



**Third
Global
Forum**

Fostering democracy
and development
through @-government
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BEST EXAMPLES IN DEVELOPING COUNTRIES

Some ICT Success Stories

*Presented by
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ICT Success Stories

- 1. eThinkTank**
2. Mobitel in Tanga and Pemba

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These are the stories that will make up this presentation. Both of them are from Tanzania. We start with the eThinkTank, which began in Dar es Salaam but has now gained a global virtual presence and is catalysing ICT policy in Tanzania as well as elsewhere. This is a story about the strength of people-power.

eThinkTank

[<http://www.eThinkTankTz.org/eSecretariat/>](http://www.eThinkTankTz.org/eSecretariat/)

- Began as 6 members on 8th Feb. 2000, now over 100 members on an email discussion list
- Informal voluntary group of professionals from all sectors with an interest in ICT
- Initially held weekly meetings to discuss and share knowledge on local progress in ICT
- Articulated stance in an Information Document published on the Web on 22nd June 2000

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The eThink Tank began very informally, using borrowed conference rooms (facilitated by either KPMG Tanzania or YellowPages-Tanzania) to hold presentations on various ICT-related topics. Members were initially people who knew one another from all fields of the private, public and non-profit sectors. We began by holding weekly meetings on Thursday afternoons (from 4 to 5pm), to share knowledge on our diverse activities and interests. We felt there was need to be progressive and build a sense of direction and purpose for the group. Hence the weekly meetings were then used as workshops to articulate our position, which eventually came to be recorded in an Information Document published last June. It is available among the downloadable documents at the given website address.

eThinkTank

MISSION

Offer ICT leadership by catalysing policy changes and by supporting related developments aimed at enabling Tanzanians to participate effectively in the modern Internet-based global economy, benefiting their Nation and partners

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In the Information Document the mission is spelt out thus. It was deliberately made to be replicatable by other countries, if they should wish to do so, in the hope of thereby forging cross-boundary alliances in the spirit of those made while preparing for Y2K. The phase I goal of eThinkTank is also spelled out as being to establish a national ICT entity with mandate from the Government, which can become the ICT focal point for Tanzania. It should therefore incorporate broad representation of stakeholders and have a mandate that recognises the cross-cutting aspects of ICT, and the role that ICT can play in reinforcing other development activities. Once established, the national ICT entity could be given support by eThinkTank on an advisory basis. But eThinkTank members have chosen to remain as a free-form and voluntary group with a variety of activities, rather than to become yet another formal association that lacks sustainability and impact.

eThinkTank

WHY FOCUS ON POLICY?

- High taxation, making ICT infrastructure inaccessible
- Inadequate training opportunities for using technology
- Unattractive labour market due to lack of ICT skills
- “Hollowing-out” of local enterprise due to eCommerce
- Poor penetration of digital networks in the country
- Poor services infrastructure due to uninformed decisions
- Invisibility in the new Internet-based economy

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The eThinkTank is a policy oriented group. We held a series of analytic sessions to find our area of focus -- taking into account the circumstances of our country and the key opportunities and threats of the future. From these sessions, it became evident that the area for the biggest positive impact with the greatest immediate benefits in Tanzania would be the policy area. Some of the major observations behind this focus are given on the slide.

eThinkTank

PROPOSED ACTIVITIES OF NATIONAL ICT ENTITY

- **Stimulate our people to develop, use and propagate content on the Internet that is relevant to them, addresses local issues, reflects our cultural diversity and our social values**
- **Educate the public on the benefits of ICT and the way that business is being increasingly conducted in the new global economy**
- **Establish working groups focused on ICT development, eg. legal, regulatory, technical, social, cultural, education, economics, trade, and finance**
- **Be the focal point to address emerging issues or trends that relate to ICTs, eg. cross-border taxation within the context of global eCommerce**
- **Monitor the development, implementation, and evaluation of standards, policies and regulations related to ICT, incorporating stakeholder benefits**
- **Monitor the proposed investments in ICT-enabling infrastructure, in the context of the greater national benefit**

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The purpose of setting up the national ICT entity is for all these activities (among others) to find a permanent institutional home from which they can be managed in a coherent and cohesive manner. These points emerged from a structured brainstorming during the eThinkTank sessions, and we benefitted from the revolving-door membership whereby the composition of the participants varied from session to session. This enhanced the need to make clear statements.

At present, there is no clear line of responsibility concerning the listed areas, so there are too many instances of duplication of effort, loss of economies of scale through fragmented initiatives, ignorance of opportunities and a general inability to be proactive about developmental issues. The basic problem is an absence of *formal* broad-based policy alignment so that the cross-cutting aspects of ICT can be best served. Meanwhile, those cross-cutting aspects continue reinforcing a *de facto* approach of fragmented initiatives, which wastes our scarce national resources. It was therefore agreed in the brainstorming sessions that, in order to perform its role of being a national centre of gravity for ICT, the proposed entity will necessarily have to possess the characteristics illustrated on the following slide.

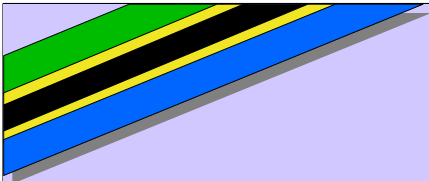
eThinkTank

PROPOSED CHARACTERISTICS OF THE NATIONAL ICT ENTITY

- Have Government mandate for ICT at national and international levels, and drive relevant policy changes
- Be a public–private–non-profit partnership that is NOT a part of Government, but has the mandate of Government and of key ICT stakeholders on furthering ICT for Tanzania’s development
- Be Tanzania’s ICT focal point and link to international ICT-related organisations and initiatives
- Safeguard Tanzania’s unique characteristics including its sovereignty, diversities, unity, culture, and social values in the global networks
- Maintain a view of global and regional strategic perspectives to assure cross-border alignment of significant ICT initiatives and respective interdependencies

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These are the proposed characteristics that the national ICT entity will be expected to possess. Again, these issues emerged from having a structured brainstorming during the eThinkTank sessions, followed by feedback circulated to all members by email. Non-participants would request clarifications and add their contributions, which would be taken on board during the subsequent session. At this stage, eThinkTank is providing backstopping to the Interim Steering Committee according to plan. But the networking among members and the exchange of ideas, knowledge and opinions is expected to gain momentum as a result of having a formal *eSecretariat* in place. Among our other current activities, we have just finalised a contribution on the debate about Voice Over Internet Protocol, to feed to the Tanzanian regulator who is preparing a paper for ITU on that subject. Our members are tracking the Dot Force initiative. We are designing a database of the ICT projects that our members are involved with and which we expect to trigger many more collaborative projects among members. Such projects are already known to be happening, but they are not yet receiving publicity as being intra-eThinkTank projects.



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This second story comes from north of Dar es Salaam, in the Indian Ocean just South of the border with Kenya. It is a story about how demand-driven technological progress can have an influence.



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It tells of a mobile cellular company which, while pursuing its own commercial interests in the coastal town of Tanga, happened to empower a hitherto disenfranchised community on the island of Pemba. It is noteworthy that the three islands of Unguja, Pemba and Wete are collectively known as Zanzibar, although the historical port of Zanzibar itself is located on the island of Unguja, which is biggest of the three.

Mobitel

<<http://www.mobitel.co.tz/>>

- Tanzania's first cell-phone company (now 5 co's)
- Grew its network aggressively to regional centres
- Extended into areas which had land-line services
- "Discovered" it serviced unexpected customers too
- Opened a territory which had never used phones

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It was the service requests which first caught the attention of Mobitel's engineers. These requests came from the small island of Pemba, which at that time was not even being serviced by landline telephony. Up to 1998, its population and purchasing power had been considered to be too small and remote to be worthwhile laying an underwater cable either from the main island of Zanzibar or from the coastal town of Tanga 100kms away. Hence, Mobitel did not plan to extend their more expensive cellular services there either. But, shortly after setting up cellular services in Tanga, their company's engineers were surprised to start receiving requests for service improvements coming from Chake-Chake in Pemba! So a trial booster was set up there and a whole new territory was opened to the world of telecommunications.

Mobitel

DEMAND-DRIVEN ICT FOR DEVELOPMENT

- Local people “discovered” cell-phone signals
- Demand for telecoms existed from Government agencies, NGO’s and commercial enterprises
- Demand for telecoms also existed among locals living elsewhere, who financed handsets/airtime for their relatives back at home
- Soon phones also came to be used for intra-island calls as well as off-island communications

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As it turned out, the Government offices, NGO’s and private companies operating in Pemba were eager to be able to communicate efficiently with each other and with the rest of the world. Once visiting subscribers of Mobitel discovered that they could pick up a signal on their handsets while on the island, the word spread very quickly and offices were acquiring phones even if it meant physically going to the only corner of the island where they could pick up a reliable signal. Additionally, people from Pemba living elsewhere in Tanzania were able to send home handsets and call in to dictate the code numbers of airtime pay-cards, thereby subsidising the growth of communications capability back home.

Hence the demand for handsets and the level of traffic grew very rapidly, despite being among a people who had never before received telephone services. This also brought about another phenomenon, whereby although the phones were initially perceived as a means for communicating with people who were off the island, the growth of the local user-base meant that phones gradually came to be seen as an effective means of communicating within the island too, particularly as the local transport services were rather poor.

Mobitel

DEMAND-DRIVEN ICT FOR DEVELOPMENT

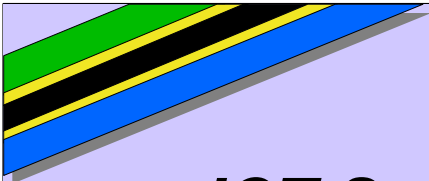
- Two boosters installed in quick succession to cover the whole island, due to burgeoning traffic
- Pemba's cellular services are soon going to be upgraded from analogue ETACS to digital GSM
- Public service, commerce and tourism have all gained benefits and reduced operational risks
- Knowledge sharing is helping entrepreneurs and investors to gain an interest in the local markets

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The advent of telephone services has significantly energised the island's economy and provides a convincing example of the so-called "leapfrogging" opportunities that are offered by modern ICTs. This leapfrogging is not merely experienced in the sense of moving to cellular telephony without going through landline telephony, but in all sectors of endeavour, because ICT is a tool which is desirable for the many broad-based and cross-cutting benefits that it can facilitate. However, it is undeniable that, as the digital divide grows, the imagery of leap-frogging now needs replacing with "cheetah pole-vaulting", as was described during the first Dot Force meeting in Tokyo last year.

The installation of an initial test-booster, to enhance signals from the Tanga site, was considerably cheaper and more reversible than laying telephone cables on the ocean-bed. And as traffic was seen to grow, coverage was rapidly enhanced by the addition of a second booster. Soon, the quality of service is going to be enhanced further as part of Mobitel's upgrade strategy from analogue to digital cellular phone technology. And Metcalfe's model, which describes the value of peer-to-peer connectivity, has been validated with the parallel increase in the numbers of subscribers as well as the volume of traffic for subscribers.

In the words of Mobitel's General Manager, "The increased traffic attributed to the booster indicates a significant level of traffic for Pemba. The increased activity levels and increase in numbers of commercial subscribers indicates an increase in activity for these subscribers. This *must* result in development."



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Thank you for your attention

