Mmegi newspaper worried about the materials found in the websites as a majority of these are generated by Western companies, organisations and institutions. This means that stories and research findings about Africa, and indeed most of the developing world comes from outside. Also worrying is the fact that stories and foreign writers and journalists articulate research findings based on their understanding, sometimes shallow, of issues affecting developing countries. This has a bearing on the way in which they portray and project countries especially of the underdeveloped south. While local newspapers and the media have used stories from the Internet and email sources in the West in general, some editors like Mmegi's Nkala have been cautious in choosing the materials they download from the Internet and the news agencies and organisations that supply them with news and feature materials. Nkala said: "one has to be careful because apart from being a commercial entity we are aware that we have to promote an African agenda. This has to be seen in the kind of materials we print

and even the pictures we use. Care must also be exercised as well as discipline because an unscrupulous editor can, if not careful, end up using a lot of foreign copy because it is readily available." Linked to that is the perception by Nkala that the Internet is a vehicle for another form of colonialism carried out by the West on the developing countries of the world. This is seen as cultural imperialism in that the Internet has become an ideological playground where Western civilizations churn out materials which intrinsically promote their values and ideals. Nkala believes that this must be carefully monitored because if local media are not careful, they run the risk of being swamped by ideological products from the West.

4. Conclusion

The main contribution the study has made about the use of ICT is to assess their value to "early adopters". It looked at research as one key benefit. But many journalists say the danger with using the Internet is that sometimes they get addicted to it so much that they no longer regard books and journals as other possible sources of information they need for stories or even feature articles.

Despite this concern, however, the journalists interviewed still believe the Internet has led to increased innovation, creativity and quality of work. This is because through the Internet, new ideas are picked up by journalists and exploited further, with a local angle and emphasis. Some journalists said that with the advent of the Internet and availability of news materials from all over the world, they are able to think widely and their analysis of issues is much broader and deeper than before. This is more evident when older journalists are interviewed because they are able to compare the past and the present.

The use of ICTs has meant that news can be sent and received in a matter of minutes by the newsroom. The processes of editing

and packaging stories is not as cumbersome as it used to be when stories and other news materials came only through fax and phone. This therefore means that newsrooms can achieve maximum efficiency and effectiveness through the use of ICTs. The study has also contributed in showing that newsrooms have moved full swing into using digital technology to process and package news. This is because when using some of these technologies, much of the original quality is retained even when a photograph is transferred from a digital camera through a computer and placed on newspaper page. The high quality of work means that the client is satisfied because they get their money's worth. Product quality also has a bearing on international or regional competition. Television pictures that are shot and screened on the television channel can, as a result of their quality, attract sizeable viewers, and create a viable market for other products and services.

Access to facilities like Internet and subsequently a variety of websites has meant that newsrooms, like other entities in the world, have unrestricted and basically free access to tonnes of information and news. What this has meant is that editors and other news managers have had to wake to the reality that there are some ills associated with the advent of these technologies. Some of the challenges include the fact that the Internet carries cultural and ideological baggage that must be viewed with suspicion and handled with care. Nkala, editor at Mmegi, said it is possible for an editor, failing to get enough copy for the newspaper and with the deadline fast approaching, to be tempted to download stuff from the Internet and splash it on several pages of the newspaper.

New ethical issues also arise in the era of ICTs. Editors and news managers constantly have to make sure that the journalists adhere to journalistic ethics such as refraining from plagiarising by downloading from the Internet and not acknowledging that the material or

quotations are not original. This is a great temptation especially for young journalists who have not yet seen the effects and implications of using materials and not accrediting and acknowledging original sources thereof. That has led newsrooms and media organisations to develop full information and technology policies that guide the use and acquisition of ICTs and related products and services. In many newsrooms, for instance it is against the policy for journalists to view and download pornographic materials from the Internet. Actually at the Botswana Press Agency and Botswana television, like other government departments, the use of the Internet is monitored so that those caught viewing pornographic materials can be caught and dealt with, sometimes being cut off entirely from the service. The information and technology section has a way of monitoring those who surf the Internet and view such prohibited materials.

The study revealed that while modern technologies have been embraced wholeheartedly by news organisations, they have not completely replaced the older forms of communication like faxes, telegraph and photocopiers. In all the newsrooms studied for instance, editors and journalists confirmed that the fax remained one way for the outside world to keep in touch with the newsroom when email or the server is down. The move to the use of modern ICTs has been necessitated in part, by the need to catch up with the rest of the world with concepts like international standards and high quality. The research revealed that the newsrooms, like other institutions and organisations, have embraced the use of ICTs because they believe that technology enhances productivity and efficiency of people.

The researcher would like to suggest that much needs to be done especially in establishing the extent to which ICTs are used by community media and emerging independent radio stations in Botswana. Other interesting areas that need attention are those related to policy issues

and regulation. Policy would look at issues of Internet and email usage in the newsrooms and determine whether the national information and communication policy addresses this. The massive amounts of information found on websites and emails from the West have prompted journalists and media organisations alike to start talking about an overall information technology policy. The policy will mainly help deal with issues of acquisition of and use of ICTs and the contents which they carry. Once the policy is in place, journalists and news organisations will know what to look out for in websites, what is of use to the average reader and even which search engines to use depending on the quality of the materials that they offer.

The research described in this chapter has demonstrated the extent and use of ICTs by newsrooms. The research has also created a starting point for further scientific investigations into newsroom related uses of modern technologies. Future research may also look at the influence and extent to which foreign copy derived from websites contributes to ideological and cultural colonialism. Research may further look at possibilities that exist for Africa to be covered more and representatively using ICTs so that a better understanding of African issues is derived from this coverage.

The research has shown that the use of ICTs is widespread in many Botswana newsrooms. It has also shown that there are a number of outstanding issues still to be addressed such as policy issues. The study has also revealed that while there has been a deliberate move by the leaders and news managers in the newsrooms to embrace the use of ICTs, the old forms of communication like faxes and telegraph have not died out completely. Additionally, the study has revealed that the full exploitation of ICTs, especially outside the country, is limited to journalists working for government-owned media organisations. Privately-owned newspapers can only do this with the help of donor agencies or

an international body. Although men are still a majority in the newsrooms, women are also practicing journalists and in the case of Botswana television, they hold responsible managerial positions where they are able to influence ICT decisions and opinions. The study has gone to some extent to show that Botswana newsrooms are adopters of technology. They have many people who are embracing the use of technology in its early stages of development in the country.

Tanzania

by CHRIS KABWATO¹

1. Introduction

This study sought to establish how journalists in Tanzania were using Information and Communication Technologies (ICTs), mostly the Internet, e-mail and mobile phones, in the newsroom. It also sought to establish what informal or formal policies existed around the use of ICTs in the newsroom. The research was conducted using three methods—survey questionnaire, interviews and observation of activities in one particular newsroom.

The results of the study show that e-mail and the World Wide Web were the most widely used ICTs amongst the participating journalists. However access to the Internet was extremely limited in the newsrooms—not all journalists had access to computers and Internet access was confined to one or a few computers in each newsroom. As a result most journalists made use of Internet cafés to search for information and file stories. The cafés offered cheap access at United States fifty cents per hour.

Media owners were not keen on the use of mobile phones as they were deemed expensive and open to abuse. The study reveals that all newsrooms surveyed lacked formal ICT policies that ensured adequate access and training for journalists. It seemed one consequence of the lack adequate training and access was the wholesale ‘lifting’ of news items from, among

others, BBC and CNN websites and publishing it in newspapers without proper crediting of sources.

2. Research methods

Interviewees for this study were selected via different methods. In trying to generate as large a list as possible of Tanzanian journalists, the researcher consulted with an academic at University of Dar es Salaam, with an academic at Rhodes University running a forum called African Economics Editors Network, with past Highway Africa Conference participants and with a media programme officer at Open Society Institute of Southern Africa (OSISA).

As a result the researcher was able to generate a list of about 30 Tanzanian journalists. The researcher wrote to all journalists on the list an e-mail introducing himself and the object of study. Six journalists (all male) responded positively and were subsequently sent the final questionnaires to fill in advance. In close consultation with a Tanzanian ICT journalist, Ansbert Ngurumo, a journalist-filmmaker, Farida Nyamachumbe and ICT journalist, Rebecca Wanjiku, the researcher was able to set up appointments with 11 senior journalists (senior as in position and experience).

The journalists chosen here may not be considered as a representative sample

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¹ I wish to thank Farida Nyamachumbe and Ansbert Ngurumo for their invaluable assistance in setting up interviews with Tanzanian journalists.

population. They were interviewed on the basis of their willingness to participate in the research and on their exposure to ICT usage. They did not fit exactly with the description of 'early adopter' that the research had assumed. The 'early adopter' assumptions of the research presumed that this was a person who was comfortable with the use of ICTs in their work and on the cutting edge of technological developments. Whereas the research confirmed the prevalent use of e-mail and the Internet, its findings do not allow for conclusions about 'early adopters' in Tanzanian newsrooms.

The interviewees to the research survey had the following characteristics:

Table 1

Gender	Average Age	Location	Type of Media Establishment	Position
10 Male 1 Female	36.5	10 live and work in Dar es Salaam 1 lives in Tanga (Northern Tanzania)	1 Radio 1 Television 1 Daily News-paper 7 Weeklies	1 Media Trainer 2 Editors 7 Senior Reporters

Three methods were used to collect information: the questionnaire, the interview and observation of one particular newsroom.

For two days (14 and 15 June 2004) the researcher met with nine journalists and went through the questionnaires with them. With the exception of one, none had managed to fill in and send back the questionnaires prior to the interview.

A total of nine interviews were conducted at the offices of the interviewees. The advantage of this was that it allowed the researcher to observe and confirm some of the information from the interviewees. Notes of the interviews were recorded in the interviewer's notebook. The

most detailed interview was scheduled with one informant that the researcher deemed to be the most knowledgeable on ICTs and Tanzanian journalism. The interviewee gave an extensive overview of the state of Tanzanian media and journalism and the role of ICTs.

In all interviews, with the exception of two where the researcher did not meet the interviewees, the procedures were similar. The researcher met with interviewees and explained the objectives of the research project and then went through the questionnaire. All except two interviewees preferred to fill in the questionnaire by themselves. Based on the responses in the questionnaire the researcher asked for clarification where necessary.

3. Findings

The results of this research have been organised around four sections, namely, Personal Usage of ICTs, ICTs in the Newsroom, Newsroom ICT Policies and General Assessment.

The majority of interviewees first came into contact with ICTs in the period 1994-98 and in all cases their first use of ICTs was in the newsroom. The majority had never felt inhibited in their use of ICTs. With the exception of four, none of the eleven interviewees had ever received formal training in the usage of ICTs. Of the four that had received training one had got training at university, another had benefited from a Cambridge University fellowship, a third had been trained at college and the last had attended an introductory computer-training course. The rest of the interviewees had either taught themselves or had obtained on the on-the-job training. The mobile phone and the Internet (e-mail especially) were cited as the first ICTs that the interviewees had come into contact with.

In terms of how they used the various ICTs, the interviewees made the following remarks as illustrated in table 2.

Table 2

E-mail	World Wide Web	Electronic Mailing Lists	Mobile phones
For sending stories to editors/bureaus	To read newspapers	To maintain contact	To communicate with sources
For commissioning stories	To gather information from BBC, CNN, SABC, Reuters, Kick Off, Herald Tribune etc.	To get specialised information i.e. agriculture, environment, education	To communicate with own parents
For receiving messages (news reports from 'upcountry' correspondents, press releases, invitations)	To get news		To send messages to friends
For contacting sources	To search for training opportunities		To send messages to workmates
For correspondence with other institutions	To search for information on particular topics (Research)		To keep in touch with reporters in the field (they mostly beep)
For contacting friends	To post news dispatches		To set morning alarm
	To search for study materials		To keep reminders
			To use calculator

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When asked about other ICTs they used, interviewees mentioned telephones, facsimile machines and two-way radios. The majority of interviewees were aware of at least one electronic mailing list. They also subscribed to at least one and the following were the websites of the organisations running the mailing lists:

<http://www.ips.org>
<http://www.fairreporters.org>
<http://www.ijnet.org>
<http://www.misanet.org>
<http://www.news24.co.za>
<http://www.yahoo.co.uk>
<http://www.reuters.com>
<http://www.ap.com>
<http://www.xinhua.org>
<http://www.developmentgateway.org>

The others mentioned belonged to NSJ (Nordic-South Journalism Training Centre) and SAMTRAN (Southern Africa Media Trainers Network). Only two of the interviewees were

not subscribers to any electronic mailing lists. In reference to the mailing lists, nine of the interviewees (81%) found them useful and elaborated their utility as making possible the delivery of news and photographs, sharing of news ideas, building networks on media and anti-corruption or investigative journalism, sharing alerts on media violations and giving rise to an opportunity for collaboration on an international story. In one case of using mailing lists for sourcing, the interviewee (a radio journalist) said she used some of the news and feature stories in her programmes and credited the source.

Google was the most popular search engine followed by Yahoo. Others were Vivismo and MSN. Some interviewees cited the limitation of these search engines as their lack of adequate information on Africa. They said that the search engines were 'Westernised'. However, most interviewees did not see any limitations in the search engines. Only one interviewee understood clearly the question 'How do you deal with an overload of returns in response to search

queries?’ Her response was: ‘I make short the key words of the particular query’. The rest gave varied responses not related to the meaning of the question.

In responding to the question of what difference ICTs had made to their lives one interviewee commented, ‘I am too much enslaved. I sometimes fear I will be rendered incapable if it happens that ICTs cease to exist.’ ICTs were acknowledged by all, except one interviewee, as assisting in obtaining practical information (events; seminars; scholarships; story ideas; background information for stories). The one odd interviewee stated that ICTs offered ‘extremely little information’ and the same interviewee raised concerns over pornography and paedophilia on the Internet. Negative effects of ICTs cited were the decline in the use of libraries and the purchasing of books due to the fact that most information seemed readily available on the World Wide Web. Two interviewees claimed that because of using ICTs, the quality of their handwriting had declined. All interviewees felt ICTs had enriched their work by enabling access to updated information, easier communication with sources and cross-checking of facts and easier access to foreign features and photographs.

Asked if they had ever, on a tight deadline, ‘lifted’ news from sites without citing the reference and claiming the work as their own, three interviewees (27%) stated they had done this. Two of these interviewees stated that they did this regularly for a number of reasons including tight deadlines, lack of continuous access to Internet on time (e.g. the server was down on the morning the researcher spoke to these two interviewees at their offices) and lack of other facilities (vehicles, mobile phones) to use in news gathering. One of these three interviewees wrote, ‘I only start regretting when the paper is published’. The rest of the interviewees stated that they had never plagiarised material on the Internet.

In response to a question on whether they had found alternatives to United States of America and European online information, three interviewees stated that they had not found any. Four others cited [allafrica.com](#), one cited Southern Africa Broadcasting Association (SABA). There were individual mentions of [channelafrica.org](#), [Tanzania.net](#) and [naomba.com](#). On sharing discoveries and tips most interviewees indicated that they did not share such information with their colleagues because, as one put it, ‘people hold such information close to their chests’. Two interviewees stated that they shared information on ‘arranging stories in coded folders resembling newspaper pages to assist identification of edited and unedited stories...’ and ‘on how to use search engines in order to get information relevant to stories we write and programmes we prepare’.

As regards newsrooms, the research sought to examine the availability and use of ICTs in the newsroom. In response to the question on availability of Local Area Networks (LAN), personal computers (PCs) with Internet connections and mobile phones, all interviewees indicated that they had computers and mobile phones. The difference was in access to the Internet and use of mobile phones for work-related duties. Five interviewees (45%) worked in a newsroom with a Local Area Network and had a PC on their desk. The rest had access to the Internet in their newsroom but this was confined to one or two computers per newsroom. The latter interviewees tended to use Internet cafés to do their work. The interviewees were unanimous on the unreliability of the service offered by their respective ISPs and they cited reasons for this poor service as unspecified ISP problems, sharing of ISP with numerous other organisations and electricity cuts. All interviewees stated that mobile phones were largely for personal use because management feared abuse of this facility. In one case, having removed a fixed communication costs allowance, management

reimbursed editors for mobile phone costs. According to one interviewee, journalists based in rural areas ('up country') were given twenty United States dollars a month to cover mobile phone costs. Cellular phones are still viewed as luxuries and hence the cost of maintaining or buying a handset is still very high. When compared to other luxuries the charges/rates for using cellular power are very high. In Kenya and Uganda it is cheaper.

Within the newsroom, training at formal and informal levels was widespread. Formal training was mostly at the sub-editor, technical (IT, layout) and management levels. Journalists tended to get their training on the job.

The particular use of different ICTs in the newsroom for the purposes of interaction with different parties can be summarised as follows in table 3 below.

In response to the question on how ICTs were used in the newsroom in relation to basic communication, research, information sharing and the repackaging of information for different purposes, the interviewees made the following comments:

- Basic communication—ICTs were used to communicate with outside parties more than internally. New ICTs had also not replaced fax machines and the use of couriers.
- Research—Interviewees rarely did in-depth research but only searched for information they needed immediately. ICTs, especially the Internet, were cited as enabling the search and finding of information.
- Information Sharing—E-mail enabled the sharing of information with colleagues.
- Repackaging of Information—Only one of the interviewees had experience in 're-purposing'

Table 3

Interacting with: People in the Newsroom	Readers and Audiences	Government Sources	Other Newsrooms	International Organisations & Networks
Transferring material from one PC to another Send each other e-mails on interesting issues	Interact via the Internet Discussion Forum on the Internet Audiences send e-mails to the editor	Internet used to obtain information from national website (government budget, census figures) For question and answer session (e-mail) Receipt of press releases and invitations to press conferences	Use telephones and mobile phones to get specific information	Use the Internet (phones used only sparingly because of cost)
Media Owners	Businesses	NGOs	Any other Sources	
Use website to communicate memos Use phones and faxes to send information on advertising issues (payments)	Use telephone and fax to send advertising rates	Use Internet to source information on NGOs activities	Use of private mobile phones to store number of 'certain high profile people who provide tips and information'	

material. He stated that they repackaged news from the World Wide Web by localising and adding facts gathered elsewhere. The rest were not familiar with this practice. One interviewee said he used e-mail to re-confirm authenticity of stories sent from 'upcountry'.

All interviewees stated that ICTs had improved communications for the newsroom. They cited speed of transmission, low cost of transmission, convenience, common access and access to more information than before. Looking ahead one commented, 'it will be much easier when we go wireless.' They all felt the new ICTs (mobile technology, e-mail and Internet) were better than the 'traditional technologies' (telephone and fax) for the same reasons cited above. Three interviewees cited the interruption of power supply as a cause for disempowerment and two stated that they felt disempowered by the slowness of the network connection or when the server was down or when they were 'upcountry' where there were no Internet services. Knowledge about and use of ICTs was viewed as improving one's status. The comments by interviewees included the following:

'having ICT skills means being 'civilised' in this millennium'

'I am taken as an up-to-date person'

'increases knowledge'

'It is shameful these days to provide business cards lacking [an] email address'

Of the eleven interviewees four had engaged in discussions on ICT policies in their respective newsrooms. The debate in one newsroom was about the high telephone costs as a result of having to call mobile phones from the fixed lines in the newsroom. In this case, the interviewee stated that most of their prime sources were mostly contactable on their mobile phones. At the time of this study a solution had not yet been found. The same interviewee's newsroom staff had discussed the need to increase the number

of Internet access points 'in order to lessen the movement of writers to Internet cafes, which at times are far from the office'. These discussions on ICT policies had been held in monthly office meetings. For the majority of interviewees no discussions or debates had ever taken place in their newsrooms.

Interviewees were also asked if they believed ICTs had the capacity for improving news coverage in Africa and were also asked to give examples of their experience of this improvement or lack thereof. Their responses are captured in table 4 below.

The researcher was able to conduct an observational study in the newsroom of IPP Media. IPP Media could be unique in Africa in the sense that all its operations (radio, television and newspapers) are housed in one complex. The newspapers operate under the title The Guardian Publications and they are The Guardian, Financial Times, Sunday Observer, Nipashe, Alasiri, Lete Raha, Kasheshe and Komesha. The researcher also interviewed the Managing Editor of the Financial Times, John Mireny. The findings of the observation confirmed some of the statements made in the questionnaire. Access to computers and the Internet were restricted to senior editors. The computers looked worn-out and may have been re-furbished. The journalists interviewed at Guardian Publications were enthusiastic about ICTs and their role in news gathering. However, with the exception of one, their mastery of the Internet was limited as was shown by their lack of sophisticated use of search engines. The most popular search engine was Google but they were not able to demonstrate knowledge of ability to conduct advanced Internet searches. All journalists vented their frustrations at the unreliability of their Internet connection which they blamed on both the ISP and the regular power cuts. Although some journalists interviewed as part of this research indicated that their use of the library

Table 4

Do you believe that ICTs have the capacity for improving news coverage in Africa?	What has been your experience of this?	What do you see as the main constraints of using ICTs for news coverage in Africa?
<p>Yes. This is because there are places that are far flung and have no means of communication but have a lot potential for development. ICTs would help so much in making policymakers and donors aware of their problems.</p> <p>Very much. Acquired new skills, new contacts, and new ideas.</p>	<p>I can now get information from different parts of Africa through the Internet</p> <p>In 1996 telephones were a luxury [in rural areas] and I had to queue at the District Post Office to call Dar es Salaam.</p> <p>Press Services Tanzania has about 100 reporters/corinterviewees all over Tanzania. We manage to get "Stop the Press" stories as late as 7 pm from as far as 1000 km away from Dar es Salaam.</p> <p>The more time you spend with ICT the more opportunity you create.</p> <p>The use of ICTs has changed news gathering/coverage in Africa. Media houses get international news easily.</p>	<p>ICTs services are mostly in the big cities and towns and this alienates the rural population.</p> <p>There are many times that the international media carry very local stories of remote areas because they are better equipped.</p> <p>Lack of Internet cafes in the countryside, hence, most "rural" reporters travel at 50 – 100 kms in search of ICT services.</p> <p>Financial constraints e.g. in our newsroom we use one computer for Internet access.</p> <p>Cost of ICT infrastructure</p> <p>Manpower constraints.</p> <p>Lack of policy and awareness on part of media owners.</p>

Have you had a personal success story regarding use of ICTs? If yes, please describe.	Have you had any disappointing experience using ICTs? Please provide details.
<p>Someone at Financial Times (UK) wanted specific information which I obtained in no time and e-mailed. In less than 30 minutes [I had earned USD100].</p> <p>From computer illiteracy to being able to write own reports; use of the Internet and e-mail every other hour; and ability to communicate with the rest of the world.</p> <p>I got most information on a story on the Nile River water usage amongst 10 countries [using ICTs]</p>	<p>My source for some of the business I had got for our publication sent me an invitation through the Internet and I never used the opportunity because the time it was sent I was in an area without access.</p> <p>Some websites wouldn't open as wished due to technical causes – old computers in most cases.</p> <p>Lack of adequate skills.</p> <p>My own failure to understand new trends and keep abreast of fast moving changes.</p> <p>Our fundraising project proposal file was destroyed by a virus and was lost forever.</p> <p>I once wrote my story in an Internet café and sent it to a newsroom in Dar es Salaam but there was a power cut [in the Dar newsroom] and my story could not be used.</p>

had declined, one free-lance journalist at the Guardian stated that he made extensive use of the library citing research he had done on child labour. The Guardian Publications uses a large pool of freelance journalists and they use Internet cafes to file stories. The researcher observed one freelance journalist deliver stories he had saved on a diskette.

An analysis of the results showed some very mixed results. It showed that ICTs (especially e-mail and the World Wide Web) were most useful tools in news gathering given the ease with which one could do research on the World Wide Web and send copy to editor. In Tanzania access to the Internet is affordable at about 50 US cents per hour. The majority of journalists interviewed actually used the Internet cafés very regularly to research and file stories. Access to the Internet within the newsroom was limited in most places and tended to be confined to a single computer at the least and just a few at the most. One striking feature linked to this lack of access in the newsroom was that all journalists had either a yahoo and/or hotmail account and none had a company e-mail account and this was the case even for editors and bureau chiefs. Given the cheap access in Internet cafes the research could have delved deeper into why Internet access was not widely available in the newsroom when rates were so low elsewhere. Another disconcerting area was the lack of formal training. It was apparent that training in ICTs especially was not given any consideration at all by editors and media owners. There was a gap in the embracing of ICTs by journalists and the lack of necessary support by management to enable them to fully utilise these technologies. It seemed as if the media owners had abdicated their responsibilities to the Internet cafés.

The most startling revelation was the routine plagiarism of material and the use of material without proper crediting of source. Three interviewees stated that they routinely plagiarized from the Internet. Two other interviewees

claimed that this was a widespread practice. In an extensive interview one interviewee said:

'This is a problem of lack of resources. Some journalists have no access to e-mail. This is what every newspaper is doing – plagiarism. It is also to do with laziness. The only real stories are based on workshops. Here journalists mostly pick press releases. The Business Times does not have a single journalist now. They don't wish to pay good salaries.'

An observation of Tanzanian newspapers revealed how some dailies had lead stories culled from BBC and CNN. The English dailies credited the sources. With the KiSwahili newspapers editors literally lifted stories and translated stories from English to KiSwahili without acknowledgement of the source. This was mostly true of sports news (at the time of the research the Euro 2004 football tournament was taking place). Significantly in a recommendation in the questionnaire an interviewee requested that '[journalists] should be taught how to file stories on the Internet rather than depending only on 'cut, copy and paste' from other networks mostly US networks'.

The study was not able to establish any examples of best practice. None of the working journalists interviewed was employed in a newsroom that would ensure adequate access to ICTs, formal training in the same and ethical journalism in cyberspace.

4. Conclusion

One can conclude that ICT use in Tanzania has been a double-edged sword—at one level it has enabled greater access to information, brought faster and cheaper transmission methods, and on the other level it has encouraged lazy or unethical or unaware journalists to use material without proper acknowledgement. Whereas journalists have had rudimentary on-the-job training in the use of ICTs, media owners have not created the structures that ensure mobile

phones, digital cameras and the Internet are readily available. The lack of infrastructure and formal newsroom ICT policies covering access and training has dire implications for journalism in Tanzania. As technology evolves rapidly, Tanzanian journalists are going to find themselves behind in terms of effective use of ICTs and this may have implications on their career development.

The interviewees also suggested other areas for further research:

- Why ICT penetration is snail-paced in some parts of the continent while others are running?
- The need for effective use of ICTs in investigative journalism.
- There should more access to ICTs that use satellite technology in order to reach the rural areas where the majority of African's live.
- The accuracy of information journalists get through ICTs.

The last word belongs to Arne Konig, president of the European Federation of Journalists:

'Technology is of course of great importance to journalism and its outcome. Being in the field since newspapers were produced with the help of melted lead I have seen the introduction of electric typewriters, computers and offset print and how film was replaced by videocassettes and then by digital equipment in the field of TV and radio...More and more the team of a reporter and photographer or cameraman is replaced by one person who does it all. The newsroom work has changed a lot through the introduction of mobile phones and laptop computers and the possibility to quickly file text, pictures and sound from almost any place.'

Konig was referring to Europe but this will also become Africa's reality in the very near future. The results of this study do not show a Tanzania media prepared for journalism in the 21st century.

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Zambia

by ROMAN MUKENDI

1. Introduction

In order to ascertain how 'early adopters' of ICTs are using them in their work as journalists, a survey was conducted in four newsrooms in Zambia to collect bottom-line data and to establish the relationship between journalists' use of ICTs and their outputs in practice. The study also aimed to identify examples of good practice in the personal usage of ICTs by individual journalists. Data was collected using a questionnaire, interviews and observations. The survey results were analysed using quantitative and qualitative methods.

The survey showed that journalists in general use and understand the importance of the Internet, cellular phones and e-mail, in their day-to-day work. They often use ICTs for communicating with news sources, friends, family and fellow journalists. This research shows how ICTs have been used not only as basic operational tools but as communication tools that promote creativity, interactivity, collaboration and critical thinking in newsrooms.

2. Research methods

The results and discussion sections look in detail at personal usage of ICTs by journalists and their skills and competences, identifying and highlighting their training needs, their understanding of ICTs and purposes for which they use ICTs in their daily duties. Views about how valuable ICTs are for journalists, the impact

they have on their profession and the existence of newsroom policies on ICTs are critically analysed.

In conducting this research both quantitative and qualitative approaches were used, quantitative to provide an overview of the material with regard to numerical data gathered and qualitative to interpret statistical data and other dimensions emerging from the research. Survey instruments used include questionnaires, interviews and observations. Questionnaires were filled in by individual journalists. There were three in-depth interviews with news editors and observations of how journalists carry out their duties in the newsrooms and how they interact with ICTs. The study targeted mainstream media and the methodologies used demonstrated how ICT issues are viewed and treated in Zambian newsrooms.

Participants in this study were drawn from four Lusaka-based newsrooms. The Zambia Daily Mail and Times of Zambia are government-owned, they both have an average circulation of 26,000 copies per day. The Post newspaper is privately-owned with a circulation of 25,000 per day. Radio Phoenix is also privately-owned and enjoys wide listenership. These media organisations are what can be termed as mainstream media in Zambia.

Radio Phoenix has nine journalists working in the newsroom, which has five computers with no Internet connection. They all access Internet from their Managing Director's office where only two computers have Internet connection. The Daily Mail newspaper has about 36 journalists in the

newsroom in Lusaka which has 21 computers and only three have an Internet connection. The Times of Zambia newspaper has about ten journalists in the Lusaka newsroom which has three computers all without Internet connection.

Trends and patterns of how journalists interact with ICTs in all these newsrooms were similar. After a discussion of what constitutes 'early adopters' with editors of the newsrooms, participants were selected with the assistance of news editors.

The key survey instrument used was a questionnaire which was forwarded to all interviewees. In total 28 questionnaires were sent out to all four newsrooms of which 13 were received on time.

Respondents encountered problems with the questionnaire. They found it to be too lengthy, repetitive and some could not find time to fill it out during normal working hours. Certain questions were not adequately answered, they were filled in with short answers like 'Yes' or 'No' with no further elaborations. For example, out of a total of 66 questions in the questionnaire, one journalist only attempted to answer 36 questions, leaving the rest blank. This made it very difficult to make this research rich with well-articulated responses when analysing data.

As a follow-up to data collected through questionnaires, three in-depth interviews with two editors and one journalist, all from different media houses, were conducted. The interviews helped to clarify certain questions and terms used in the questionnaire.

Observations were made on the types of ICTs and the kind of usage, case studies on how journalists got to where they are in ICT use, and newsroom policies and expertise on ICTs.

3. Findings

The newsrooms surveyed encompassed the following demographics.

Table 1

Newspaper/Station	Number of Respondents	Male Respondents	Female Respondents	Age Group
Daily Mail	4	3	1	28-31
Times of Zambia	4	2	2	27-36
The Post	1	1	-	0-27
Radio Phoenix	4	1	3	25-31
Total	13	7	6	-

The results of gender and age classification of respondents are shown as above.

Apart from being classified according to gender and age, journalists were also classified in terms of which media organisations they worked for.

Results from the population sample surveyed reveal that more than half of the journalist respondents (seven) in the age group 25-31 first came into contact with ICTs when they were either at college or university pursuing studies in journalism and mass communications, during the period 1994 to 2000. While half of the respondents were of the view that they did not feel inhibited by ICTs, a few felt that lack of access to computers and the Internet made them feel inhibited to use ICTs. However, by using computers, cellular phones and the Internet, daily in their work, they no longer feel inhibited as they have gained some skills and competences. A high number of the journalists access ICTs, especially the Internet, from both their workplaces and

Internet cafés (eight), and only three access the Internet and personal computers from their newsrooms.

Almost half of them received training to use ICTs while at college or university while others attended short courses and in-house training on ICTs. Others claim that they never had formal training but taught themselves and learnt from workmates. Those that underwent formal training note that the training was an eye opener which enabled them to be more conversant and efficient in the use of ICTs. One interviewee remarked: 'At first I was scared to use computers but now after training I feel liberated'. At the Daily Mail, only about ten journalists out of 36 have undergone ICT training, while at Radio Phoenix three out of nine have attended ICT training workshops. One interviewee working for the Daily Mail felt that more training for journalists is required because 'out of 36 journalists working in his newsroom, less than 10 have undergone training in ICTs'.

Nearly all respondents use e-mail as a communication tool for getting in touch with friends (11), family members (12) and news sources (10) for their stories. They also use it when applying for short courses, sending stories and press queries. They use the Internet for getting story ideas, for research, for chatting with colleagues in other newsrooms and for getting news from international media or news agencies.

More than half of the journalists use electronic mailing lists for creating contacts, for conveying messages to a large number of people, for sending and receiving text messages, for conducting interviews, for communicating with friends, sending alerts on media violations, and notices on important issues. Other information communication tools they use are fax machines and fixed telephone lines.

With respect to journalistic mailing lists, respondents were aware of the following mailing lists: Misa-Zambia mailing list, World Bank, European Union, Panos feature service, SADC

Today, Zamnet, Africa Online, International Monetary Fund (IMF), Coppernet, E-discussion, World Food Programme (WFP), Reuters Foundation, and Food and Security Biotech network for Southern African journalists. The one which is mostly known among the journalists surveyed is the Misa-Zambia mailing list (four), followed by World Bank (three) and WFP (two), although the majority (seven) of the respondents do not subscribe to any mailing lists.

Some journalists only use electronic mailing lists for a specific purpose and do not necessarily subscribe to them. For example, one respondent indicated that she only uses electronic mailing lists when conveying an important message to a number of people, but does not subscribe as a member to any network or electronic mailing list.

Pertaining to how valuable the electronic mailing lists were to journalists, less than half (six) were of the view that mailing lists update them with latest happenings around the world as they use other means to receive press releases timeously and are able to exchange story ideas with colleagues. However, some indicate that mailing lists have helped them establish peer support in that friends constantly send them new information on new developments around the globe, and have enabled them to build networks with a variety of journalists.

On the question of search engines, respondents identified Altavista (four), Google (seven) and Netscape (five) as search engines they use. Google ranks as the most used search engine. However, two respondents cited Channel Africa and one mentioned News 24.com as search engines, although these are not search engines or portals as such. Such responses from journalists show poor levels of understanding and use of ICTs. In dealing with overload of returns in response to search queries, some respondents said they pick on responses that are closest to what they search for. Other responses demonstrated journalists' failure to understand the question on overloads. Some left the question

blank or said 'I have never experienced that'.

Positive views were expressed regarding what difference the use of ICTs has made to the professional life of respondents as regards practical information. According to most respondents (10), ICTs have enabled them get information on training opportunities, story ideas and contacts. They believe ICTs have had a positive impact on their professional lives. For example they do not have to wait long in order to get feedback from sources or to access global news. Almost all respondents share the view that ICTs have enriched the quality of their work because they can communicate and access detailed information easily.

On problems, two-thirds of the respondents claimed they had never 'lifted news from sites' without attribution to the authors. One journalist, however, said: 'I would only lift news from sites on a tight deadline when I am writing a story about sports, but I always attribute it to the authors of the story'.

Respondents tend to use online information retrieved from websites from the West as there are few home-grown websites. A couple access information using Channel Africa.com, the Palestine Media Centre and the Russian News Agency online service. Some said they believe that since most reports on Africa are written by journalists in the West for the Western audience, these reports tend not to tell the African story from an African perspective. Journalists are left with no alternative sources of information generated locally for Zambians or Africans. A third of respondents shared information they found online, mainly about scholarships, short courses and media alerts.

In order to determine whether gender has an impact on who makes use of ICTs, the researcher made the following observations in the newsrooms. Most newsrooms have more male than female journalists. In addition, men occupy senior positions like that of news editor, sub-editor and senior reporter. This to a large

degree indicates that men have an advantage over women when it comes to accessing ICTs in newsrooms, since the Internet for example, is mainly accessed in the offices of senior personnel in almost all newsrooms surveyed. The study reveals that there is almost a gender balance in numbers in the newsrooms studied. Radio Phoenix, however, seemed to have more female than male journalists working in the newsroom. Those who claimed to be 'early adopters' were mainly men. This is attributed to the fact that many men between ages 25 and 36 were employed earlier than women in most newsrooms.

With regards to ICT facilities available in newsrooms, cellular phones rated high (nine), followed by computers without Internet connection (five). As regards computers which are connected to the Internet, usage is restricted in almost all newsrooms. The leading Internet provider as identified by all media houses surveyed is Zamnet (10) followed by Zamtel (three), whose service many respondents (six) said was reliable but with few lapses. Another four expressed reservations with the reliability of the ISP services.

Cellular phones are a dominant ICT tool and all respondents use them stay in touch with each other like while in the field gathering news. Those with access to the Internet use it for sending email to each other in the newsrooms. Journalists use ICTs especially email, the Internet and cellphones to get feedback from their audiences. A combination of the use of email, land lines and cellular phones has enabled journalists to interact with government sources, other newsrooms, international organisations, NGOs, businesses and media owners for sending queries, obtaining feedback and exchanging information.

All respondents shared similar views as to how they apply ICTs in basic communication, research, repackaging and information sharing. The fax machine was cited as still being a

common basic tool they use to send questions, to receive press statements and stories from correspondents. They use the World Wide World to carry out research on various topics relevant to work assignments. Information sharing is done either via cellular phones by sending text messages, or by sending emails to workmates on new story ideas and comparing diaries.

The perceived view that ICTs are efficient and effective was confirmed by all respondents when answering the question whether ICTs have improved communication in their newsrooms. They said that due to the use of computers, email, cellular phones and Internet, work in their newsrooms is faster and of high quality. An interviewee from Times of Zambia said that he is able to get a 'breaking story' through the cellular phone or land line very easily.

At Radio Phoenix journalists are able to read news directly from computers without the hassle of printing scripts first. Journalists feel empowered by using ICTs because they can now use computers effectively and continue to acquire knowledge on what is happening on the international scene. They also feel that by virtue of using technology they have gained valuable knowledge on a range of issues which enables them to present their work in a professional manner. Because of the knowledge and skills they have acquired by using ICTs, the respondents said they were regarded highly by their colleagues.

All newsrooms in the four media houses surveyed do not have formal policies on ICTs. A majority of journalists (12) questioned said they had never participated in any policy related issues with regard to ICTs. They cited the use of e-mail and cellular phones for personal use during working hours and unequal access to the Internet by journalists, as the main problem associated with lack of ICT policies in newsrooms.

On an informal level, debates or discussions about ICTs and telecommunications are said to have taken place in one of the newsrooms.

One respondent said he once suggested that journalists in his newsroom should have more access to the Internet but management was reluctant to act.

4. Conclusion

All journalists interviewed in this study believe ICTs have the capacity to improve news coverage in Africa. They believe that ICTs could enable Zambian journalists to write events or stories about Zambia and Africa in general without much exaggeration like the Western media tends to do. One senior journalist noted that, with ICTs, the speed of information and reach of news is greater than before. Most (8) journalists called on the government and other stakeholders to invest in ICTs if their use is to yield positive results in newsrooms.

Some constraints journalists encounter in the use of ICTs, the Internet in particular, include limited access and resistance by their managers to adapt to new technologies. One journalist narrated a personal success story regarding the use of ICTs. He said that with the use of ICTs, he is no longer confined to working only in the newsroom after gathering information about a story. He uses his cellular phone to gather news while travelling and then develops the stories when he returns to his newsroom.

Shin & Cameron (2003) assert that the Internet has changed the conditions under which practitioners or experts build a dialogic relationship with journalists by creating fast and confidential communication via a quick Internet connection. It is important to note that while ICTs are generally adaptable to different information needs and circumstances, their effectiveness in solving development issues still depends on their use and content (UNECA 2002:4). Their use can only be increased by empowering journalists through training. Most journalists have no real skills in online information retrieval, or in evaluating information found online. Every

editor interviewed expressed the urgent need for training.

Journalism can sometimes be a very isolated profession. Chat groups, list serves and direct e-mail give journalists the opportunity to converse with others in the profession and to compare and contrast, critique and celebrate what other journalists are doing (Naidoo 2000:22). A point to note is the confirmation journalists have made on how frequently they use e-mail for communicating with their friends, families and sources. They use the World Wide Web for research on story ideas, chatting with other newsrooms or agencies and creating contacts with sources. They find electronic mailing lists valuable with regard to new information or latest updates of what is happening around the globe. They are all of the view that ICTs have enriched the quality of their work and have had a positive impact on their professional life.

Some journalists claim that because of ICTs, newsrooms are losing their traditional atmosphere where newcomers used to learn from veterans and they all shared information, contacts and approaches to news stories. They argue that computer-based work has turned journalists into individualistic people and reduced the chances of colleagues communicating face to face (Aviles and Leon 2002:366). Zambian journalists find ICTs useful for sending press queries, conducting research, news gathering, chatting, sharing story ideas and keeping contact with others working on the same subject. This interaction evidenced by the way journalists interface with ICTs, shows that information exchange and professional job satisfaction in newsrooms, is not hindered but enhanced by ICTs.

According to Naidoo (2000), the Internet will only become useful to African journalists if there is more relevant African information online. It is also a self empowerment tool that Africans should use to publish information about Africa. Respondents to this study believe that online

information lacks local content about Zambia and does not depict an accurate representation of Africa. They feel that online information is either US or European dominated. Theoretically the Internet allows both journalists and newspaper organisations to become their own news agencies without having to rely on Western content which dominate news agencies. If African journalists are empowered to use the Internet the balance of information power can be radically shifted and equalised.

In the newsrooms surveyed, the ICT tools available are cellular phones and computers. Cellular phones are used for general communication purposes. Almost all computers in the newsrooms are not connected to the Internet, they are used for typing and editing of stories. All things considered, traditional media practices have not changed fundamentally but they benefit from new possibilities which demand basic knowledge and new skills on the part of the journalists. This obliges journalists to acquire an understanding and training in the domain of ICTs so as to be able to fully utilise a computer and all the possibilities now available (Stanbridge & Ljunggren 2003:65).

In this study, journalists expressed an understanding of the general use of computers. It was established that computers, although limited, were being used by almost every journalist in the newsrooms surveyed.

Peddie (2004) reaffirms that individuals adopt a new idea not only because they become aware of innovation somewhat sooner than their peers, but because they require fewer months or years to move from knowledge to decision. In relation to this study, some of the journalists pointed out the fact that they never had formal training in the use of ICTs but taught themselves and learnt from friends. This shows that individual journalists have no difficulties in adapting to new technologies as they can share and learn from each other. This could be because the sample of those surveyed were young journalists in the age group 25-36,

who are more inclined to use new technologies than the older generation of journalists.

On the question of whether journalists see themselves as 'early adopters' of ICTs or not, one third of the respondents felt they were 'early adopters' because they had prior knowledge of how to use computers before joining the newsroom. Others said that they adapted to the use of ICTs in newsrooms because their work demanded it. In explaining his experience with the Internet since joining the newsroom, one journalist remarked: 'The Internet has expanded our voices as journalists, we are able to receive information about what is happening in other countries faster than before'.

ICT policy (formal or informal) as a framework or law based on values or norms that seek to guide, direct or govern a particular course of action is non-existent in all newsrooms surveyed. All newsrooms acknowledge that at an informal level, there have been some discussions about policies on ICTs. The absence of proper ICT policies reflects the degree of commitment to the value of ICTs by newsroom managers. The development of an ICT policy is an important exercise which should receive the support and attention of all key players. Once formulated, the policy should aim at sustaining the vision and goals of any particular newsroom. A gender perspective that addresses equal access for both male and female journalists should be incorporated in the ICT policy. ICTs are becoming a permanent feature in newsrooms and therefore require regulation and good management.

There is a lot that has to be done to improve the use of ICTs in newsrooms in Zambia. This study has brought to the fore major constraints journalists face in the use of information technologies. These constraints include among others, the lack of training for journalists in the use of ICTs, lack of ICT facilities and the lack of ICT policies in newsrooms. The absence of ICT policies in newsrooms presents us with a

challenge that media managers will have to critically address.

Journalists have expressed appreciation of how cellular phones, computers and the Internet have enhanced their work. Their working conditions have changed with the presence of these communication tools which enables journalists to create a fast and confidential communication process with their sources and colleagues. It is incumbent upon all media houses to address the issue of access, connectivity, training and ICT policy formulation in order to create an ICT-friendly working environment.

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Swaziland

by VUYISILE SIKELELA HLATSHWAYO

1. Introduction

This research project gives an insight into the ways in which journalists are using ICTs in the newsrooms in the Kingdom of Swaziland. The research is significant for the notion that the media can play a critical role in building Africa's information society. A total of 14 journalists were surveyed from the three print media houses. The media houses were the Times of Swaziland, The Swazi Observer and The Nation, a monthly news magazine. This research has established that local newsrooms have been transformed from traditional newsrooms using typewriters to the modern ones using the new technologies. However, this technological change in the newsrooms has not been matched with the formal training of journalists on how to use the ICTs effectively in their jobs. Despite this, the majority of the surveyed journalists have not only embraced ICTs, but also equipped themselves with some basic ICT skills through on-the-job-training or trial and error.

'Nowhere do ICTs lend themselves more immediately to application than in the media—a profession in which speed and cheap communications is key' — NetGains.

Viewed as new tools of gathering and disseminating news and information in the most expedient way in the information age, there is interest among the proponents of ICTs to establish the extent of the usage of ICTs by

African journalists in the newsrooms. This is against the backdrop of the notion that the media is a catalyst for building Africa's information society. There is a strong belief and optimism that African journalists who are empowered by ICTs can play a critical role in the advancement of cultural, social, economic and political development goals in the era of a knowledge-based society.

However, a group of sub-Saharan African journalists, who participated in the World Summit on Information Society (WSIS) conference in 2003, highlighted the problems caused by lack of ICTs and their use in their newsrooms. Alden (2004) notes that the economics and politics of their region present problems that rich nations from Europe and North America could scarcely understand. Among these journalists was Yael Tidhar, a systems manager at the Times of Swaziland, responsible for training reporters on accessing and doing research on the Web. Tidhar's comments were on the use of ICTs by Swazi journalists, in particular at the oldest and widely read Times of Swaziland, a 20,000-circulation English language daily. 'I do sit with people and explain to them about the Internet. They're not really pushed into it, they're afraid of computers,' Tidhar said. 'The reporter, if he knows something, it's how to open Word and that's it. They're using emails a lot but I would say very few are using the Internet for their own knowledge and for information.'

Such a statement made by the media representative from Swaziland's leading media

house at WSIS underlines the value of research on how Swazi journalists are using ICTs in the newsrooms. Investigating the extent of the usage of ICTs within the newsrooms helps shed light on the problems encountered by the Swazi journalists when trying to use the new technologies.

It can also provide answers to the following questions stemming from Tidhar's comments. Are the journalists afraid of computers? Why do they to use email a lot? Are very few of them using the Internet for their own knowledge and information?

2. Research process

A sample of 14 journalists was used for this study. They were picked from three local media houses namely the Times of Swaziland Newspapers Group, the royalist Swazi Observer Group of Newspapers and Swaziland Independent Publishers. Six of them were from the oldest privately-owned Times of Swaziland Newspapers Group, which boasts of three publications in its stable namely, Times of Swaziland (daily), Swazi News and Times Sunday (weeklies), as well as a vernacular edition known as Tikhatsi TeMaswati. Another six were from King Mswati III's Swazi Observer Group of Newspapers, which runs a daily, The Swazi Observer and a weekly, Weekend Observer. Two journalists were from the relatively new Swaziland Independent Publishers' monthly news magazine, The Nation.

With the assistance of three editors, the sample of the journalists picked was representative of rest of the journalists in the newsrooms. There was, at least, one journalist each from general news, business, entertainment, sports and the foreign news.

This study was done in the journalists' respective newsrooms. The researcher visited the newsrooms during the working hours and lunchtime to help them either fill in the questionnaires or collect them. Other visits

were made mainly for observations and face-to-face interviews with other staff members in the newsrooms.

Qualitative research methods produced experiences, feelings, attitudes and beliefs with regard to using ICTs in the newsroom. The quantitative research method was also used to quantify the ICTs found in the various newsrooms. This method helped the researcher to observe and verify the data provided by the respondents.

The questionnaires were complemented with in-depth interviews not only with the sampled journalists, but also other staff members in the newsroom. This was necessary to get other people's views on the use of ICTs in the different newsrooms.

At the inception of the research in April 2004, I conducted a pilot study at the Times of Swaziland. Five individual journalists were asked by the researcher to fill in the hard copies of the questionnaire. The findings of the pilot study showed that the study was feasible. It also enabled the researcher to fine-tune the questionnaire accordingly for the main study based on the few comments made by the five journalists.

After the formal introductory talks with the editors, copies of the questionnaire were emailed to the editors of The Swazi Observer [swaziobserver@swazi.net], Times of Swaziland [editor@times.co.sz] and The Nation [thenation@realnet.co.sz]. They were asked to forward it to the selected journalists in the various targeted sections in the newsroom. This was done in order to get a feel of how they were using the ICTs within their Internet-connected newsrooms.

Follow-up landline telephonic interviews on the journalists' progress with answers to the questionnaires revealed that the journalists had not bothered to access nor respond. They all gave the same reason that they saw the email with the questionnaire but were too busy to attend to it.

This was followed with the hand delivery of hard copies of the questionnaires to the journalists. Again, the journalists were given two weeks to fill in the answers and notify the researcher either by cellphone or landline telephone or email to collect the filled in questionnaires. When the two weeks elapsed without any response from the journalists, the researcher resorted to face-to-face interviews.

All the interviewees were interviewed at their convenience. Whilst some agreed to give answers on the spot, others wanted to continue filling in the questionnaires. This proved to be their way of avoiding filling in the questionnaires and returning them on time.

Face-to-face interviews were also conducted with the systems managers and some of the management staff. The systems managers explained the whole computerisation process of the newsrooms. As computer experts, they also helped to fill in the information gaps left by the interviewed journalists. This kind of information became very handy in analysing the data and making some conclusions at the end of the study.

Several observational visits also formed part of the research. A total of nine visits excluding the interviews (collection of questionnaires) were made to the three newsrooms during the working hours to observe the work situation. During the visits random personal interviews were done with any journalist, sub-editor, editor, technical staff or manager.

One of the common observations was that the journalists had to share computers. In the Times of Swaziland, there were 78 computers. The Swazi Observer had 25 computers. The Nation had only 3 computers. Each news section had its own set of computers and password allocated to it. Journalists were expected to use computers in their respective sections. This frustrated the journalists and photographers, as they queued to use the computers and tried to meet their deadlines.

3. Findings

The sample of 14 journalists from the three local media houses showed that their age ranged between 22 - 40 years. Only one of the journalists was 40 years old, the rest were below 35 years. The age group was evenly spread across the surveyed newsrooms.

Journalism being a male-dominated field in Swaziland, nine of the surveyed journalists were male. The other five were women journalists. From the Swazi Observer, the gender representation was 4 to 2. It was the same at the Times of Swaziland, whereas there was a slight difference at The Nation where the ratio was 1 to 1.

As regards personal usage of ICTs, a majority (10), of the journalists first came into contact with ICTs in the 1990s, two others in the 1980s, while another two in 2000 and 2001 respectively. The bulk of respondents came into contact with ICTs at their workplace—in the newsroom. A few first came into contact with ICTs at an Internet café. One came into contact with ICTs at college, and another at school.

Except for the 25-year-old journalist from the Times of Swaziland, who started using ICTs at the early age of 10 in 1989 at home, the majority of the journalists started in the 1990s, two of them in 1989 and one in 2000 and the other in 2001. Six of the respondents started using ICTs at work writing stories at the early ages of 17, 18 and 19.

More than half of the interviewees felt inhibited by the ICTs, because they did not know how to use the ICTs. 'At first yes, there was excitement and yet at the same time I was scared of exploring because I had no clue what would happen next. Besides, we were always being cautioned against passing anything.' (Interview, Journalist, Times of Swaziland: June 2004).

Just under half did not feel inhibited at all. Instead they embraced the ICTs as tools

for improving communication and journalism practice. One journalist from The Nation stated that he was fascinated by the whole exercise because he had heard that computers were key vehicles of communication for the future.

A majority [nine] of the surveyed journalists no longer felt inhibited by ICTs because they were now used to them. 'Not really. When I was shown how to use it, everything went fine.'

Yet, others were scared to try out something new due to the fear that they might break the ICTs or cause complications. Four of the journalists did not give any answers. Only one was still feeling inhibited because he did not know how to use ICTs.

All the interviewed journalists used the ICTs at the workplace [the newsroom]. Four of them also used the ICTs at home. One used the ICTs at the Internet café. Another one used the cellphone anywhere while the other one used it at other places. One of them used the ICTs at his friend's house.

Two-thirds of the surveyed journalists did not receive professional training to use ICTs except for on-the-job training or trial and error. The remaining third of the respondents received training either at college or workshops. All of those who had received training, found it very valuable. One of the journalists at the Times of Swaziland, who attended an ICT course at Rhodes University, said he had learnt a lot about surfing, designing web pages and appreciating a computer and how it could be useful.

Only five respondents found peer support valuable in the newsroom whereas the other ten never bothered themselves about it. Of the five, two journalists used peer support in helping each other. Another two were influenced by their peers to use the same search engines. One used the electronic networks/ mailing lists to boost peer support.

The email was the most widely used Internet service by the interviewed journalists for communication purposes. They used it for

communicating with news sources and friends. Email was used by half of the interviewed journalists to send and receive news information from sources. They sent questionnaires to news sources and received press releases from government ministries and companies. They also received stories from correspondents from the other regional towns (Manzini and Nhlanguano). The rest said they used the email for information exchange and sharing of story ideas and journalism training programmes.

Six of the interviewed journalists used cellphones to communicate with the news sources. Three of them used the cellphones for communicating with friends and relatives. Two also used them for personal business. Another three added to their cellphone usage lists: games, time, alarm, calendar, calculator and light. Others did not specify.

Seven of the journalists did not use other information and communication tools. Two of the respondents used the fax as an alternative communication tool. The other two preferred to use the fixed-line telephone to the cellphone.

A majority of the surveyed journalists did not use the electronic mailing lists. Those who did used the electronic mailing lists for downloading information. Only five of the interviewed journalists were aware of the journalistic mailing lists. They knew of the Commonwealth Press Union (CPU), Institute for the Advancement of Journalism (IAJ), BBC, Reporters Without Borders, The Guardian, Media Institute of Southern Africa (MISA), Nordic School of Journalism (NSJ), African Soccer and Kick Off. Two of the respondents mentioned the CPU. One mentioned IAJ. One mentioned MISA and another mentioned the BBC. Four never attempted to answer the question. Three said they were not aware of any journalistic mailing lists.

Asked about subscribing to electronic networks/ mailing lists, nine of the surveyed journalists responded with a mixed picture of what they considered to be such lists: Real Image, Swaziland Post and Telecommunications

Corporation (SPTC), South African Press Association (SAPA), New York Times, Yahoo, Google, MISA, Fashion TV, CPU, Telegraph online, NSJ, African Soccer and Kick Off.

Although actual use of lists was uncommon, still a majority of the interviewed journalists found the electronic networks/ mailing lists valuable with regard to news information. Six of them found them valuable because of the provision of news updates. Two found them valuable because they offered breaking news. Another two found them valuable because of the availability of latest news and information on courses, skills and training. They also found them valuable because it was easier, faster and cheaper to get information.

In terms of building networks, six of the respondents found the electronic networks/ mailing lists useful. They built networks by exchanging information, sharing information on journalism courses and networking with other journalists worldwide. Four journalists found the electronic networks/ mailing lists to have been quite helpful to them in terms of communicating, keeping in touch, getting updates and sourcing information.

More than half of the respondents used search engines. Google proved to be the most widely used. Twelve of the journalists used Google, whereas only six (30 percent) preferred Yahoo. One used Yahoo, Google and Netscape. Others used both Google and Yahoo.

A majority of the interviewed journalists was not aware of the limitations of the search engines. Amongst those who did know, they cited: failure to connect Internet, congestion, and lack of information on Swaziland and they also required specifics. Fourteen percent did not answer this question. Most of the surveyed journalists tried to deal with the overload they confronted when using the search engines. The ways that they used included deleting, selecting another, waiting and choosing the other search engine.

A majority (13) of the surveyed journalists felt that ICTs had made a positive difference in their lives in terms of practical communication. They found ICTs very useful for sourcing story ideas, doing follow-ups and as convenient means of communication. They had also improved their professional life by making networking and communication easy. They also felt empowered with knowledge. Only one was not sure.

Almost all the respondents felt that ICTs had enriched the quality of their work because they were more knowledgeable and resourceful. They had also acquired better writing skills. Only two of the surveyed journalists were not sure of the impact of ICTs in their work.

With regard to plagiarism, 12 of the interviewed journalists said they had never been tempted to lift news from websites without quoting the reference. They knew that it was unethical in the journalism profession to do that. Only two admitted to having done so, but only in instances where the websites did not have the name of the author or a copyright.

In terms of African alternatives, more than half of the surveyed journalists revealed that they had not found any African alternatives to the US and European online information. Only a few of them had found African alternatives to the US and European online information, citing SAPA, AllAfrica.com, iafrica.com, COSAFA and African Soccer.

More than half of the journalists shared helpful discoveries with their colleagues, but a fifth did not. A lot of them shared helpful discoveries of stories and journalism scholarships and workshops. They also shared information on how to use the Internet effectively. Over half had received helpful tips from their colleagues with regard to using new technologies.

Eight of the surveyed journalists had access to all the mentioned ICT facilities in their newsrooms, which included Local Area Networks, personal computers with Internet connections, email, and cellphones. Three listed the Internet;

email and cellular phones as the ICT facilities they had access to. One mentioned cellular phones, personal computer, fixed-line telephone and the fax. Another one had a personal computer with an Internet connection, email, and cellphone whereas the other remaining one did not answer.

Seven of the interviewed journalists mentioned Africaonline and Real Image as the Internet Service Providers. One mentioned Real Image and SPTC. Another did not answer the question.

On reliability rankings, six of the surveyed journalists viewed Real Image as a very reliable Internet Service Provider. Four of them ranked Africaonline similarly. Only one regarded Real Image and SPTC as very reliable Internet Service Providers. But the other one had some reservations. Another one was not sure and another said there were some shortcomings. A majority highlighted the stated problems of telephone lines, unspecified ISP and electricity cuts. One complained of slow reaction.

For interaction purposes, six of the interviewed journalists said the email was most widely used to send and receive messages. Another four said the landline telephone was used for interaction in the newsroom. Only two journalists mentioned the usage of cellphones while another two mentioned the Internet. Another two journalists mentioned a company Intranet, but they said it was still not in use.

Two thirds of the respondents used the email to interact with the readers/audiences. They sent messages and received feedback. Readers also sent letters to the editor.

Ten of the surveyed journalists used the email to communicate with government sources. Two of them used the cellphones to communicate with the government sources. Another two used the fixed-line telephone while the other two journalists used the Internet to communicate with government sources. They sent and received information from the government sources.

Eleven of the interviewed journalists used

the email for basic communication in the newsroom to source and exchange information. They also used it for sending information, doing follow-ups for stories as well as for arranging interdepartmental meetings. Two of them used the cellphone while another one used the fixed-line telephone. One of the interviewed journalists used the Internet and another one used the fax. An overwhelming majority (12) of the journalists surf the Internet for research purposes.

The same proportion of the sampled journalists felt ICTs had improved communications in the newsroom. Only one said ICTs had not improved communication much in the newsroom. A large majority of the respondents felt that ICTs had helped them perform better than with the traditional technologies. Only one felt negative about ICTs improving delivery.

Two-thirds of the surveyed journalists felt using technology had improved their status. One-fifth felt otherwise. The remainder did not answer the question.

More than half (8) of the respondents were not involved in any debates (formal or informal) regarding the use of telecommunications and ICTs within the newsroom. Four of the respondents were involved in the debates. The remaining two did not give an answer. In the debates, the topics discussed included the best use of the Internet for research and sending pictures.

The other issues were that of not watching pornography, computer viruses, telephone bills and the use of the email. Journalists said they were also encouraged to use cellphones and the Internet. Four of the journalists stated that the issues discussed in staff meetings focussed on the use of telecommunications and ICTs in the newsroom.

Other journalists were invited to make inputs, as they were the very people using the telecommunications and ICTs in the newsroom. Others were invited to shed light on the

advantages of using telecommunications and ICTs in the newsroom.

A large majority (12) of the surveyed journalists believed that ICTs had a capacity for improving news coverage in Africa. However, they expressed concern that ICTs discourage journalists from going out and covering events on the spot. One believed that ICTs could enable Africa to catch up with the First World's socio-economic and political development trends. One believed that ICTs could improve the news coverage of Africa. Many of the journalists had had some good experiences with ICTs such as being able to receive current news timeously. They also mentioned the accessibility and availability of information from far away and unreachable places locally and internationally.

One of the main constraints of using ICTs as cited by the respondents in news coverage in Africa was cost. The lack of ICTs in the newsrooms in Africa was another constraint. The journalists also cited poor infrastructure and poverty as another constraint of using ICTs in news coverage in Africa. They identified a lack of formal ICT training for journalists as another major constraint of using ICTs to cover news in Africa.

Half of the interviewed journalists had had personal success stories regarding the use of ICTs. One was the improvement in the performance of The Nation magazine due to the use of ICTs in the newsroom. The other was getting exclusive story ideas from the Internet, which earned one the COSAFA Best Sports Journalist. Another one was better delivery on international sports assignments.

Only a third of the interviewed journalists had had disappointing experiences of using ICTs. Among the disappointments cited by the journalists was the freezing of the computer while using Internet. Other disappointing experiences included being de-registered from an electronic network mailing list shortly after subscribing without any notification; the collapse

of the Internet; to be disconnected from cellular network or to find cellular network congestion.

The majority of the journalists wanted the issue of their training on the use of search engines to be given top priority. They suggested that further research be conducted on knowledge and understanding of the African journalists on how to use ICTs in the newsroom.

With the exodus of journalists from the newsrooms to the well-paying corporates, this study encountered difficulties in finding real 'early adopters' of ICTs in Swaziland. But it did manage to identify journalists with qualities of early adopters. The usage of ICTs by the Swazi journalists within the newsrooms started immediately after the computerisation of the newsrooms in the late 1980s. 'I started using ICTs in 1989. When the newspaper (Times of Swaziland) was computerised, we moved into receiving wire news via computer. I was only 19 years old.' The sports-journalist-turned-IT manager at The Swazi Observer also concurred that the computerisation of the newsrooms took place in the late 1980s in the country as The Swazi Observer was also computerised in 1989.

The advantages of computer-assisted reporting are summed up by Simon and Napolitano (1999:2):

'The spread of the new technology in the last few years has clearly made reporters faster and much more productive. At a higher level, it is doing more than that. Even as computer-reporting techniques spread into the main newsroom, adding depth and context, they continue to make possible the longer, analytical projects. Steadily improving technology, as well as increasing levels of skills at using it, has led to better stories.'

Like typical early adopters, a majority of the Swazi journalists also embraced the use of ICTs as new tools for improving news production and news outputs in the newsroom at their early ages: 17, 18 and 19 years old. Technology experts always argue that the younger age is the

better for humankind to learn and adopt the new technological devices. Deuze and Dimoudi (2002) note that new and electronic communication, in the First World, is omnipresent among young people and journalism students in particular.

With the computerisation of the newsrooms, Swazi journalists began to use the available ICTs including computers, emails and the Internet. Although it was their first contact with ICTs, just over half of the journalists never felt inhibited and intimidated by the ICTs. This crop of Swazi journalists exhibited the essential qualities of early adopters. 'I was fascinated by the whole exercise because I had heard that computers were the vehicle for the future.'

This study has established that although some journalists had received in-house training on how to use the ICTs, others were still scared of trying out something new due to the fear that they might break the ICTs or cause complications. There were still those who did not know how to use the ICTs, even after training. This calls into question the standard and quality of the common newsroom in-house ICT training done by the ICT Consultant at The Nation, Systems Administrator at the Times of Swaziland and IT Manager at The Swazi Observer. The ICT trainers still have a big challenge posed by Kerina (Getahun 2004:2-3), to demystify the ICTs as just a tool to access information or help other citizens or institutions to engage in their work more professionally.

For the Swazi journalists to use the ICTs effectively in their newsrooms there is an urgent need to improve and expand their formal ICT training in the newsrooms. This is necessitated by the revelation that two-thirds of journalists had not received ICT training, except for the on-the-job training offered by their colleagues or through the trial and error method. Only well ICT-trained journalists can really appreciate and enjoy the full benefits of using ICTs within the newsrooms. As Simon and Napolitano (1999) point out that the future belongs to reporters who become more and more computer literate.

Impressed by the usefulness of ICTs in their profession, the Swazi journalists interviewed used most of the available ICT facilities in their newsrooms. The email emerged as the most widely used Internet resource for communication purposes in the newsrooms. This research discovered that the usage of email by the journalists cut across all the cross-spectrum of people that the journalists needed to interact with in their journalism practice. It was widely used for sending and receiving news information from sources. In addition it had become a useful tool for getting feedback from the readers.

Dominick (1999) explains that journalists worldwide like to use the email because it is usually fast, cheap, and reliable. 'I use the email to send and receive information or queries.' (Interview, Journalist, The Swazi Observer: June 2004). Melinda Robins (2000) agrees that the African situation lends itself more to email services generally. What is also worth noting here about the getting of feedback from readers/audiences is that the ICTs are promoting democracy in a country ruled by an absolute monarch. Even readers outside the country are now able to exercise their democratic right through emailed letters to the editor.

The email was followed by the World Wide Web, which the journalists used for research purposes when looking for news information, news updates, breaking news and journalism courses. Fischer (2004:1) affirms that the Internet provides a virtual plethora of information for research, reporting and reference.

Interestingly, the Swazi journalists preferred to use the cellphone when conducting personal business and not so much when executing their journalistic duties. However, associated with status, the cellphone was commonly used by the journalists when communicating with the business executives. There was a belief among the status-conscious journalists that in order for them to be taken seriously by the business

executives, they should use the state-of-the-art cellphones to communicate with them. Another good reason was that the cellphones enabled them to circumvent the red tape of the receptionists and personal administrators who always blocked them from seeing the company executives. 'I use cellphone to do business and other personal communication.'

Some Swazi journalists, who used cellphones, also fitted to the category of early adopters. Always prepared to explore the functions of technological devices to the fullest, these journalists were using the other functions of their cellphones such as the games, clock, alarm, calendar, calculator and torch. 'I use the cellphone for communicating, but also as a watch for time and alarm, calculator and a source for light when it's dark.' (Interview, Journalist, Times of Swaziland: June 2004). Expense, however, turned out to be an obstacle. In newsrooms where preferential treatment was prevalent, media owners only purchased or topped up airtime for the senior journalists and editors.

Consequently, the usage of traditional technologies such as the landline telephones and fax machines remains the most preferred means of communication in the newsrooms. Another reason for the continuous use of traditional technologies is that only a few computers had email connections in the newsrooms. 'In the newsroom we just use landline telephone extensions to communicate ...because only a few systems are connected.'

As much as the Swazi journalists appreciated the usefulness of the ICTs like computers, cellphones and Internet, affordability remained the biggest constraint. 'I use the fax machine for sending questionnaires and receiving league games, logs, fixtures and results. I also use the fixed-line telephone because it's always cheaper than cellphones.'

Limited access to the few Internet-connected computers and work pressure in the newsroom had denied many journalists the opportunity to

know and effectively use journalistic electronic networks/ mailing lists. Yet, many of them claimed to be subscribed members to a number of electronic networks/ mailing lists. What this study has established is that the journalists familiar with journalistic lists had benefited through training and exchange programmes. They mentioned among other electronic networks/ mailings like the Institute of Advanced Journalism (IAJ), Media Institute of Southern Africa (MISA), NSJ School of Journalism, and the Commonwealth Press Union (CPU).

The journalists also used the electronic networks/ mailing lists recommended by the media bosses who paid the subscription fees. These included Real Image, SPTC, SAPA and New York Times. They had also subscribed for themselves to some of the user-friendly electronic network/ mailing lists such as those on Yahoo.com. They found the electronic networks/ mailing lists valuable with regard to sourcing new information, peer support, ways of sourcing and building networks.

The widely used search engines by the journalists included Google, Yahoo and Netscape. They were encouraged to use them by the fact they were resourceful and free of charge. The journalists needed formal training on how to use search engines in order to be able to navigate and deal with overload. As Dominick (1999:334) points out, the Internet is not without problems, including that it is difficult to navigate.

A majority of the journalists said that ICTs had made a difference in their lives. They outlined a number of advantages with regard to practical information. Amongst these was that ICTs were convenient and faster means of sourcing information related to story ideas, job search and finding training information. 'It helps a lot particularly in story search, ideas, jobs, applications for scholarships, courses and updates on new information and researches.'

The use of ICTs seemed not to have compromised their professionalism as the

majority of the journalists claimed to have avoided plagiarism of Internet stories. Even the few who lifted news from websites without citing the reference could still defend themselves. One such defence was that: 'Yes, when the work is not copyrighted'.

Due to the newsroom-orientation and maybe to a certain extent the dearth of African online information, the majority of the journalists had not found any African alternatives to the US and European online information. As pointed out earlier, the media bosses paid subscriptions to the US and European online media for African news. They preferred the Associated Press (AP) and Reuters and AFP to the Pan African News Agency (PANA). However there was a small percentage of journalists who were aware of the African alternatives such as AllAfrica.com, iafrica and SAPA.

Influenced by the spirit of the on-the-job training, the Swazi journalists had learnt to share story ideas, journalism courses, workshops and scholarships. One of the journalists said they shared 'information on scholarships and courses, as well as research on other things like diseases such as HIV-Aids.'

More importantly, they also shared information on how to use the Internet effectively in their practice. Another said: 'Yes, mostly I have gained knowledge to use the ICTs through colleagues.'

This demonstrated that the local journalists had embraced the new technologies and were keen to utilise them. They were also prepared to train themselves or one another to use the ICTs effectively in the newsrooms. All was done in the spirit of the early adopters who shared innovations with their colleagues.

Access to ICT facilities was not a problem to the Swazi journalists. They mentioned that they had access to the Local Area Networks, personal computers with Internet connection, email and cellphones. But to put this into perspective, there were restrictions imposed on how the journalists

were to have access to the ICT facilities in the newsroom. Each work station or news section had its own set of computers connected to the Internet and email. The journalists could only access the Internet or email at their respective work stations.

It was relatively easy for the journalists to give names of their newsrooms' Internet Service Provider. Half of them knew which ISP was servicing the different media houses. Africaonline was providing service to the Times of Swaziland. Real Image was responsible for servicing The Nation and the SPTC was offering service to The Swazi Observer. Depending on which ISP they were more familiar with, or using, the journalists ranked Real Image as the most reliable followed by Africaonline and the SPTC. The systems managers were quite happy with the reliability of the ISPs. Most journalists were unconcerned seeing this as an operational issue belonging to the systems department.

4. Conclusion

There was a consensus among the Swazi journalists interviewed that ICTs had helped them to deliver their work more easily than with the traditional technologies. The minority who felt hampered raised an important issue about the restriction of access to the Internet. They argued that as long as they were not connected to the Internet and did not have personal email addresses they could not fully enjoy the benefits of using ICTs. Also the sharing of the limited number of computers was a big problem as the journalists always worked under pressure. This robbed the untrained journalists of spare time to practice and learn to use the Internet in the newsroom.

The journalists felt that using technology had improved their status. The mere fact they were able to use technology had elevated them to the middle-class status, as they believed that technology was not meant for an average class of

people. Others said that technology had improved their status through efficiency. 'I'm now able to conduct business quickly and communicate easy. So most of the people with whom I interact with take me seriously and regard me highly as an efficient person.' (Interview, Journalist Times of Swaziland: June 2004).

In view of gender inequality in the newsrooms, it would be wrong to overlook the gendered implications. Robins (2004) notes that the 'information highway' is still predominantly male-oriented and often a forum for gender discrimination, intimidation, and even harassment. In this research, the male: female gender representation was 86 percent to 14 percent. There was a need to encourage the women journalists to use ICTs in a work environment that was male-dominated.

Not many of the journalists knew of any newsroom policy regarding the use of telecommunications and ICTs. Only a select few were invited to meetings to debate how journalists were expected to use the telecommunications and ICTs. Although there was not any written policy, the journalists were encouraged to use the new technologies in the newsrooms but were also warned not to spend hours on the telecommunications in order to save money on the bills. They were also warned not to abuse the newsroom computers by using them for private matters. A stern warning was issued against watching pornography on the Internet. It can be recommended that there should be a clearly defined policy on how the journalists should use the telecommunications and ICTs in the different newsrooms.

In the newsrooms where gender inequality still existed, women journalists did not have equal access to the new technologies. The study established that this problem was made worse by the fact that women journalists did not hold any senior positions. The newsrooms were male-dominated in all aspects. 'I have to surrender the machine to my aggressive male colleague.

This is the order of the day in our newsroom as there is no clear newsroom guidance on how to use the facilities.' (Interview, Journalist The Swazi Observer: June 2004).

The overwhelming majority of Swazi journalists in this research believed that ICTs had a capacity to improve coverage in Africa. The journalists mentioned advantages such as the fact that ICTs had bridged the gap between time and space. Through the use of ICTs, they would now receive and send stories from far away places outside the newsroom. They supported their statements with a number of their success stories. One journalist related his success story of winning the COSAFA Best Sports Writer as a shining example of how far the ICTs could go in improving the news coverage in Africa. "I used to do a lot research on sports reporting on the Internet. Then I learnt the better sports reporting skills, which won me the COSAFA Best Sports Writer worth \$10 000. The COSAFA judges used to monitor my stories on the website. So you could see the potential of ICTs to improve news coverage in Africa." (Interview, Journalist Times of Swaziland: June 2004).

Working under the trying conditions in the newsrooms, the journalists highlighted some of the constraints of using ICTs for news coverage in Africa. One of the constraints that they noted was expense. They noted that the ICTs were too expensive for most of the newsrooms in Africa. Another constraint was the poor telecommunications infrastructure and grinding poverty in the continent. An additional major constraint was lack of journalism training on how to use ICTs in the African newsrooms. They also identified lack of resources and accessibility as another constraint to the use of ICTs in Africa. But they were brimming with confidence that ICTs could solve some of the problems they were faced with in their newsrooms in Africa.

Ursell (2001) concludes that the new technologies make possible changes in news production and news outputs, but there is no

reason to expect that the impact of the new technologies will be uniform across all news providers. Rather we might expect to find that there are differing impacts, contingent upon the goals and judgements of executive personnel and any political regulators. This conclusion seems to be appropriate to this study on how journalists are using ICTs in newsrooms in Swaziland.

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Lesotho

by SIBUSISO MNGADI

1. Introduction

This is a study conducted in Lesotho among the so-called “early adopters” and newsroom leaders on the extent of their interaction with ICTs, and how these tools have impacted on their professional lives. The results of the study show that the diffusion of ICTs in Lesotho newsrooms is beginning to take ground, but the real impact has not been felt among media professionals of traditional media. Access to the new technologies is still very limited as a result of poor communication network infrastructure. The journalists also lack training to effectively use and benefit from these new technologies. One of the main conclusions from this study is that the emerging practice of integrating ICTs into journalism practice is not matched with efforts to build the capacity of the journalists to benefit from this development. There is a danger of the degeneration of the journalism profession in terms of disseminating invalid information downloaded straight from the Net.

Lesotho has both state and privately-owned media. There are 16 newspapers, one of which — Lesotho Today — is owned by the state. Churches and political groups own six newspapers. The other nine are independent. The government has a near monopoly over the electronic media, owning the only national radio station, television station and news agency (MISA, 2004).

2. Research Methods

Convenience sampling was used to select respondents. This was done because the researcher had difficulty in establishing the population parameters, and selected respondents on the basis of availability and willingness to participate in the research. However, an attempt was made to select respondents who fitted the description of “early adopter”. From a general database of media institutions compiled by the Media Institute of Lesotho (MILES), a survey questionnaire was sent via email to editors in Lesotho media houses while the researcher was still in Swaziland (the researcher’s home base). This was done to establish contact and also test the possibility of getting online responses to the questionnaire. None of these objectives were achieved as the response rate was a disappointing zero. The target group included journalists from radio, television, newspapers and online publications.

After failing to break through to the newsrooms by employing ICTs (that is, email), the researcher set out to make physical contact. The researcher arrived in Lesotho on a Saturday evening, started making appointments for interviews on Sunday. This was a difficult exercise as most newsrooms were not operational. The first interview was on Monday with the managing editor of a Christian radio station, Catholic Radio FM. It was from this interview that I also established the location of the other newsrooms and arranged appointments.

In all the newsrooms, the point of entry was through the editors. The editors assisted in identifying respondents and in most cases they [editors] were the appropriate respondents themselves. The respondents needed to be journalists who were regularly using cellphones, www, email and other new communication technologies in news production. Respondents represented several typical information-gathering roles in newsrooms, including publishers, web specialists, editors, sub-editors and reporters. The demographics of the participating journalists show that respondents are female and male within the age range 24 – 47. Respondents with the most experience in using ICTs in news production were those in positions of authority such as editors and publishers. For instance, it was mostly editors that answered questions on electronic journalistic networks. Most respondents were not aware of these networks and did not use them. This shows that editors had more skills and exposure in the use of ICTs than their colleagues in the newsrooms.

In view of the time constraints, some respondents were asked to fill the questionnaire within 24 hours. In most cases, the researcher filled the questionnaire on behalf of the respondents during interview sessions. This was done to maximise questionnaire response. These interviews took an average of 45-60 minutes. During these interviews, the researcher was able to keep the interest of the respondents high by ensuring that questions were not repeated. The in-depth interviews, done among four respondents, were also conducted in a similar fashion, with a majority of the questions [interview guide] drawn from the standard questionnaire.

Because the researcher used the in-depth interviews and survey questionnaire in a similar fashion, that is, to administer interviews, the results tended to be the same. The responses were elaborative in both methods. In the few questionnaires respondents had to fill on their own, they provided short answers and

sometimes skipped questions. However, the survey questionnaire method helped to establish that some of the questions may have been too technical for the respondents to grapple with on their own. The benefit of using the observation method was not fully realised because of time constraints during the data collection exercise. The method was, however, important in establishing actual newsroom habits in the use of ICTs, such as using the Internet mainly for personal emailing purposes.

In one newsroom, The Public Eye, the researcher conducted the study as a participant observer for half a day (that is, morning until around lunch-time). The researcher made no attempt to disguise his scholarly aim or identity, but was able to mix with the journalists as they carried out their tasks. The observer approach assisted in drawing up comparisons with the written responses. The focus was on their interaction with ICTs during their work. During the observation, the respondents showed little interaction with new ICTs as they spent the better part of the day in planning meetings, making telephone calls and reading other newspapers. It seemed that South African newspapers provided a good source for story ideas (as opposed to online information). The World Wide Web was hardly used by any of the journalists. The researcher saw only one female reporter browsing a yahoo web mail page. She said that she was checking her personal emails.

In the four working days in Maseru, 13 questionnaires were completed. There were four in-depth interviews, four guided interviews (where the researcher filled questionnaire on behalf of respondents) and five questionnaires were filled by respondents on their own. The in-depth interviews generated more discussion and solicited attitudinal data.

The respondents were from Lesotho Today (a weekly government-owned newspaper), Mopheme (a privately-owned weekly newspaper), Public Eye (a privately-owned weekly newspaper),

MoAfrika (privately-owned weekly newspaper), The Mirror (privately-owned weekly newspaper), Radio Lesotho (government-owned radio station), Moeletsi wa Basotho (newspaper) and Catholic Radio FM (owned by the Catholic Church).

The in-depth interviews were conducted among four respondents whom the researcher judged had more experience in terms of exposure to the use of ICTs in journalism than the other respondents. Three were male editors of newspapers and the female respondent was an editor of the government of Lesotho online publication.

Table 1: In-depth interview by sex and age

Age	Female	Male	Total
25-30	1		1
31-40		1	1
41-50		2	2
	1	3	4

3. Findings

Journalists in Lesotho face difficult challenges in terms of access to and appropriate use of ICTs in their jobs. The problems include poor network infrastructures, lack of professional training economic resources. The integration of ICTs was ad hoc and slow. Most journalists were neither aware of nor used online journalism networks. The use of the Internet and email was rarely linked to work related activities. No attempt has been made to develop newsroom policy on the use of ICTs. Despite the challenges, Basotho journalists were confident that ICTs will improve the quality of the journalism profession in Africa provided the network infrastructures were improved and the cost of using ICTs was made affordable.

Generally, the use of electronic mailing lists was limited. Most journalists surveyed did not have ready access to the Internet and had to rely

on other means of communication and research. Most newsrooms had dial-up Internet connection, accessed by a few individuals, usually the editors or sub-editors. Most journalists in the country predominantly used email for communicating with friends and sometimes news sources.

Most early adopters came into contact with the Internet in the late 1990s. The first Internet Service Provider, Lesotho Office Equipment (LEO), began operating in 1996. Most respondents considered ICTs to be the World Wide Web (www) and email. ICTs are mainly used at work. Some relied on Internet cafés for access to the web and email for personal purposes.

Most newsrooms have inter-connected computers (Local Area Network) with Internet and email. The problem is that the work stations are always fewer than the users, making it difficult for journalists to find time to use the computers for Internet browsing. The work stations are used for writing stories, editing and page lay out.

There are two main Internet Service Providers in Lesotho that is, Lesotho Office Equipment (LEO) and ComNet. Most newsrooms were connected by LEO through dial-up connection. Although broadband services were not available in Lesotho, respondents felt that the ISPs provided a reliable service. There was however a concern that Telkom Lesotho imposed some restrictions on Internet users, especially the refusal to permit local organisations to connect through South African ISPs.

Journalists mainly use cellphones to interact among themselves. Email is normally used to interact with government sources, other newsrooms and international organisations for news production purposes. The email is also used to interact with media owners to discuss administrative issues. In terms of interacting with business using ICTs, Francis Shopane, the editor of Moeletsi wa Basotho, said the newspaper paid its overseas suppliers and customers over the Internet. "In the absence of the Internet it would

have been difficult to achieve this," said the editor. Using ICTs was not regarded as a status symbol, but rather ICTs were seen as practical tools for interacting with people from all over the world.

Lack of professional training in the use of ICTs was one of the problems facing journalists in Lesotho. Although some journalists had received training in computer skills only a few were trained specifically in the use of ICTs in journalism practice. Among the 13 respondents, only one benefited from the training organised by Nordic-SADC Journalism Centre (NSJ) and Rhodes University on computer assisted research. One journalist was trained in Internet reporting at the Institute for the Advancement of Journalism (IAJ) in Johannesburg, South Africa. These respondents found the training to be very valuable in providing a good foundation for mastering the skill of ICT use. Training in the use of ICTs has mainly been in-house and ad hoc. Despite this, reporters, sub-editors and editors (both male and female) have benefited.

Getting started on using ICTs was not difficult for most journalists. Although a few felt inhibited at the initial encounter, they soon used ICTs comfortably through both formal and on-the-job training. More than half of the respondents did not feel inhibited by ICTs, especially because they had been using computers and windows-based applications before the Internet. Even the few that felt uncomfortable using ICTs at first, soon found them to be user friendly. All respondents said they did not have any difficulty using ICTs at the time of the interview.

Generally, journalists came into contact with ICTs at work. Only three of the respondents had computers with Internet connectivity at home. However, most respondents used mobile phones at work and at home. Mobile phones were predominantly used to co-ordinate news assignments in the field.

However, only two newsrooms had formalised the use of mobile phones for news production purposes by sharing maintenance costs. The

newsrooms were either paying air-time and access charges on behalf of their staff or paying for all charges including the purchasing of the handsets. In one newsroom, The Public Eye, management assisted staff to buy handsets by facilitating short loans. Most newsrooms realised the potential mobile phones have in improving communication among journalists. The country's first mobile phone company, MTN, started operating in 1998.

Knowledge of electronic mailing lists and online journalistic networks was limited. The few mailing lists mentioned included Misanet (although no longer functional), Channel Africa, Media Directory, Catholic Information Service for Southern Africa (CISA) and EWTN. The few respondents who said they were aware of electronic networks noted that these were valuable resources of information. One respondent actually expressed concern that Misanet had ceased to operate, noting that it had been a valuable resource and a platform for sharing among journalists in Southern Africa.

The respondents were not particular about which Internet search engine they used. However, almost all the respondents said they often used Google to search for information on the Internet. Other search engines used included Yahoo, AltaVista, Ananzi, Lycos and Askjeeves. The respondents could not think of limitations of the search engines and they were also not bothered by an avalanche of returns in response to search queries.

The general feeling among respondents was that ICTs had made a difference in their professional lives. One respondent said she downloaded application forms for the job she is currently holding over the Internet while she was completing her studies. Another respondent noted that he had been able to apply for jobs overseas. Other respondent said the Internet had been a good source for story ideas.

All respondents felt that the impact of ICTs on their lives was positive. The only negative

response was that it had made journalists lazy to go to libraries for information.

The respondents also felt that the introduction of ICTs into the work process had improved working conditions, and the quality and circulation of the newspapers. The improvement, they said, was in terms of real-time transmission, reception and sourcing of information, and low cost access to local, national and international news sources. There were misgivings, however, about the benefits of distributing newspapers online. Mopheme and The Public Eye took decisions to withdraw their online publications after losing sales on their print editions.

Most respondents valued ethical considerations in relation to citing Internet references. However, some journalists said they were tempted to download material without citing reference.

There seemed to be little or no awareness of African websites with online information relevant to journalists. All Africa.Com and SABA were the only two African online information resources cited by respondents. Colleagues in newsrooms were able to share these resources. In general, journalists in newsrooms helped each other to effectively use the new ICTs.

Newsroom policies on ICTs are non-existent in all the newsrooms surveyed. However, a few respondents made reference to verbal advisories against the use of the Internet for accessing pornographic websites. Most managers said there was, however, a need to develop formal policies around the use of ICTs in newsrooms. They were of the view that the policy development process needs to involve all users.

All the respondents were confident that ICTs have the capacity to improve news coverage in Africa. They highlighted that ICTs enabled news production through remote cooperation of journalists and allowed rapid access to local, national and international sources. These were cited as the main factors towards improving journalism in Africa.

Most respondents expressed difficulty in confirming credibility of information from the Internet. A majority of respondents cited the lack of professional training among as a major constraint in the use of ICTs.

Notable personal success stories in using ICTs included training opportunities, jobs and establishing contact with people from overseas. There were generally no disappointing experiences in using ICTs. However, some respondents felt that computer breakdowns always posed a major threat to their work. Although not raised in the questionnaire, some journalists highlighted that Internet publishing was important. Two respondents suggested that Internet publishing should be considered as an area for research to determine strategies for making online editions sustainable, instead of relying only on the proceeds of the print version.

4. Conclusion

The research on the use of ICTs in African newsrooms needs further analysis and a breakdown of the explanatory variables regarding early adopters. As a qualitative study, it has provided valuable insights into how journalists have incorporated ICTs in their work. However, the study has limitations in presenting a comprehensive profile of the extent of the integration of ICTs in newsrooms in Lesotho. The main limitation is that it does not reveal whether or not the early adopters are a majority or a minority in the newsrooms. How do those surveyed compare with other journalists? What distinctive qualities do early adopters have anyway? These are some of the problematic areas of this research.

Further investigation is also needed to establish if journalists were aware of ethical problems associated with the use of ICTs, especially material sourced from the Internet. Our study only focused on the attribution of materials sourced from the Internet. However, the main

challenge relating to computer assisted reporting is how to deal with online communication in an environment where verification of information is extremely difficult due to the often anonymous, fast-paced communication involved (Deuze, 2003).

In 2001, Write News.Com quoted Don Middelburg who has been conducting online surveys in the US: "The increasing use of the Net underscores the importance of credibility and of putting out reliable, sound information. At the same time, it emphasizes the need to communicate quickly and think globally, and leverage all the ways that exist to communicate, including electronic databases, search tools, web sites, links and other means."

In addition to understanding the diffusion of ICTs in traditional media, baseline studies are needed to assess the development and impact of online journalism. Online journalism can be defined as journalism produced exclusively for the World Wide Web. The study revealed that two online newspaper editions in Lesotho ceased to operate because they could not sustain themselves financially. The gradual improvement of communication networks means that accessibility of the Internet will increase, even at the local level. This presents a good opportunity for online journalism, whose running costs are relatively lower than communication technologies of traditional media such as radio, television and newspapers.

At the same time, there is need to focus on the capacities of people working as media professionals as an increasing number of people are turning to the WWW for news and information. The study could also have been more valuable if it investigated the frequency at which journalists used ICTs in their daily work. How often did the respondents access the Internet? Once a day? Once a week? This would have indicated if the participating journalists had embraced ICTs in their regular work. Studies show that the Internet has become deeply

entrenched as a news-gathering resource in Europe and the USA.

Overall, the study successfully combined the responses of print and broadcast journalists, and showed how ICTs have affected their jobs and how equipped they are to use the new communication tools. The conclusion that can be drawn from this study is that Lesotho journalists have not fully explored the potential of ICTs because of the small amount of resources devoted to training and improving ICT networks.

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Malawi

by Zelda Jongbloed

1. Introduction

This chapter examines the newsrooms of Malawi's two biggest (and only national) newspapers. It describes the method of research and gives background information on each newspaper examined. It also looks at the bigger Malawian picture, i.e. how easy or difficult it is for newspapers to operate within the parameters of government policy and legislation. Thereafter the findings of the research based on personal interviews with respondents and answers given in a questionnaire will be discussed, followed by an interpretation and conclusion.

This study of the use of ICT's by early adopters (of communications technology) in Malawi was conducted at the country's two main newspapers, The Nation and The Times. It found that Malawian journalists (and newspaper companies/owners) make limited and basic use of new technology to produce the papers. However, ICTs—websites, email, cellphones, and faxes—have nevertheless made a crucial difference in the manner in which the papers are produced and to the professional standing of most of the journalists working for them. Apart from the fact that ICTs exposed the journalists to the bigger world, they also opened new avenues for Malawian journalists to produce stories and articles (and newspaper-related research in some instances) for use by agencies and institutions outside the country. In some instances through websites and different mailing lists, the status of some of these journalists has been enhanced because of their

stories being posted on the Internet. The lack of a clear government policy on ICTs and issues like globalisation, the Internet, convergence, regional co-operation and the lack of commitment by newspaper owners with regard to better resources, plus the lack of proper training and the lack of money for the development of a proper infrastructure, were found to be the main problems facing Malawian journalists in the technological age. The investigation showed that self-reliance (on the part of working journalists) seemed more important than challenging management to provide access to technology and proper tools. The symbiosis between reporters and resources, however limited and whatever the constraints of access, does facilitate better news flow and therefore better informed news stories. But the print media in Malawi, hampered by lack of resources and a clear vision of the technological future, still has a long way to go in narrowing the digital divide at various levels within itself and in the wider global context.

2. Research methods

Questionnaires were used as the basis of the study to establish the manner in which journalists in Malawi use ICTs in the newsroom. However, because of the manner in which newsrooms operate in Malawi, it was necessary to slightly widen the scope of the study to include enquiries about the use of computers and first contact therewith.

Through the Internet—using various search engines—and the limited information available on the media in Malawi on the worldwide web, I established that Blantyre, though not the capital, is the industrial heart of the country. Most of Malawi's most important industry and business, including the media, had Blantyre as its head office. It made sense to choose Blantyre as the area for research.

In order to select the study subjects, a colleague who is responsible for Media24's Africa office was contacted. She brought me into contact with the Malawian representative of Media 24. I emailed him explaining the nature of the research and my requirements, i.e. the names of the most important newspapers and their management editors and reporters.

Having established that The Nation (and its weekend edition) and The Times (and its weekend edition Malawi News) were the biggest and only 'national' newspapers in the country, I contacted the editors, once again explaining the nature of the research and the manner in which it would be conducted. I requested permission to interview a selection of journalists and be allowed to spend time in the newsrooms observing the daily routines of the journalists.

Specific names of those willing to participate in the study were given which enabled me to email a rather lengthy questionnaire prior to my arrival in Blantyre. I indicated that I was going to follow up with personal interviews and assistance with filling in the questionnaires. This method eventually yielded a 100% questionnaire return rate.

At The Nation, the former IT-editor, editor of the weekend paper and reporters in various stages of seniority were selected. The Nation sample consisted of seven people. The candidates were identified with the help of editors and senior editorial staff. The same method was used to select six respondents for the survey at The Times (about a third of the editorial staff complement).

The same research tools, i.e. observation, questionnaires, interviews, were used for males and females and for the sample of management. The first section of the questionnaire focussed on demographics (age, gender etc); the second focussed on personal usage of ICTs; the third wanted specific job-related information with regards to the use of ICTs in the newsroom; the fourth probed policy in newsroom and to what degree respondents were involved in discussion on policy matters. The last section deals with the general assessment of ICTs in newsrooms in Africa and their capacity for improving news in Africa as well as possible areas for further research.

Additional content of the study was created from interviews with reporters and senior editorial staff of The Nation and its weekend edition and The Times and its weekend edition, Malawi News.

Observation at The Nation was done over two days (Monday and Tuesday). Apart from individual interviews and observation in the newsroom to see how people went about their daily tasks, I attended the daily senior editorial meetings where news issues were discussed. Two days were spent at The Times (Wednesday and Thursday). About 16 hours (per paper) spread over four days were spent at the two papers.

The papers surveyed carry the usual mix of international, African, national state, local and regional news and they produce this with extremely few resources and with great odds stacked against them

3. Findings

Personal observation in the general (open-plan) newsroom of The Nation, showed roughly six work areas (desks pushed together), a number of landline telephones and about 10 computer workstations along the sides of the newsroom. All the editorial staff of the paper share the computers. One computer is the paper's link to

the Reuters news service.

Reporters start working at about 7h30 every day when a news list for the day is drawn up by the editors of each section of the newspaper and stories are assigned to individual journalists. Those covering the courts set off to do that, while others use mainly landline telephones to research stories. Faxes and email are used to send out questions which are very often used as the basis of stories. The newsroom pace appears to be very slow since the paper normally has only about four tabloid pages filled with local news stories. When enough information is gathered for a particular story, a reporter would access the system to type in their stories. The editors responsible for different sections take the stories and hand-design dummy pages which are then taken to technical staff who lay out the pages. The pages are then sent electronically through the system.

The senior editorial management of the newspaper meet twice a day—at 10h00 and at 15h00—to compare their paper to its main rival, The Times, and to discuss the manner in which stories will be covered or followed up and a final meeting to decide which stories would be used.

The Nation sells about 25 000 papers per day and is the biggest newspaper in Malawi. The Weekend Nation has a circulation of roughly 40 000. The paper's main rival is The Times which has a circulation of between 7 000 and 10 000 (depending on who you ask) and the Malawi News, the paper's weekend edition with a circulation in the region of 25 000 to 30 000 copies.

The Times has fewer ICT resources than the The Nation. The manner in which stories are gathered and written is the same with the exception that the newsroom only has four computers for the general use of reporters, editors and editorial management. One of these computers was a receiver for limited Reuters news. It is limited because of the cost involved. Only the most important world news stories

are sent to this server. Only one computer has access to the Internet. Email is accessed here. Staff are not encouraged to have email addresses using the paper's service provider. Most of them use either hotmail or yahoo which they access at Internet cafés in Blantyre. They use cellphones and Internet cafés at their own cost, and more often than not, in service of the newspapers. During my period of observation at The Times, a number of stories received via email from the paper's bureaus at Lilongwe (seat of government and thus an important bureau) and Mzuzu (in the north of the country), were tampered with and disappeared. As a result a decree issued by the general manager who also acts as the editor-in-chief, said all editorial staff were forbidden use of the Internet.

The landlines at The Times (including the switchboard) use pre-paid airtime, a practise which places a lot of stress on reporters. A specific amount of airtime was budgeted for and when used up, journalists either have to use their cellphones or put stories on the backburner. Through discussion with staff it became clear that there is a belief amongst the editorial staff that there is a lack of appreciation (on the side of the owners of the newspaper) that the work could be enhanced by better facilities.

The production process at The Times works on the same principle as at The Nation. The paper also has a television set in the newsroom with several channels (DSTV) and access to local news services. Senior staff here believe that the government has not made access to new technology any easy. There are no tax breaks and only a surcharge (on computer equipment) has been removed. They point out the 'really very depressing' fact of The Times not having an updated website. 'We established one but had lots of problems with the upkeep. It was also very costly. Fortunately we don't have a tradition of readers who rely on the website for news,' said a senior reporter. Asked to explain he said: 'People in Malawi are poor and do not have computers

and Internet access in their homes. The website would therefore mainly be used by people living outside the country who are not buyers anyway.' The impression given is that because they were not buyers, potential cyber readers of the paper are not seen as important. 'It is not that we are not interested. The younger generation especially are introduced to websites at school, but the cost of keeping it going is prohibitively expensive,' a manager said.

In response to questions on the factors inhibiting computer use/Internet access, it was pointed out that hardware was expensive, connecting to the Internet was expensive and phone lines in Malawi were notoriously unreliable even though they have improved a lot in latter years. In addition there are frequent electricity blackouts. It would be useful to undertake research to determine how to alleviate the challenges of illiteracy and how to develop affordable technologies and non-text computer interfaces to facilitate people's access to international research and development efforts.

Respondents at The Nation and Weekend Nation were asked about the personal usage of ICTs. With the exception of two respondents, all those surveyed indicated that their first contact with any form of electronic data capturing machine in the form of a computer, was in college as either a learning aid or as part of their studies. One respondent said her very first contact was at home where the family had a computer installed for business purposes.

A 44-year-old respondent's first contact was when he worked for the Montfort Press (a Catholic establishment in Blantyre) which published a magazine in English and Chichewa (indigenous language spoken by most people in Malawi). He worked as an editorial assistant. First contacts with computers among those surveyed went as far back as 1982. Without exception privately-owned computers are currently used mainly as word processors. None of those interviewed had Internet access at home.

All those surveyed started using cellphones, the Internet and email shortly after they became available in Malawi. At The Nation, apart from a few senior staff members (mainly editors and senior staff), all those surveyed had personal cellphones which they used in service of the newspaper.

In the newsroom, a restricted form of Internet-access is available with only one of the computers being connected to the Internet. Access is confined because of the huge costs of telephone services in Malawi. A number of staff have email addresses through the paper, but most of them use yahoo.uk.

On a question with regards to the manner in which the new technology inhibited them, those surveyed spoke about their excitement at having access, even though limited, to new ways in which to work. One respondent however, experienced difficulty and frustration especially when trying to access information from a source and using tools he was not quite familiar with.

Staff members indicated that they use ICTs in their own time at their own cost outside the newsroom in Internet cafés. Most received basic training in the use of ICT's with many of them being 'trained' by colleagues. Younger staff members surveyed indicated that they did a course in the fundamentals of the Internet. Most said that formal training offered far more advantages than on-the-job experience with its problems of having to wait until somebody had time to show you.

The most important use of email at the paper is the sending of stories from the two bureaus in Lilongwe and Mzuzu, the other two big cities served by The Nation. There is no direct network link between head-office and the bureaus. Email is also used to communicate with friends and colleagues, to send short messages, to receive tips for stories and to send out questions in connection with stories. A lot of this is also done at Internet cafés at journalists own cost.

The respondents indicated that they use the

Internet to surf, to do research, to look for story ideas, to update The Nation's website, and to look for scholarships and training opportunities. In the newsroom, the Internet is used exclusively for work purposes, i.e. research and website. Again, surfing and a lot of the research is done outside the newsroom at Internet cafés.

Few of those surveyed knew what electronic mailing list were with only a handful using them on a regular basis or subscribing to one or more of them. Cellphones are used mainly privately to communicate with family and friends and for the editors to reach staff on assignments outside the newsroom, and to co-ordinate work. The only other ICTs used on a regular basis are digital cameras. The technical editor persuaded management about their cost effectiveness (in both time and resources such as film and photographic paper).

The main complaint aired about electronic mailing lists was that the discourses were 'too academic' and 'more gossip than anything else' (one user). Among the benefits were information on new training opportunities and news from other areas. Lists for one respondent offered peer support and a good source for research. One respondent said he kept abreast with professional issues and used mailing lists to maintain contact with Malawians outside the country. This kind of interaction helps to build networks and contacts, even with strangers.

It became clear from some of the answers received in response to questions about search engines, (e.g. limitations and return overloads), that many of those interviewed were unfamiliar with the jargon. Google, however, seemed to be the search engine of choice with Altavista and Yahoo mentioned as alternatives. Most users found the search engines adequate for their purposes. The response to overloads of returns varied between 'I'll give up and get my colleagues to help' and 'I try to look for the information till I get it, I never give up easily' to 'I narrow down my search and use the advanced search function'.

Some of the respondents realised that overloads very often are the results of not being specific when searching.

The respondents were asked about whether they have found African alternatives to US and European online information. Most of those surveyed had very little knowledge of African alternatives.

After searching for background information for stories and features, it would seem as though the search for scholarships to do all kinds of courses in and outside of Malawi and job searches are the most popular use of ICTs. They are also used to get story ideas and to keep up with what is happening in other parts of the world. Some respondents gave the Highway Africa conference as one of the things they became aware of through the Internet. Users have found that, by using these tools, research has become easier and less tedious. However, one person surveyed warned against an obsession (he was an early victim) with the Internet and surfing. In Malawi this could be both time consuming and very expensive. Most people believed that having access to ICT's whether in the newsroom or outside, has definitely enriched their work, made them better informed journalists, widened their horizons and brought them in contact with professionals elsewhere on the globe. Nobody admitted to lifting news from the Internet, but many acknowledged 'lifting' story ideas and giving these a local angle.

The Nation has access to a local area network and a number of computer workstations for the general use of reporters and senior staff. As noted, one computer has a link to the Internet with access thereto restricted (permission to use it has to be sought). The Nation uses Africaonline as its service provider and most respondents regarded the service as reliable but pointed out that the telephone system and regular electricity blackouts in the country interfere with the availability of the service. Almost all the people in the newsroom, i.e. women, sub-editors, technical

staff, management, editors, have access to ICT training even if informal (taught by colleagues). A serious problem seems to be the fact that reporters do not have direct access to the Internet. Apart from queues, there is also the question of seeking permission to use the service and time constraints placed on the use thereof. Most journalists therefore prefer to use Internet cafés at their own cost to do research for stories that eventually go into the newspaper.

Interaction in the newsroom between people happens via cellphone (when reporters are out in the field or off-duty), landline telephones and to a degree by email to pass on information, for example. Contact with the papers' readers, government sources, other newsrooms, international organisations and networks, media owners and ngo's is maintained via email, telephones, cellphones and faxes.

Reporters in the field have found cellphones to be the easier tool to use. The recent election was given as one example where reporters in the field phoned in stories or where possible, used email.

ICTs have, however, also had a hampering effect in the newsroom, not within themselves but because of what is needed to make them work effectively. 'When we have a breakdown of equipment and limited technical support, communications in the newsroom between the different sections have on occasion been severely hampered,' said one respondent.

None of those surveyed ever felt disempowered by ICTs and all agree that ICTs have improved their status. This is especially true of those people working for The Nation since theirs is the only newspaper with a website in the country. Writers have thus become nationally and internationally known for their work. 'I've become popular and have been exposed to a lot of important organisations and people,' one respondent said. Another said that he is regarded as 'something of a boffin' by his peers. It was also pointed out that the use of different ICTs made them 'multi-skilled' and more

knowledgeable and therefore able to find really good jobs. This was in theory only, however, since none of those surveyed had found better jobs on the basis of the above.

In a country where not many people have access to ICTs other than cellphones, the standing of people who know how to use the Internet and email has 'definite status'. Users also believe that they would be able to work anywhere in the world and have, through the use of smart tools, acquired the knowledge to produce things like newsletters, letterheads etc. which gives them access to additional means of income.

Less than half of those surveyed took part in newsroom debates (formal or informal) about the use of telecommunications and ICTs within the newsroom. Discussions centred on the launch of a website and issues like how to make the Internet commercially free or at least much cheaper than at present. One of those surveyed said she initiated the discussion both at newsroom level and with the editor-in-chief. Another was an 'interested listener' in a conversation driven by the editor-in-chief. A senior sub-editor was involved in discussions to persuade senior management to switch to using digital cameras which would be more cost-effective than the film-cameras they were using up till then.

In their assessment the respondents said they believed that ICTs have the capacity to improve and create better news because of the way in which news can be sourced and updated to give readers a wider perspective. One respondent said that it would empower journalists to learn new skills. Having access to the Internet gave better insights into international issues. One respondent mentioned the situation in Zimbabwe as an example of a story to be kept up to date on through the Internet and other digital news services.

The main constraints are seen as the cost of hardware and service levels and to get a system

in place; the cost of the telephone service and the fact that management restricts the use of the main ICT in the newsroom, the Internet. A lot needs to be done to demystify the Internet for ordinary people. The fact that the Malawian government has no ICT-policy is also seen as a problem. A further problem listed is the fact that even using cellphones has constraints. Not all of the country is covered by cellphone networks which means that access to people in non-covered areas is restricted.

The assessment of the survey and observation at the above newspapers is more or less the same as at The Nation. In this section I will deal only with experiences that differ from the The Nation.

Blantyre Newspapers are the owners of both these papers. The papers have separate editors and separate newsrooms with a general manager who also acts as an editor-in-chief in an overhead position. Like at The Nation, no one—that includes senior managerial and editorial staff—has their own computer. The general newsroom has access to four workstations, one of which is connected to the Internet and access is allowed for 30 minutes each day collectively. Because of financial constraints, all telephones of these papers (including the switchboard) operate on a pre-paid system. This severely limits not only access to the Internet but also the use of landlines to do interviews. This means that reporters are forced to use their personal cellphones for the use of the paper. They are not refunded.

At the time of my visit to the papers' newsroom, one of the four workstations in the newsroom, which are used by about 18 reporters and senior staff, was broken. On the second day of my visit Internet access was totally forbidden by the general manager after emailed stories for use in the paper mysteriously disappeared.

Like their counter-parts at The Nation, these journalists too, though generally paid less,

also make use of Internet cafés for research purposes and to access email. One company email address services all the editorial staff but is used mainly as an avenue for receiving stories from outlying bureaus (Lilongwe and Mzuzu) and to give orders and make requests.

'It does not seem to be appreciated that the work output can be enhanced through the use of better facilities. We still produce a paper on a daily basis in spite of the severe lack of resources so the general approach from the managers is that the editorial staff can manage without modern newsroom resources,' a senior staff member said.

In the absence of proper and unlimited access to the Internet as a research tool and a source of news, the paper has what one of the editors called 'a limited view of the world through a Reuters subscription'. A television set with several DSTV channels and access to news services like the BBC and local news services forms part of the hardware in the newsroom.

With regards to questions on the personal use of ICTs, it became clear that most people had their first contact in the late 1990's or early 2000's. One respondent gave his first contact as 1990 while he was studying in Malaysia. Most of those surveyed felt excited by the new technology rather than inhibited. They use ICTs at the office, Internet cafés around Blantyre, in their homes and in the case of cellphones, 'all over'.

All respondents had some formal training in ICTs in either basic or fairly advanced form. Some, however, felt that formal training should go hand in hand with on-the-job training since it is believed that the two forms of training complement each other.

Respondents indicated that they use email for sending and receiving messages and questionnaires and occasionally for filing stories. The Internet is used for research purposes, general studies and to surf and look for story ideas which are then localised. Cellphones are used to keep contact with the newsroom and

with news sources, to send messages and for general communication purposes. Electronic mailing lists seemed to be better understood at The Times than at The Nation. Respondents indicated that they keep contact with other journalists (both internally and externally) through mailing lists on issues like gender, HIV/aids and the environment.

Most of those surveyed were not only aware of journalistic electronic mailing lists like Af-Aids, Saf-Aids but also subscribe to some of them. They indicated that they find these valuable in terms of catching up with global news and developments in other African countries and receiving valuable story ideas and assistance with research. It is also a great source of information, new story ideas and building networks with professionals elsewhere in the world, they said.

Search engines like Google and Ask Jeeves are also used in this newsroom and by reporters in Internet cafés. All those surveyed agreed that they have found ways through personal experience and by learning from colleagues' experience, to narrow down searches so that returns in response to queries are not so overwhelming and daunting so as to put them off using the resource.

In terms of the difference ICTs have made in matters like practical information, their professional lives and quality of work, those surveyed pointed to the ease with which ICTs have brought them into contact with ideas for stories, scholarships and jobs. Most found that the access to the Internet and different websites has enriched their work and led to better and well-researched stories being produced. It has also linked them with journalists in other parts of the world (very often First World journalists).

All those surveyed were quite adamant that none of them has ever, nor will ever, lift stories from the Internet and claim the work as their own. However, 'lifting' story ideas from the Internet is seen as acceptable.

All journalists also share useful information

with colleagues and agree that they have in turn received useful information from friends.

Malawi SDNP is the service provider and most of those surveyed described the service as reliable but pointed out occasional problem with electricity blackouts, overloads and the hampering effect of the prepaid landline system as the most common problems experienced.

Replies to the question on access to training, varied between 'some', 'everyone' and 'some sub-editors and reporters'. All agreed that there is a system of informal training (colleagues showing each other) in place. It is the paper's stated policy that all employees be properly trained, but the practical reality is that there is no money to achieve this.

Respondents agreed that they felt empowered by the use of ICTs. One pointed out that it enabled him to earn extra money after he initially got scholarships through the Internet. The training he received through this and the contacts he made enabled him to write stories for international publications and to participate in research for overseas institutions of higher learning and organisations. Only two of the respondents confirmed that they had Internet access in their homes. This greatly enhances their status in a country where very few people have that access, even at their places of employment.

Journalists indicated that they felt disempowered by the fact that their local area network was incomplete. There are newsroom discussions on these and other matters (e.g. upgrading equipment, encrypting text and photographs, and clarifying use of the Internet). Not everyone was involved in the discussions. Women reporters were sidelined. All those interviewed felt that there was a lack of commitment by 'media bosses to connect'.

4. Conclusion

Swinton (2003) suggests that the impact of ICTs for the African journalist is one of the main debates on the African continent. She quotes Alain Modoux (adviser to the Delegate of the Swiss Federal Council for the World Summit on the Information Society): 'ICTs provide immense opportunities to promote and foster social, economic, cultural and political development in African countries.'

The most important problems of African journalists are highlighted as issues of accessibility and affordability, infrastructure and connectivity, illiteracy and training.

According to Modoux, the African problem is not one of technology but rather one of economic and political infrastructure. The emergence of new technologies and the Internet means that Africa could have valuable new opportunities. One such opportunity is to put newspapers on the Internet and disseminate content around the world. However, in the case of Malawi, only one of the two major papers in the country, The Nation, has a regularly updated website. It appears that generally ICTs are not regarded as a top priority in the country.

At both The Nation and The Times there is at least one truly early adopter of ICTs. Without doubt, these two men are among the most influential ones at their respective papers even though they are not the editors. They keep themselves (mostly at own cost) up-to-date on new innovations and developments in the field of this technology. Where possible, they persuade management to invest in the new tools. They are the opinion makers on ICTs.

Most of those surveyed, and certainly the paper's junior staff members, make use of Internet cafés to access email, surf the net and do the necessary research for their work. They do this in their own time and at their own cost. Initial difficulties with the Internet and sourcing have all but disappeared and none of those

surveyed in any way now feel inhibited by ICTs. Even though these journalists are also early adopters, they do not have the same level of influence as the ones mentioned earlier because they work at a junior level.

It became clear through the answers given in the questionnaire that the use of ICTs within the newsroom of The Nation is still very limited with only a few staff members—those who lay out pages and the webmaster—having access to smart tools on a regular basis.

The data revealed a pattern of ICT use with a few differences standing out. Thus, the mean age of those interviewed at The Nation was 33 years. The mean age of respondents at The Times was 30 years. Of the study sample at The Nation, 42.2% constituted women and 57.8% men. At The Times 33.3% were women while the remainder of the sample (66.7%) was men. The study comprised interviews with both top management and newsroom staff. It confirmed that Malawi is still a largely patriarchal society. This study showed that women were not high up in the newspapers' hierarchy. Few of the women interviewed exhibited an interest to be in management nor were they curious about new technology. Only one woman said she aspires for a higher position. She was also the only one to ever have challenged management because she did not get the promotion she was seeking.

There was a general disillusionment with salaries, though most respondents agreed that their income was better than the mean for the country. This unhappiness with salaries can also be linked to the fact that Malawian journalists use costly Internet cafés at their own cost to do research and to use email.

In discussion with the senior editorial management of The Nation, the very problems Modoux (Swinton, 2003) was referring to, i.e. that Africa's problem is not one of technology, but rather of economic and political infrastructure, were put in perspective. What the management referred to as the 'mood of change' in 1994

brought with it an upsurge in the number of newspapers published in the country. At one stage there were about 20 newspapers, most of which faded when the euphoria about the new democracy started disappearing. Most of the papers 'leapfrogged' the era of the electric typewriter and went to the use of computers, initially as word processors and eventually for the (limited) electronic nature of the entire production process.

The computer era brought with it Internet cafés where ordinary Malawians could access—at a price—the Internet. From a government policy point of view, ICTs were not an important issue compared to the economy being the most important factor of Malawian national life.

It is also perceived as a huge problem that the Malawian government has no ICT policy. A draft information technology bill was being lobbied for acceptance in 2004, and there are huge expectations that the present government would spearhead the surge towards new technology.

Management (at both papers) readily agreed that they were 'quite overwhelmed' by the demands of the new technological age and the rapid development of ICTs. They have some resources, but only to a very limited extent with issues like cost, training, infrastructure, being major challenges. In spite of present constraints, management pointed out that the long-term strategy of the papers, as reflected in the vision and mission, was to gain access to more advanced technology. 'We want people with eyes to direct it,' was said with reference to the fact that technologically advanced people are needed in Malawi to train staff.

I believe the Malawian Government should be lobbied to actively promote the use of ICTs as a fundamental working tool by their citizens and local authorities. How the country's newspapers could be involved in this lobby could be an area of study. In line with the plan of action of the WSIS (2003) sustained evaluation and assessment of progress should be maintained especially in Malawi.

Little use is made of modern technology at both the newspapers studied. A very serious obstacle is the fact that the senior editors and management of both papers—the ones to make the decisions with regards to advancing their business technologically—are not well-informed about ICTs. Neither are they interested in the manner in which ICTs could be used to improve both the news gathering and the production processes. Apart from the daily planning sessions with regards to the type of news to be pursued, planning with regards to technology and newsroom policy is largely absent. There is no appreciation of the potential that ICTs have to change their professional lives and the cost effectiveness in news production. Yet, at both papers the wish to move into the new technological era was expressed on a number of occasions.

The journalists on the other hand, have experienced the 'almost magical' way in which ICTs, especially Internet, has changed their lives. There appears to be a general unease with the pace of change in this regard at both newspapers, and the lack of vision. I believe that training in the use of ICTs should be pursued much more vigorously and with special reference to the training of the top-hierarchy. This will assist in narrowing the divide between the newspaper management who are largely unwilling to adapt to the new technological world and the eager young journalists who are keeping themselves informed about technological advances.

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Zimbabwe

by HAYES M MABWEAZARA

1. Introduction

The critical role of interactive communication technologies in newsroom functions is unquestionable. It appears inevitable that every well-meaning newsroom will have to adopt and put to full use new communication technologies if it is to play a meaningful role in the Global Information Society. However, the adoption of the technologies is not without problems, particularly for Third World media practitioners because of a number of inhibitive factors, most of which hinge on the notion of the 'digital divide'. Against this background, this chapter sets out to examine how selected journalists, branded as 'early adopters' (opinion leaders who are integrated in the social system of their newsrooms), make use of Information and Communication Technologies (ICTs) / interactive technologies in their newsrooms. Specific attention is given to four leading Zimbabwe Newspapers Limited (Zimpapers) newspapers—The Herald, The Sunday Mail, the Chronicle and the Sunday News. The results of the research are telling in terms of the extent to which Zimbabwean journalists and newsrooms in particular have adopted and used ICTs in their routines. The results provide clues for the identification of critical areas that require policy attention, which addresses the significant problems pertaining to ICTs in the newsrooms. Chief among these are: lack of proper training in the use of ICTs; gross underutilisation of available ICT facilities; and the abuse of ICTs in the writing of news. The results provide a pathway to the

foregrounding of African issues in the Global Information Society.

It is a common assumption that ICTs raise the efficacy of practice in many sectors. The media is a particularly important sector because it can impact on the role of ICTs in other sectors, given that journalists are the mainstay of information transfer within a given society. In short, the quality and reach of their communication products is critical to the growth of, inter alia, an African Information Society. It is in this regard that this research has sought to unearth the extent to which the adoption of ICTs by journalists and newsrooms is a major indicator of the productivity of their work.

The research is also instrumental in examining problems ensuing in newsrooms from the adoption of ICTs in day-to-day routines such as more and faster journalism with less attention to quality, and the use of ICTs for consuming pornography rather than for media research. The research thus highlights the potential or otherwise for increasing the power of ICTs in journalism, with an eye to exploring both positive and negative effects on the practice. It provides a bedrock against which further research on the impact of ICTs in African newsrooms can be carried out. In particular, it will help construct bottom-line data that can feed into the World Summit on the Information Society processes culminating in Tunis in 2005.

2. Research methods

In the light of the rationale given above, the research focuses on how 'early adopters' at The Herald, The Sunday Mail, Chronicle and the Sunday News are using ICTs in their work. Rogers cited in Garrison (2000) posits that, '...early adopters are opinion leaders who are more integrated into the particular social system involved in the adoption process'. They can be identified through observable traits (external markers) such as individuals regularly using and engaging with ICTs, which leads to an inference that these kinds of individuals understand ICTs. They can also be identified through assumptions made regarding individuals in relation to how their use of ICTs is interpreted ('values'). The researcher discussed and explained these assumptions to senior editorial personnel of the selected newsrooms, who in turn used them to identify 'early adopters' in their newsrooms. Focus was accordingly given to these journalists in the research.

The research was carried out at four newspapers under the government-owned Zimbabwe Newspapers Limited. These constituted two dailies, The Herald (Harare) and the Chronicle (Bulawayo) and two weeklies, The Sunday Mail (Harare) and the Sunday News (Bulawayo). These constitute a bigger part of the mainstream press in Zimbabwe and therefore provide a sound and representative picture of how 'early adopters' in Zimbabwe are making use of ICTs. All four newspapers are located in Zimbabwe's two major cities, Harare, the capital, and Bulawayo, the second largest. There is generally a uniformity of approaches in the manner in which the four newspapers are run given their common ownership. In this light, the adoption and use of ICTs by the newspapers is also similar in many ways, although there are internal dynamics peculiar to each newspaper owing to varied newsroom cultures and traditions.

For the purposes of this research, a total of 13 journalists from the four newspapers constituted key respondents to the questionnaires and interviews—nine males and four females, all within the age range of 22 and 38.

The researcher made use of the following research methods and tools: Questionnaires, Interviews and Observations. An open-ended questionnaire was completed by the 13 journalists who were deemed to be 'early adopters' of ICTs by their superiors. The questionnaire was clearly segmented into sections that captured all the critical indicators in the research to ensure that data collected led to valid conclusions. The 13 journalists were divided as follows across the four newsrooms: six at The Herald, three at The Sunday Mail, two at the Chronicle and two at the Sunday News. The response rate to the questionnaires was 100% given the involvement of the key editorial staff of the newspapers.

The questionnaire was tested in advance on four journalists [not necessarily 'early adopters'] at the Chronicle, to whom the researcher had easy access. The four journalists were asked for feedback on the validity and readability of the questionnaire and for any other suggestions they had. Two of the journalists made comments about the wording of some questions, which they found difficult to understand. They also expressed concern about the meaning of the abbreviation ICTs, which the revised questionnaire sought to explain. Concern was also raised on the length and general readability of the questionnaire. The questionnaire was thus adjusted to make it user-friendly and, in some instances, the researcher had to assist the journalists to go through the questionnaire by way of explaining some of the questions without necessarily influencing their responses.

Interviews also assumed a key part of the research. Seven in-depth interviews were carried out with journalists who expressed willingness

to be interviewed in addition to filling the questionnaire. A series of open-ended guideline questions were structured on the basis of the research objectives. More specifically, interview questions were drawn from the journalists' responses to the questionnaires in a manner of covering apparent gaps, as in instances where journalists literally failed to answer key questions on the questionnaire, either due to lack of understanding or due to lack of time. To ensure the capture of verbatim material as much as possible, a recorder was used.

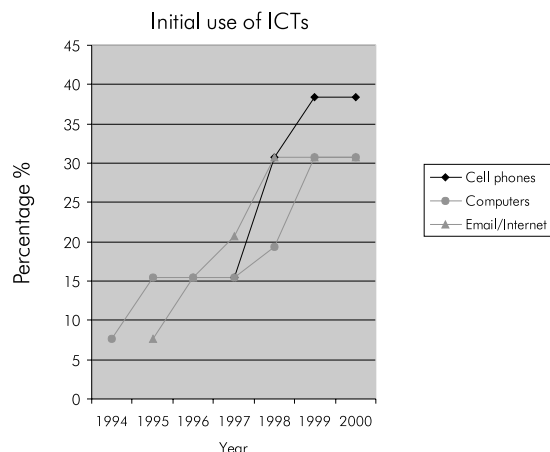
Observations were also carried out with the aim of analysing the whole process of news production in terms of how journalists interacted with ICTs in their day-to-day newsroom routines. Particular attention was paid to the type of ICTs the journalists made use of in the course of their work. The observational study was intended to supplement, challenge and complement the data acquired from the questionnaires and interviews. The method thus assisted in making up for notable gaps in the interviews and questionnaires where the journalists held back on certain critical information or would not speak about a particular issue that seemed to be bothering them. To this end, a three-day observation of newsroom practice was carried out with specific focus on three journalists, chosen from the 13 identified as 'early adopters' at The Herald and The Sunday Mail between the 11th and 13th of May 2004. The observations were done at different working hours agreed upon by the journalists and the researcher within the three days. It must be pointed out that this method was strongly affected by the erratic and sometimes unplanned movement of the journalists within and without the newsrooms for unexplained reasons.

The research methods and procedures described above appear independently exhaustive but they were used in interdependently. While interviews covered gaps in the questionnaires, observations covered the gaps in both interviews and questionnaires.

3. Findings

This section presents the outcome of the research. The plot of the section draws from the main headings and subheadings used in the questionnaire, viz: personal usage of ICTs by journalists; general usage of ICTs; ICT usage in the newsroom; newsroom policy on ICTs and journalists' assessments of the use of ICTs in African newsrooms.

From the journalists' responses to the questionnaires, it was apparent that they all generally came into contact with ICTs between 1994 and 2000. However, 53% percent of them only started making serious use of ICTs between one and three years after they came into contact with them. The move towards computerisation by the Zimpapers from around 1997 saw a marked rise in the use of ICTs, in particular computers, Internet and the email. Journalists who joined Zimpapers at the time had to learn to use ICTs, or started applying the knowledge they had acquired from elsewhere at their workstations. The table below reflects the increasing usage of ICT resources over the years from 1994. It indicates that adoption and use of the technologies (computers, Internet and email) began gradually and became more frequent following the classic s-shaped diffusion curve. The curves indicate, as Rogers observes, that 'adoption is a process and not a case of immediate transition' (Garrison 2000). As indicated below, the cellphone was adopted much later (1997) than the computer, Internet and email. Cellphones were considered by most people to be expensive. At the time of this research, some journalists could not afford cellphones.



More than two thirds of the journalists interviewed said that they had never been inhibited by ICTs. ICTs have made their duties easier than before. One journalist at The Herald commented: 'ICTs have actually enhanced my efficiency as a journalist'. This sums up how the journalists generally perceive ICTs. It is interesting to note that some journalists pointed out that, though they were not necessarily inhibited by ICTs, the question of access to ICTs in the newsrooms was a major inhibiting factor. Almost one third of the journalists studied expressed sentiments that ICTs presented some problems for them. One journalist said that at inception ICTs were a major impediment in the newsroom because of the difficulties faced in mastering the keyboard. Since then, however, said the journalist: 'I have used computers, cellphones, and websites for too long and have mastered the art.' Some, however, pointed out that the slowness of old computers in their newsrooms was a major obstacle that persists to date. The Internet was also referred to as an inhibition when it is 'down' as 'it affects research and communication'. One journalist noted that the 'occasional use of ICT jargon was a bit unnerving' and this problem has persisted with the 'constant upgrading of software'. It was however, apparent that though

close to one third of the journalists cited some problems in their use and interaction with ICTs, there was a general acknowledgement of the importance of ICTs as tools for the execution of their duties. This is confirmed by the more than two thirds of the total sample who hardly raised any problems with the use and interaction with ICTs in their day-to-day newsroom duties.

It was noted that two-thirds of the journalists access ICTs at work and almost four in ten access them elsewhere besides at work. While some journalists accessed the Internet and email at home, some pointed out that they visited Internet cafés particularly when their work place systems are down. Notable is the age dichotomy between the journalists who access ICTs at work and those who access them both at work and elsewhere. Those who access ICTs at work only range between 26 and 38 years of age across all the newsrooms studied and those who access them at alternative places other than at work range between 22 and 26 years of age. This distinction implies that younger journalists are more inclined towards using ICTs owing to their belief that they are good and increase effective practice and productivity.

In terms of training on how to use ICTs, 31% of the journalists have received formal training, 31% had informal on-the-job training and 38% had neither formal nor informal training. Less than a third of the journalists attached value to training (both formal and informal). They viewed it as constituting a foundation for on-the-job learning. As one journalist pointed out, training 'provided basic skills needed for the job', in terms of usage of ICTs. Almost a third of the studied sample attested that on-the-job training was more valuable — 'it's easier to learn as you go,' suggested one journalist. A total of 30% of the journalists could not indicate clearly whether training (formal or informal) was important as compared with on-the-job experience.

All the journalists stated that they used the email for either personal or business

communication. Only a third cited with any particularity the nature of the communication they use the email for, viz: link with relatives in the diaspora; interviews with sources; communicating with sources; and filing stories. In terms of the World Wide Web usage, research was a common function with all the journalists. While most of the journalists did not specify the nature of their research on the Web, a fifth revealed that they are informed of international events through the Web, and only a fraction said that they sometimes received news ideas from the Internet. Eight percent used the Internet for discussions on chat sites and interview. The journalists hardly make use of electronic mailing lists; only a few of the total group use electronic mailing lists for international links and searching for scholarships and workshops.

Four fifths of the journalists cited the communicative value of cellphones, but only one fifth of the journalists cited usage that is peculiarly within the technical nature of cellphones: 'for communicating when outside office,' for 'strong precise detail search/clarification' and for 'storing contact details and making calculations'. Hardly any of the journalists made reference to any other tools except those indicated on the questionnaire. Only eight percent made mention of tape recorders and faxes, although without giving detail on how exactly they use them in their newsrooms. It must also be mentioned that the observational study made at The Herald hardly revealed the use of tape recorders and faxes in the newsrooms—this perhaps is indicative of the infrequent use of these tools by the journalists.

Approximately one third of the journalists made mention of journalistic electronic mailing lists hosted by the Media Institute of Southern Africa (MISA), Zimbabwe Union of Journalists (ZUJ) and ZIMMEDIA. Others indicated that they used various electronic resources and mailing lists, viz: Yahoo, Hotmail, Global link, MISA, Geocities, News 24, Editor's Forum and Mail.com.

As indicated in Table 1 below, which captures the journalists' responses to questions pertaining the value attached to electronic networks/ mailing lists, the journalists attach value to the networks and mailing lists in terms of being exposed to new information.

The table below, however, clearly shows the low response rate to the questions about the value accrued from the electronic networks/ mailing lists with regard to: peer support, ways of sourcing, building networks and any other ways.

In terms of the search engines used often by the journalists, four categories were realised: those who use Google only (54%); those who use both Google and Yahoo (23%); those who use Yahoo only (8%) and those who hardly use any search engines (15%). Among the journalists who often use Google, some cited no limitations in the search engine. Others, however, noted that the search engine has limitations on African sports. Those who often use both Google and Yahoo cited the problem of speed in the downloading of images and lack of depth on African issues. Journalists who use Yahoo only cited no limitation in the search engine.

The responses to the question on how the journalists deal with overloads of returns in the response to queries online are telling: some responses clearly demonstrated failure to understand the question or that journalists did not have a clue on what to do when faced with overloads of responses. Some of these journalists pointed out that there were 'no information overloads' in Yahoo or Google; some stated that they 'ignored the overloads'. However a third of the journalists pointed out that when faced with such a problem, they repeat the search excluding unwanted returns, minimise search subjects or sort the search according to relevance or date.

It would appear that the use of ICTs has made a big difference in the day-to-day functions of the journalists. Almost all of them attested that ICTs, particularly the Internet, have helped them in a number of practical ways. While some could

Electronic Networks/ Mailing lists	NEW INFORMATION	PEER SUPPORT	WAYS OF SOURCING	BUILDING NETWORKS	ANY OTHER
YAHOO/ HOTMAIL	Updates on new things	-	-	-	-
GLOBAL -LINK	Gives updates	Sends invitation to partake in certain programmes e.g. HIV/AIDS	-	Through contributing on-line	-
MISA	Developments in the SADC region	Training—often runs workshops for training	-	-	-
GEOCITIES	Cite gets constant updates	Often interactive	-	-	Given back-up information in serious research
NEWS 24	Provides news alerts	-	-	Providing new contacts	-
EDITOR'S FORUM	Updates on latest issues in editing	Sharing ideas with editors	-	-	-
MAIL.COM	Updated on a number of issues from time to time	-	-	-	-

not give specific examples on the differences that have ensued from their use of ICTs, it was apparent that they treasured the introduction of ICTs to their work. The journalists made varied statements to this end, viz: 'ICTs have had a positive effect on access to information especially from the World Wide Web,; 'helps me find clarifications on subjects I am not sure about,; 'helps me in a big way especially when doing research and story ideas'. Some of the journalists revealed that they got scholarships through the Internet. Those who are studying stated that the Internet had made their studies a lot easier. These statements on the benefits accrued from the use of ICTs (Internet) testify to the fact that ICTs have made a difference in the lives of the journalists.

However a fraction of the journalists pointed out that ICTs have not made a major difference to them in terms of availing practical and relevant

information. This is divergent to the wider perception that ICTs have made a positive impact on the professional lives of the journalists. A cautionary statement was issued by one of the journalists that the positive aspects of ICTs can actually breed an 'over dependence' on them, which in itself is negative and detrimental to the quality of journalism.

Almost all the journalists were quick to quash the ethical question of plagiarism—'lifting' news from sites on the Internet without acknowledging the source. One journalist stated thus, 'ethically we give credit to all sources, for example AFP'. In the same defensive language, another journalist noted: 'We always give credit to material from the Internet, plagiarism at The Sunday Mail leads to instant dismissal.'

However, one journalist revealed that the lifting of news items from the Internet without acknowledgment was a common trend at her

newspaper. In an interview, she said: 'I have done it many times when faced with tight deadlines. Everyone does it, even the editor.' This revelation complements the cautionary statement by one of the journalists, referred to above, on the potential negative impact of the Internet.

More than half of the journalists acknowledged having found African alternatives to US and European online information. Specific sites were cited as alternatives, viz: All Zimbabwe.Com; Mweb; SNN1 and Inkundla.Com. The rest of the journalists indicated, implicitly (by not responding to the question on the questionnaire) and explicitly that they have not found African alternatives to Western online information.

All the journalists acknowledge having shared helpful discoveries with colleagues. This is particularly telling in terms of their role in the newsrooms in the context of the usage of ICTs. More so, in the light of the fact that, among this sample, all the journalists interviewed perceived themselves as 'early adopters'. Most journalists also acknowledged receipt of helpful tips from colleagues with regard to using new technologies. One journalist pointed out that this has happened 'on numerous occasions'. Two respondents pointed out that tips on the use of ICTs from colleagues have been about 'links and search methods' on the Internet.

In general, journalists from the four newsrooms acknowledged having access to the following ICT facilities: personal computers (PCs) with Internet connections, email, local area networks (LAN), cellphones, and digital satellite television (DSTV). In all the newsrooms, however, cellphones are provided only to senior staff. Only eight percent of the journalists singled out DSTV as an ICT facility. It emerged that slightly more than half of the journalists could identify their Internet Service Providers (ISPs) as follows—Zimbabwe Online (Sunday News, Chronicle) and Africa Online (The Sunday Mail, The Herald). A telling divergence of opinions emerged from the journalists in terms of the

reliability of their ISPs—some two thirds were of the view that the service providers are not very reliable, the remainder testified that the service providers were reliable although there were occasional disconnections due to lack of funds.

Across all the four newsrooms, it would appear that there was ignorance in terms of who has had access to training on ICTs. Thus, one-third of the journalists interviewed hardly knew who has had access to training—this is revealing in terms of the organisations' attitude to training. Only a small minority of the journalists, all from The Herald, attested that 'all journalists' have had access to training. Some, however, pointed out that only the senior editorial staff have had access to training.

In terms of the actual use of the ICTs in the newsrooms, it was generally accepted that ICTs play a pivotal role in the interaction of journalists in the newsrooms. Of particular note was the exchange of information through the email, cellphones and the Zimpapers Local Area Networks. It appeared also that the journalists acknowledged the function of ICTs in their interaction with readers/audiences. For them ICTs provided a conduit for 'news tips' from the readership. It emerged that the on-line web pages of the four newspapers enabled the audience to provide feedback to some articles. The audience also responded by email. In interacting with government sources, it was disclosed that ICTs are used for 'news tips', 'press releases' and the availing of specific and specified information. It is interesting to note that while the cellphone and email were deemed key in the newsrooms for the interaction with government sources, 'traditional' ICTs, faxes and terrestrial phones were also highlighted as key. This perhaps is indicative of the government's common usage of 'traditional' ICTs and 'reluctance' in adopting 'new' ICTs.

In interacting with other newsrooms, the common usages of ICTs included: exchange of images, exchange of stories, news tips and search for specific information. As in the

interaction with government sources above, the cellphone and email complement the traditional ICTs, the terrestrial phones and fax machines in the newsrooms. In interacting with international organisations and networks, it emerged that ICTs are used for receiving press releases, news and invitations to conferences, seminars and training workshops.

It was noted that while the new communication technologies appeared to be 'threatening' the traditional ICTs in basic communication in the newsrooms, in the majority of cases they played a complementary role. In the words of one of the journalists, the electronic mail 'is used as contingency to surface mail, instead of faxing pictures, scanning and emailing have become common'. Email was thus seen by the bulk of the journalists as convenient as compared to the traditional technologies (faxes and terrestrial phones). In basic communication, the traditional communication technologies were thus cited as still playing a key role in newsrooms.

ICTs were generally perceived as playing a key role in research, which is a fundamental aspect of journalism. The Internet was singled out as key in research. One of the journalists noted: 'You just log on to a site and you get your data.' It was also noted that the Internet enabled the journalists to 'browse through relevant topics to see what has been written before—getting background information'. Others pointed out that the Internet was replacing libraries, and was being used to consolidate hard copy information. The email was also cited as key in carrying out interviews. The scheduling of appointments for interviews through SMS messages via the Internet or cellphones was also raised as one of the important functions of ICTs in newsroom research.

The journalists generally acknowledged the positive impact of ICTs in the newsrooms as two-thirds of them revealed that ICTs have improved communications in the newsrooms. Some indicated that ICTs were fast and efficient

in relaying information, hence the improvement in internal communication. Others indicated that ICTs have made it easy for them to meet deadlines and communicate between branches. That ICTs were replacing hard copy documents was also raised as an important aspect as they had helped improve newsroom communication. One quarter of the journalists were indifferent to the impact of ICTs in newsroom communications. They simply did not respond to the question on the questionnaire. The journalists generally acknowledged that with the use of 'new' ICTs they have delivered work more easily than with 'traditional' technologies. The reasons given across the four newsrooms were different but expressive of the fact that the ICTs have enhanced the work of the journalists more than was the case with the use of 'traditional technologies'. Some pointed out that 'soft copies of stories are easy to deal with' as compared to hard copies hence increased efficiency and ability to meet deadlines. The ability to promptly dispatch stories via email or LANs was also pointed out. In some instances however, journalists noted that ICTs have hampered communication in the newsrooms. One enlightening view was that 'people fail to address each other directly preferring emailing and phoning,' It was also highlighted that 'if the system collapses, information [communication] is restrained due to over dependence on ICTs'. Some journalists pointed out that ICTs may not necessarily impact on communication per se in the newsroom but on 'productivity as some journalists spend time on chat'.

Gender dynamics in the newsrooms hardly reflect on the journalists' responses to the question of empowerment by ICTs. Some journalists pointed out that they have been empowered by the efficiency of ICTs in research, as they have had 'access to vast and diverse information'. For some, empowerment has come through being connected to a lot of useful contacts as a result of the 'liberty to cross

borders' made possible by ICTs. Empowerment was thus cited in the 'flexibility', greater diversity of functions and access to information embodied in ICTs which, as pointed out by one journalist, is like 'having the world at ones' finger tips'. A quarter, however, pointed out that they have felt disempowered by ICTs in their newsrooms. Three key reasons were presented, viz: failure to master some programmes on PCs; access to greater percentages of Western information with little, if any relevance to Zimbabwe; and over-dependence on ICTs which nurtures a detrimental dependency syndrome—particularly in the event of failure by ICTs.

Two-thirds of the journalists felt that using technology provides a means of improving their status. Diverse reasons were proffered, but a common thread cutting across all the explanations given was that ICTs open doors to knowledge, through access to diverse information, hence the improvement of one's status in the newsroom. In the words of one of the journalists, 'ICTs can assist in education and getting valuable information which in turn will have an impact on one's status in society'. One of the journalists also posited that 'in an age when ICTs have become the most efficient and quickest means of getting information communication etc., using them is a plus'.

However, a fraction of the journalists felt that using technology did not provide a means for improving one's status. One of the journalists pointed out that ICTs 'just make life/tasks easier' and hardly impacted on status. Nearly a quarter of the journalists were indifferent to the question.

It emerged that the regulatory frameworks on ICT use in the four newsrooms were informal, as no written formal policy framework exists to guide the use of ICTs in the newsrooms. That one-third of the journalists interrogated also professed ignorance to participating in any debate regarding the use of telecommunications and ICTs within the newsroom is telling in regard to the organisations' positions on ICT use.

The age range of these journalists (23–38) reinforced the fact that ICT policy in the newsrooms was without formality and priority as among the one-third, the older and experienced journalists expressed the same sentiments as the younger and less experienced journalists. Two-thirds of the journalists who admitted having taken part in informal policy discussions on the use of ICTs in their newsrooms commonly admitted that the use of ICTs in the newsrooms was not without problems. In this vein, the abuse and problems of ICTs featured prominently in discussions held in the newsrooms. These bordered around the over-reliance on ICTs leading to laziness and armchair journalism and the use of ICTs for personal issues during working hours. Thus some journalists argued that ICTs were counter-productive. The question of equal access to ICTs also featured in the discussions of one of the newsrooms. In the words of one of the journalists, it was discussed 'that it is important for everyone in the newsroom, regardless of position, to have equal access to ICTs'.

In line with the question of access, the necessity of availing and upgrading ICT facilities was discussed in one of the newsrooms. In yet another newsroom, it was pointed out that debate centred on 'cellphones and their irksome noises' in the newsrooms. While there was a general agreement among the journalists that ICTs ought to be used more aggressively and that they ought to be availed equitably in the newsrooms, some journalists expressed the concern that 'some people [journalists] exploit ICTs and end up using them for wrong purposes such as visiting pornographic sites during working hours'.

Some journalists argued against the idea of 'lifting stories' on the grounds that it is just the same as plagiarism. The abuse of ICTs has led to investigations being instituted in one of the newsrooms in regard to selected journalists. This resulted in informal prohibitions on the use of

ICTs. One journalist recalled that there was once a notice in her newsroom stating that 'Internet is only used for research during working hours and leisure after hours'.

There was a general consensus among the journalists that ICTs have the capacity to improve news in Africa. Only two of the journalists said that ICTs have no capacity to improve news in Africa as 'much depends on professionalism and access to appropriate technologies'. Various reasons were proffered for the positive contributions of ICTs to news in Africa. Top on the list was the view that ICTs would enable journalists in Africa to 'tell the African story on sites to which they can contribute'. One journalist pointed out that 'instead of depending on what the West feeds us on, we can have our own'. There is therefore a belief in the development of an African Information Society through effective and informed use of ICTs. Some journalists posited that ICTs 'give a broader outlook and different perspectives' to African journalists and therefore lead to an improvement in news gathering.

The journalists cited a number of reasons as constraints to the potential of ICTs improving news in Africa. The general lack of investment in ICTs due to their costly nature was cited as one of the key constraints to African journalists realising the full potential of ICTs in their newsrooms. The lack of investment in ICTs in turn led to limited ISPs in Africa which is a major constraint as it leads to limited accessibility, hence most people still have no access to ICT gadgets.

The full realisation of the positive impact of ICTs in the newsrooms was also attributed to lack of adequate training. As one journalist pointed out, 'there was hardly any training on ICTs at the journalism school, particularly on computers and the Internet'.

Some journalists cited the 'lack of access to other sites' as a major hindrance to the full exploitation of ICTs in newsrooms. There was

also reference to 'the constant breakdown of Internet services in the newsrooms'. Among the journalists who could not identify any prospects of positive improvements in news culminating from the adoption and use of ICTs in the newsrooms, 'plagiarism and the adoption of Eurocentric news and values' was cited as a key impediment.

Just under half of the journalists could not tell personal success stories regarding the use of ICTs, but the rest made testimonies regarding their achievements. One journalist pointed out that because of ICTs he has 'managed to create a 'virtual newsroom''. The journalist explained: 'When I get a story idea at home I research, write up and use the cellphone for interviews—the newsroom has become portable.' The journalist is therefore no longer necessarily limited to the physical environment of the newsroom as he can write stories from anywhere where he can access ICTs.

Some journalists pointed out that because of ICTs, they have 'been able to keep in touch with sources and get news tips'. For some, story ideas have emerged from the Internet. The swiftness and efficiency of ICTs have enabled some journalists to relay news items to the newsroom as they happen. Two journalists told personal success stories of scholarships they got through the use of ICTs, the Internet in particular. However, almost one third of the journalists cited major setbacks in the use of ICTs; some noted the failure to own personal computers as a major setback. The absence of local languages on the Internet was cited as one of the major obstacles by some of the journalists. Some journalists pointed out that the lack of privacy in the ICTs was a major impediment to their free and exhaustive use.

One journalist said: 'ICTs have led to the death of privacy in the newsroom, it is now unsafe to use Zimpapers machines or local area networks because they are being monitored.'¹³ For this journalist, 'lack of confidentiality in ICTs' is an important aspect that should have been given

attention in this research. He further notes: 'ICTs have exposed journalists to greater surveillance threatening the flow of information.'

4. Conclusion

This section discusses the findings of the research as outlined above and makes recommendations for future research. It is observable that the adoption and use of ICTs in the Zimpapers newsrooms (The Herald, The Sunday Mail, Chronicle and Sunday News) has been a challenge. One assistant editor pointed out that 'as a big organisation — Zimpapers was not the first to adopt ICTs. Smaller publications were the first because they had the capital to invest'.¹⁵

The demographic structure of the newsrooms as reflected by the journalists studied is telling and generally characteristic of many African newsrooms. That female journalists constituted only a third of the total number studied is indicative of overt gender imbalances, which have implications in terms of access to ICTs in the newsrooms. According to one reporter, at one of the daily newspapers studied, all women have computers allocated to them in the newsrooms, while most male journalists share. This was also confirmed in the observational study done at The Herald. It emerged that the set-up, in terms of computer allocation in the newsroom, was an attempt to retain female journalists. In terms of the actual use of the computers in the newsrooms, there was however, no noticeable difference between male and female journalists.

It is also interesting to note that the group of journalists studied generally perceived themselves as 'early adopters', when compared to their colleagues. One journalist pointed out that she has often assisted journalists with ICT-related problems in her newsroom, particularly, research on the Web. The five journalists interviewed also generally pointed out that they have, at various moments, willingly shared discoveries with friends

in the newsroom. It is no wonder then that these journalists, particularly those between the ages of 22 and 26 would go out of their way to access the Internet/email elsewhere whenever their work place connections are down. It should, however, be pointed out that the criteria used to identify the 'early adopters' in the newsrooms were not without weaknesses as no specific methodology was devised to guard against the senior editorial staff's incorrect perceptions.

As it emerged in the research, Internet and email were the first ICTs to be adopted by the journalists in the newsrooms and cellphones only featured much later 'because of the costs involved', as one journalist pointed out. As indicated above, the adoption and use of the ICTs in general was a gradual process. Noticeably therefore, is the fact that few journalists used ICTs before 1997. This is explained in part by the fact that: 'Some individuals are more venturesome and adopt early. Others have higher thresholds or resistance to innovation, and are more likely to adopt later' (Garrison 2000). This research corroborates a remark made by Garrison (2000): 'Growth in use takes place as users become more comfortable, learn new applications and ultimately, trust the technology to enhance their work and not damage it.' This was confirmed by one journalist who pointed out that she had used ICTs for a long time [1994 to date], thus making it easy for her to contend with minor problems.

It is significant to note, however, that in terms of actual use of ICTs as indicated above, the year 1997 marked a critical rise in terms of the use of ICTs in the Zimpapers newsrooms. One of the key reasons was that this was the time when Zimpapers made a decision to embark on a multi-million dollar computerisation project. In contrast to Tim Berners-Lee's statement that 'the World Wide Web began to be embraced by the general public in winter 1993 — 1994' (Garrison 2000), Zimbabwean journalists at Zimpapers, adopted the Internet much later than their Western

counterparts. This typifies the scenario in many African newsrooms. The costs involved in the acquisition and adoption of ICT gadgets were, and in many cases still are, a deterrent.

It is reasonable to agree with Rogers who has noted: 'The decision to adopt or not to adopt an innovation is not an instantaneous act, but one that involves a process. The decision is also an active information seeking and information—processing behaviour' (cited in Garrison 2000).

That more than two-thirds of the journalists studied indicated that they had faced little or no inhibition at all in their use of ICTs is telling. It is indicative of a general internalisation and acknowledgement of the importance of ICTs in journalistic practices such as 'the shaping of news - gathering and reporting and some would say ... even the very nature of journalism itself' (Garcia Aviles & Leon 2002). One can thus argue that the 'early adopters' in the newsrooms studied are generally comfortable with the use of ICTs. It is however, noteworthy that, although approximately one third of journalists explicitly pointed out that they have had problems with ICTs. And amongst these were problems related to:

- access to ICTs in the newsrooms.
- slowness of the Internet.
- difficulties in understanding ICT 'jargon.'
- inadequate training in the use of ICTs.

The question of access to computers and the Internet is a major inhibitive factor. As one reporter at The Herald indicated, 'two journalists have to share one computer in the newsroom in the majority of cases'. For this reason he had to make use of his own laptop in the newsroom. At the daily newspaper, Chronicle, it emerged that not everyone had access to the Internet in the newsroom. Only senior reporters and editors have the privilege to access the Internet from their personal computers. This scenario is confirmed by Mudhai and Nyabuga (2001) who

studied the Kenyan situation and noted that, 'in most media houses, Internet use is restricted to a few top editors, and access to the rest is not easy'. Dutton (1996), cited by these authors, argued that this is not surprising, as 'the new media tend to be implemented in ways that follows and reinforce prevailing structures of power and influence within organisations'. The prohibitive costs of connecting to the Internet are also key amongst the reasons for restrictions placed on the use of the Internet in newsrooms, according to Mahler and Rogers cited in Garrison (2000).

Apart from the costs, lack of basic knowledge and skills also hinders access and use of ICTs by journalists. That a third of the journalists have not been trained formally or informally in the use of ICTs reveals the newspapers' attitude to the importance of ICTs in their newsrooms. According to Maier (1999) cited in Garrison, the diffusion of ICTs 'within the newsroom hinges on in-house training and other internal support mechanisms designed to develop a critical mass of computer users'. In this light, the newsrooms have a challenge to develop a rigorous training process which would lead to the creation of a receptive environment for the expanding of ICTs use. Equal access to training opportunities should thus be promoted across all positions in the newsrooms.

In spite of the inhibiting factors to the use of ICTs intimated above, it is apparent that the use of ICTs by the journalists is rising steadily, as indicated in the table presented earlier. A closer look at the extent to which the ICTs are being put to use for self-development, quality journalism and professionalism in the newsrooms reveals a gross underutilisation particularly of the Internet and email. The second table above gives a clear picture of the observation made here, in terms of the value attached to electronic networks with regards to: peer support; ways of sourcing; building networks; and any other ways. The revelation by one of the journalists

that he often teaches 'colleagues to search for news items on Google' points to the fact that the use of the Internet in journalistic routines is still developing in the newsrooms. In this light, Kupe rightly observes that 'there is lack of in depth knowledge among [African] journalists and editors about information technologies' (2003:18). Makali, commenting on the use of ICTs by journalists in Kenya, makes a related observation that, 'Internet use by ...journalists is especially poor. Many journalists do not even have email addresses and those with addresses limit their Internet use to emailing only' (Mudhai & Nyabuga 2001). According to the International Federation of Journalists (2003), 'in Togo, most of the journalists do not know how to use the new technologies of information ... and this limits their capacities to check their sources'.

While the Zimbabwean case may be much better than Kenya and Togo, one may still conclude that the underutilisation of communication technologies by the journalists interviewed in this study is reflective of the organisational and individual difficulties which range from difficulties in accessing Internet host computers to frustrations of logging-on.

In general, there was acknowledgement of the positive impact of ICTs in the newsrooms by the journalists - that they have revolutionised the day-to-day work of the journalists. One journalist pointed out that it would be difficult to function without a cellphone as, 'you feel you are missing a part of yourself'. It is interesting to note, however, that such sentiments chiefly stemmed from senior editorial staff with 'unlimited' access to ICT facilities in the newsrooms.

It is significant to observe that some journalists testified that ICTs have not made any practical difference in their day-to-day work. This appears to be evidence of some resistance to adoption of innovative technologies. Notable however, is the fact that such resistance is premised on the perceived ethical questions

linked to the use of ICTs, such as over-dependence on them, which as one of the journalists noted, leads to 'arm-chair journalism'. As Cottle (1999) observes, this kind of fear may also point 'at the normative professional concerns about the impact of new technology which have largely focused on the belief that analytical depth is being traded for immediacy'.

One of the journalists cited in this research claimed that plagiarism has become common with the adoption of ICTs. While the majority of the journalists expressly condemned the 'lifting of material' from sites without acknowledgement, from the response given by one of the journalists above, it can be inferred that plagiarism from Internet sites is prevalent. There is therefore a serious need for the Zimpapers newspapers to guard against the abuse of what Kupe (2003:10) refers to as 'the interactivity of ICTs [that allows] for the manipulation and reproduction of information'.

One key point raised by some journalists is the absence of information online that critically and exhaustively deals with African issues from an African perspective. Although just over half of the journalists studied acknowledged having found alternatives to American and European online information, which is indicative of an attempt to reverse the 'historical' flow of information, the rest still have difficulties in identifying African alternatives to Internet online information. It is against this background that Lyndall Shope-Mafole, the chairperson for the South African Presidential National Commission on Information Society and Development, has posited that 'African journalists have to ensure that no aspect of information society should lack an African element' (2003:5).

While the journalists generally pointed out that they have some access to ICTs in their newsrooms, viz: PCs, Internet, email, local area networks (LANs) and DSTVs as indicated above, it emerged as already discussed in this section that easy access to Internet and cellphones is a

privilege of a few senior reporters and editorial staff. As observed in the newsrooms, most junior reporters share computers, which are not necessarily connected to the Internet.

The two ISPs, Zimbabwe Online and Africa Online cited as rendering services to the four newsrooms, were generally perceived as unreliable by the journalists.

It is interesting to note that the journalists cited problems not directly related to the ISPs, in the majority of cases, viz: server problems, congestion and occasional disconnections due to lack of funds. According to Garrison, often non-adoption decisions are made because of a low rate of diffusion caused by, among other reasons, lack of resources to invest in new technology and 'fear of lost time required to learn', which in one way or the other are linked to the problems ascribed to ISPs cited above.

In terms of training, it is apparent that the newsrooms do not have a structured commitment to training on the use of ICTs. As it emerged in one of the interviews, training is mainly accessible only to senior staff. There is therefore a need for the newsrooms to adopt serious and vigorous in-house and external training programmes in order to facilitate maximum and efficient use of ICTs across all positions in the newsroom.

While there was general acknowledgement of the importance of ICTs in communication within and without the newsrooms as indicated above, concerns raised by some of the journalists on the inhibiting nature of ICTs in newsroom communication are of interest. One view was that the journalists fail to address each other directly preferring to email or phone each other. This scenario thus downplays face-to-face communication, which is at times easier and more efficient than technology.

According to one photo editor, cited in Seelig (2002), 'it is just as easy to talk to someone sitting right across from you, than it is to send an email. It is counter-productive to send an

email if the person is available and willing to communicate face-to-face'. As one journalist in this study pointed out, if the system collapses communication in the newsrooms is inhibited due to over-dependence on it.

The absence of formal policies on ICTs in the newsrooms is detrimental to the diffusion and adoption of ICTs in the newsroom functions. In fact, one can safely argue that it depicts reluctance by management to lead towards adoption and full utilisation of ICTs.

Given that the informal policies existent in the newsrooms are patchy, it is necessary for the newsrooms to adopt incisive, formal policies on the use of ICTs as has been done by other news organisations. One example is the Associated Press (AP) which decided in 1995 that 'every AP reporter, editor, photographer and artist, to do the job, needed a PC with full access to the Internet [email, Web, newsgroups, FTP, etc]'. To realise this, clear rules on appropriate use of the new technologies, were laid down formally. This constituted the bedrock against which rules in training were formulated.

The role and function of interactive communication technologies in African newsrooms is undeniably fundamental not only in terms of journalistic functions but also in terms of influencing the direction taken by African journalists in the Global Information Society. The journalists interviewed in this study generally acknowledged the importance of ICTs in their newsroom functions. There is, however, a serious need to address the factors that inhibit the full realisation of the importance of ICTs in the day-to-day functions of journalists such as, inter alia, lack of enthusiasm in investing in ICTs by news organisations; the limited numbers of ISPs; constant breakdown of services; and the poor training of journalists in the use of the ICTs.

African journalists remain vulnerable to other problems apart from the poor state of the communications infrastructure. In particular,

repressive laws which target journalists with impunity make their work even more difficult.

This research has sought to look into how 'early adopters' in the selected Zimpapers newspapers use ICTs in their newsroom routines. The interpretations presented here are only the beginning of an important area of study in Zimbabwe and in Africa as a whole, one that is worth pursuing. A larger sampling investigation will help to find out if these findings hold true in other newsrooms. Further research could focus on the following related areas some of which were suggested by the journalists involved in this study:

- The accessibility of ICTs to African journalists.
- The use of ICTs by journalists working in urban areas compared with those working in rural areas with a view to bridge the divide.
- The role of ICTs in investigative reporting in African newsrooms.
- How ICTs could strengthen, or help evade, surveillance of confidential information, blocking intrusion, etc.

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Appendix A

Questionnaire: Early Adopters' Use of Information and Communication Technologies (ICTs) in the Newsroom

Please fill in the list of questions below in as much detail as possible.

Where you need more space for your answers, please use the space provided at the end. We are mostly interested in how you use ICTs at work or for work purposes.

The answers you provide us with is what is of importance to us. Your personal identity will not be revealed, and is not necessary for the completion of the questionnaire or the research as a whole. We would therefore appreciate it if you could be as detailed and as honest as possible in answering the questions.

Thank you very much for the time you are taking to fill in this questionnaire. We hope that with your answers we will be able to provide relevant technical training and skills development for media workers in Africa.

Information and Communication Technologies (ICTs) refer to digital means of storing and transmitting information. We are specifically interested in cell phones, web sites, email, internet, but if you are making use of other forms of ICTs, please mention these.

1. Particulars

- a. Newspaper:
- b. Your age:
- c. Your sex: (Male/Female)

2. Personal usage of ICTs

- A. a. When did you first come into contact with ICTs? (year, circumstances)
- b. When did you first start using ICTs? (year, age, circumstances)
- c. Did you ever feel inhibited by ICTs? If yes, describe how.
- d. Do you feel inhibited by ICTs? Why? How?
- e. Where do you use ICTs?
- f. Did you receive training to use ICTs? Please specify.

g. If you answered yes to f above, how valuable was this training compared to on the job experience, trial and error?

B. What do you use the following for?

- a. Email
- b. Internet
- c. Electronic mailing lists
- d. Cell phones
- e. Other information and communication tools. Please specify.

C. Please list any journalistic electronic mailing lists that you are aware of.

To which electronic networks/ mailing lists do you subscribe as a member?

Have you found these to be valuable with regard to:

- a. New information. If yes, how?
- b. Peer support. If yes, how?
- c. Ways of sourcing. If yes, how?
- d. Building networks. If yes, how?
- e. Any other way in which these networks/ mailing lists have been helpful?

D. What search engines (e.g. Google, Altavista, Ananzi) do you use most often?

- a. What are its limitations?
- b. How do you deal with an overload of returns in response to search queries?

E. What difference has the use of ICTs made to you with regard to the following? Please give examples where possible:

- a. Practical information – e.g. job search, finding information on scholarships, story ideas, etc.
- b. Any other difference (positive/negative) you feel ICTs have made to your professional life?
- c. Has it enriched the quality of your work? How?
- d. Have you, on a tight deadline, 'lifted' news from sites? (without citing the reference and claiming the work as your own)
- e. Have you found African alternatives to US and European online information? If yes, where?
- f. Have you shared any helpful discoveries with colleagues? If yes, which?
- g. Have you received any helpful tips from colleagues with regard to using new technologies?

3. Newsroom

A.

- a. What ICT facilities does your newsroom have access to? (e.g. Local Area Network, personal computers

with internet connections, email, cellular phones) Please specify.

b. Who is your Internet Service Provider at work?

c. In your view, how reliable is this service?

d. What, if anything, hampers the reliability of service? (e.g. sharing an ISP with other organisations, unreliable telephone lines, unspecified ISP problems, electricity cuts, etc.)

e. What kinds of people in your newsroom have had access to ICT training? (formally or informally, e.g. women, journalists in specific beats, sub-editors, management, specific racial/ethnic/language groups, technical staff, etc.)

B. How are ICTs used in your newsroom to interact with: (Please also specify which ICT)

a. People in the newsroom

b. Your readers/audiences

c. Government sources

d. Other newsrooms

e. International organisations and networks

f. Media owners

g. Businesses

h. NGOs

i. Any other sources

C. How do you use ICTs in your newsroom with regard to the following: (please give concrete examples from your experiences where possible).

a. Basic communication (replacing or supporting telephone, fax, courier, mail)

b. Research

c. Information sharing

d. Repackaging information for different purposes (e.g. repackaging web text for making radio programmes)

e. Any other function

D. Please give concrete examples from experience where possible.

a. Have ICTs improved communications in the newsroom? Whether yes or no, please state how.

b. Have you delivered work more easily than with 'traditional technologies' (e.g. phone, fax, mail) because of ICTs?

c. Have ICTs hampered communications in the newsroom? Whether yes or no, please state how.

d. Have you felt empowered by using ICTs?

e. If yes, how?

- f. Have you felt disempowered by ICTs?
- g. If yes, how?
- h. Do you feel that using technology provides a means for improving your status?
- i. If yes, how?

4. Policy in the newsroom

- a. Have you or your newsroom been involved in any debates (formal or informal) regarding the use of telecommunications and ICTs within the newsroom? If yes, describe what was discussed or agreed.
- b. How were you involved in these discussions?

5. Assessment

- a. Do you believe that ICTs have the capacity for improving news coverage in Africa?
- b. What has been your experience of this?
- c. What do you see as the main constraints of using ICTs for news coverage in Africa?
- d. Have you had a personal success story regarding the use of ICTs?
- e. If yes, please describe.
- f. Have you had a disappointing experience using ICTs? Please provide details.
- g. Are there any issues not raised in this questionnaire that you would like to comment on?
- h. Are there areas for further research on journalists' usage of ICTs in Africa that you would like to suggest?

Thank you very much for taking the time to fill in this questionnaire.
Your answers and time are of great value to us.

