It is a great privilege to be here at this auspicious occasion. Thank you to the hosts of Digital Africa, the World Summits Organisation and particularly conference director Elaine Turner for the invitation to address this esteemed gathering.

My topic today is “Digital Opportunities” looking at how this brave new world of ICTs is affecting us here in Africa. The very phrasing of the topic speaks of an optimistic view of ICTs, that ICTs are opening up a new world for us, new chances. But one could argue that my topic could be more appropriately phrased, “Digital Threats”

I do believe there is much to be optimistic about regarding ICTs and I certainly want to get to that before I am finished. But I want to start this session by spending some time questioning our assumptions about the goodness of ICTs in the hope that that exercise will help us to approach the appropriation and utilisation of ICTs more wisely being aware of both their benefits and their potential threats.

According to professor Guy Berger head of the Journalism department at Rhodes University here in South Africa, there are three assumptions we make when speaking about ICTs:

1. that information is good
2. that information is powerful
3. and that ICTs are neutral

I'm going to adapt that statement and have us look at two assumptions this morning:

1. that information is good and empowering
2. that ICTs are neutral

Let’s question each one of these assumptions in turn:

**ASSUMPTION 1: INFORMATION IS GOOD AND EMPOWERING**

While this may be true and there have been a significant number of examples of this shared at this conference...

**INFORMATION CAN BE BAD AND DISEMPOWERING**

*Radio Television Libre des Mille Collines in Rwanda*

Ask moderate Hutu’s and Tutsi’s from Rwanda whether information can be bad. In 1994 a private radio station was seconded to the radical Hutu cause and millions paid the price.
Internet Pornography
Internet pornography is another example of bad information. How can we speak of Digital Opportunities when increased access to the internet means increased access to information which is abusive particularly to women and children. No one here needs to be reminded that the consumption of pornography may be the dominant use of the internet world wide.

War in Iraq
With embedded journalists and beheadings online both sides of the Iraqi conflict have shown their propensity for bad information.

Farming in Sub-Saharan Africa
When the colonialists arrived in Africa they brought with them Western European methods of farming. They discounted the indigenous knowledge and encouraged or enforced their methods with disastrous effect. A few years ago it was calculated that Zimbabwe alone lost enough topsoil every year that it would fill a goods train that would stretch one and a half times around the world. Only recently have methods such as zero tillage farming begun to reverse this.

Quality Information
So whether information is good depends on its quality and its ability to empower. Another way of putting it is that it is good if it is truthful, a difficult concept in the world of OJ Simpson and Bill Clinton where we seem to have lost the ability to recognise truth. This is why Nelson Mandela is such a giant on the international stage, he seems to have a connection to truth that is evading the common person.

You might say, okay, I understand information has to be quality information if it is to be good, but surely the sheer quantity of information available now through ICTs is good. Again that would be an argument with much to back it up, but

AND TOO MUCH INFORMATION CAN BE BAD TOO AND EQUALLY DISEMPowering
In the modern Western world the defining statement about who I am as a human being is French philosopher Descartes’ statement “I think, therefore, I am.” As a result over the past 300 years the West pursued the gathering of knowledge on an unprecedented scale. The assumption was that truth is found in gathering the facts. But as we have been discovering, the accumulation of facts is not necessarily truth. And how does one know when one truly has all the facts?

Quantum Physics
We have discovered the more we know the less we realise we know. The more you know the more you realise you don’t know in the world of probabilities.

HIV debate in South Africa
The HIV debate in South Africa is a case in point, where the accumulation of knowledge simply disempowered the decision makers. We knew too much so we doubted that we knew anything at all and many lost their lives.

Google dependence
The accumulation of information can also be disempowering because of the sheer volume. In order to access the right information we become what I call Google-dependent. Instead
of being empowered then, the power to access the right information is concentrated in the hands of fewer and fewer high tech organisations, and instead of power being given, power is taken away and concentrated in the hands of a few.

Experts and Analysts
The overabundance of information means that power also shifts away from the masses to the experts and analysts who can help us decipher what it all means

So more information does not mean more wisdom. We may discover we know more and more about less and less and meaning is lost in the proliferation of facts.

ASSUMPTION 2: INFORMATION AND COMMUNICATION TECHNOLOGIES ARE NEUTRAL

The assumption is that ICTs are neutral and, therefore, if the right development happens they can be equally beneficial to all but the truth is

ICTs CAN BE SECRET AGENTS OF FOREIGN POWERS (tongue in cheek)

Technology, like language, is the product of the culture in which it was forged and it carries with it the seeds of the propagation of that culture. Technology is not created in a vacuum, it exists to service a particular market and it is created from a particular perspective.

It is not surprising then that the majority of internet users in the world are members of the same overarching-culture that birthed it - namely white, western, English speaking males. This is not to say that the technology can’t be adapted for and by other groups, as it is, but it fits within the context in which it was invented.

Although we are very grateful for them ICTs are not neutral, they often require a socio-economic and cultural leap by the user to engage with them. Where in the West internet connectivity can be as high as 1 in 2 people, in other parts of the world we are a long way from that. This is because the socio-economic and cultural leap is so massive.

Rural Zulu speaking girl, Nongoma district, KwaZulu Natal province, South Africa
Take for instance a rural Zulu speaking girl in the Nongoma district of KwaZulu Natal province South Africa. That girl has to become literate, learn English, perhaps overcome sexist cultural expectations, get access to electricity, get a telephone account, and earn enough to afford a computer and modem, to say nothing about high speed access. The leap is just so big.

Whose development is this?
The question is, are we really serving her, her life, dreams and aspirations by trying to bridge this digital divide. Can she not survive without this, and more importantly will her life, her culture, her language and identity not be better off without getting connected? What is developed by being connected? What is development anyway. Is becoming a member of the global middle class, as all of us here are, really “development” when the lifestyle that this middle class lives is so grossly unsustainable that should the whole world’s population attain to that level of consumption we would need the resources of five planets to make it work. Is this development? Is a world which has enabled its three wealthiest citizens to own assets to the value of the total GDP of its poorest 47 nations really developed?
ICTs are not neutral and the sooner we grasp that the sooner we will stop trying to force square pegs into round holes.

IMPLICATIONS AND THE WAY FORWARD

So what does this all mean? What are the implications for Digital Opportunities in Africa?

The digital opportunities are not what we think they are. They don't lie in:

a. simply providing wholesale access to the products of the information society because information is not necessarily good and empowering
b. and they don't lie in simply accepting and adapting foreign technologies to local needs because technologies are not neutral

While we recognise there is no malicious intent from the originating cultures, we have got to realise we are not on an even playing field as far as becoming competitive in the ICT arena goes. For the content and products of the information society to really benefit us we are going to have to be far more discerning than that.

Following on from our discussion about assumptions, then, there are two primary implications with regard to Digital Opportunities:

IMPLICATION 1: ENCOURAGE INDIGENOUS INFORMATION AND KNOWLEDGE THAT IS GOOD AND EMPOWERING

Africa has tremendous riches to share with the world in terms of indigenous knowledge and information. If the promises of the information society are going to be realised we have to work toward representative information, what I call information democracy. Africa has to have a voice.

But in order for us to do this we need to:
1. nurture it and create space for it
2. be free to give it and not have it taken from us

NURTURING INDIGENOUS INFORMATION

I think one of the primary tasks of African governments and civil society is to nurture the creation, recording and digitisation of indigenous knowledge. This is an area where there really are digital opportunities because we uniquely have access to our own indigenous knowledge base. We can't just leave this to the markets because as we have already concluded, the markets do not necessarily want information that is good and empowering. The market for pornography is a case in point.

My background is in the media and so I'd like to share some examples of organisations in the media world that are nurturing indigenous, grassroots information:

South African History Online
South African History Online is a fascinating collective effort here in South Africa to nurture a people's history. Their web site contains over 25,000 pages of information which has been
compiled in collaboration with academics, schools, the media, students and the general public. As a member of the public you can submit articles on historical figures for inclusion in the web site.

*Development Through Radio (DTR)*
The media in Africa is dominated by either state run media or corporate media. Nurturing community based media is absolutely essential for information democracy within our countries and the continent. One exciting project is the Development Through Radio initiative in Sierra Leone where women suffering the results of war in the country form “radio listening clubs.” Members meet regularly and are given a chance to air their views. This is recorded and then edited down and broadcast on national radio.

*Africa Media Online*
I run an organisation called Africa Media Online and our mission is “Africans telling Africa’s story.” This is because it is often anyone but Africans telling Africa’s story in the international media. The story is told by the international press and broadcast agencies AP, AFP, Reuters, CNN and BBC and even if they employ Africans the editorial decisions are made in New York, Paris or London. I have a colleague who works as a photographer for one of these agencies and he is constantly frustrated by the pressure to tell the story editors in foreign countries want to see, even if it is not really there. He told of a time when he travelled around Malawi for three days desperately looking for starving people even though they were not there simply because one of the other networks had run a story on starving Malawians. The story did not exist but the editors in New York were insisting it did.

Not only are Africans not telling the story in the international media, but they are also not telling it in the African media. At the launch of the African Union I was speaking to the editor of a Malawian newspaper who said the biggest overhead they have as a newspaper is not salaries but a contractual agreement with an international wire service. Cash strapped African newspapers spend more money on foreign networks than they do on their own people, and of course that money leaves the local economy.

I was once sitting in a think tank of Southern African online editors and the question was asked, “what is your primary source for news on Africa?” Remember these are editors of major African media houses. 90% of respondents said the BBC.

Africans even hear news about themselves via the West. The neo-colonial information flows are still very much in place partly due to language barriers. Mozambique, Angola and Guinea Bissau have more connection to Portugal. Francophone Africa has more affinity to France than to neighbouring African countries where French is not the primary medium.

Africa’s largest news magazine L’Afrique is run from Paris, and the primary English language magazines are run from London.

This is also true of not only the media but also academic archives. The greatest collections of African artefacts are not here in Africa but form part of the archives of institutions of learning primarily in the West. Yet there are many African archives that are not yet digitised and still remain in our control. Rather than foreign institutions putting them online and controlling access to them, we as Africans should be doing that with our own innovations.

One such innovation is Africa Media Online’s professional online picture library management and sales system known as MEMAT 2.0 which has just recently been approved to power the picture archives of the National Library of South Africa. We developed this system so that African media professionals, agencies, organisations and archives could both make their archives available to the world, but do so on their own terms being fully in control of their
own archives. MEMAT 2.0 gives libraries a web site through which they can manage their whole media library, at the same time we market their pictures archives for them through africanpictures.net which ensures revenue for the archives.

These are just some examples of institutions that are taking seriously the challenge to develop good, empowering local content and to make that content available to the world and to markets.

**SECURING INDIGENOUS INFORMATION**

In the world of picture libraries large corporates have bought up national assets of nations which are then lost to those nations. And this is happening in many spheres. For us to allow this to continue is to throw away digital opportunities. I think another key task of governments and civil society in Africa, therefore, is to secure our indigenous knowledge so that it remains the heritage of our peoples.

*Rooibos*  
The WTO’s Trade-Related Aspects of Intellectual Property Rights are rules are not in our favour. Take the case of Rooibos, the South African tea which was registered in America as a trade name and so prevents South African Rooibos farmers from trading in America under the Rooibos name - a loss to the industry of R120 million. African governments should actively lobby against such rules and seek to secure national assets without so tying them up that the world can’t access them for legitimate purposes.

**IMPLICATION 2: ENCOURAGE INNOVATION OF OUR OWN APPROPRIATE ICTs AND TARGET THE ADAPTATION OF APPLICABLE ICTs**

**INNOVATION**

In terms of ICT policies in Africa much energy has been geared toward ensuring access to ICTs. This has been the great rallying cry, that ICTs must reach the masses, the theory being that our societies will bridge the digital divide and “catch up”.

The question is how will we ever compete with societies out of which these technologies emerged - technologies which fit them hand in glove and which often fit us like a glove on a foot? We won’t as long as we pursue the “catch up” tactic. I believe our only hope is to innovate ourselves, create technologies from our own perspective and become market leaders in our own appropriate technologies which we can then export elsewhere.

*The promise of Open Source*

In this open source software holds great hope. As translate.org's Dwayne Bailey says “Open Source is one of the West’s greatest gifts to the world. It is one of the few truly altruistic acts, one of the only gifts given without any strings attached. Open Source allows us to develop our own products without being dictated to and so to become market leaders what we innovate.

A case in point is Brazil. That country was one of the first to accept open source software into the banking sphere, creating products and services based on it. The banking world in
Europe is now looking to adopt open source. Guess who their primary consultants are? Brazilians of course!

Africa Media Online has adapted open source technologies of MySQL and PHP to create a product applicable to African Media and archive collections such as libraries and museums.

*Recognising our strengths*

It is not just on the basis of open source that we can innovate. I think to do this we need to recognise our strengths. Essential to this is knowing how we are different to other cultures. An example which comes to mind is that in Africa many of our cultures are traditionally oral. It is no surprise then that the ICTs that predominate are voice based - telephone and radio, whereas in the West, which is very much an image-based culture ICTs that stimulate the site predominate - pictures, text and television. We have to recognise and accept who we are and build on the basis of that strength if we are going to get ahead.

**ADAPTATION**

In the light of understanding ourselves more fully we are more equipped to assess what technologies available to us are appropriate for us to adapt.

*Translate.org.za*

Translate.org is an interesting project. It is an ongoing community project which aims to translate open source software packages into South Africa’s 11 languages. It has translated the web browsers Mozilla into several languages, and Firefox into Afrikaans and Xhosa paving the way, they trust for members of these communities to begin to engage with the internet and begin a movement of web sites in these languages. They have also translated Open Office into North Sotho, Afrikaans and Zulu. This is also an important move for innovation, because languages enable us to think differently and appropriate technology for Africa is more likely to emerge when thinking in African categories.

An interesting reaction that Dwayne Bailey and the team at Translate.org found was that they often came across people who did not want software translated. It was a status symbol to be doing everything in English. That is a sign of a overrun culture.

*Liberalisation*

I trust all that I have said does not lead you to think that I am suggesting we get rid of ICTs. I am not suggesting that at all, but rather that we approach them with a healthy scepticism and an openness alternatives.

ICTs are already upon us and useful to us yet they must serve us rather than we them. In closing I want to make a final comment about the the liberalisation of infrastructure, the theme of this conference.

In considering liberalising ICT infrastructure there are two extremes that should be avoided. The first is that we do not want control of ICTs to be concentrated in single institutions which lends itself to unsustainable and uncreative monopolies. We have seen this throughout Africa, not least in South Africa. State monopolies kill innovation and keep us from being competitive in the global market.
And secondly, while we are very grateful for the assistance of other nations, we do not our ICT infrastructure to be owned by offshore concerns and foreign investors who quite understandably approach the issue from the perspective of their culture and do not understand us. As much as possible ongoing payments for ICT use remain within our nations and certainly not flow out of Africa. Donor organisations and foreign companies should truly seek to serve Africa by both refraining from dictating solutions and by facilitating and designing solutions that ensure real ownership of infrastructure by the people of those nations.

CONCLUSION

So we have seen that information is not necessarily good or empowering, and ICTs are not neutral as is assumed. In response, as African governments, civil society and business we need to be encouraging the development of indigenous knowledge and information that is good and empowering, and we need to stop concentrating on following the rest of the world and "bridging the digital divide," rather we need to be focused on becoming leaders by innovating our own ICTs and adapting ICTs to our own cultural context appropriate for our people.

Ultimately, with God’s help, our solutions must be forged in Africa, by Africans for Africans