



Internet Services-

How to make the Affordable

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Introduction

- International Internet Connectivity in E.Africa has been through Satellite links.
- Two undersea cables are now operational
- Retail Prices for Internet largely remain at the same pre-submarine cable era.
- Why & What are the possible interventions?



Affordability

- ITU Defn Affordability: as % factor of Internet Access Price over the country's Gross Domestic Product (GDP) per capita
- Kenya's average monthly Internet Price of 100USD against monthly GDP per capita of 70USD can imply that Internet costs are **1-2times above** the average salaries.
- Compared to American citizens whose monthly salaries are **40times above** their average Internet Costs (Broadband service)



Components of Internet Costs

- This includes
 - Cost of Infrastructure (Cable)
 - Cost of Internet Interconnection Charges
 - ***Cost of Local Loop***
 - Profit

Denton et al (2000) in Asia-Pacific Internet Study found that 60% of the costs arise from the Local Loop.



Methodology

- Jagun (2005) used Stakeholder Analysis technique to understand the tensions within the EASSy Project.
- List of Stakeholders, their interests and objectives highlighted.
- These are then examined in the light of how they are affected in the event of Internet Price reductions.
- Process floats subconscious Assumptions which are then Validated or Invalidated.

Stakeholder Analysis

No	Stakeholder	Key Objectives/Interest
1	Public	Affordable Internet Services
2	Civil Society/Consumer Group	Affordable Internet Services
3	Media	Informing, Entertaining, Influencing
4	National Regulator	Competition and fair play
5	Government Institutions(Finance/ICT Min)	Law & Oder, Tax Collection
6	Financial Institutions (Banks) & Investors (Cable Owners)	Maximize Return on Investment (ROI)
7	Telco Operators (IGP/IBP)	Provide PROFITABLE services
8	Internet Service Providers (ISP/ASP)	Provide PROFITABLE services



Assumptions & Validations(1)

- **Public**

- *Strategy:* Boycott Internet Services in order to force Suppliers to reduce prices.
- *Assumptions:* That alternative Suppliers and Services exist.
- *Reality:* Market structure at Internet Gateway and Backbone level will remain mono-polistic at best duo-polistic in the medium term. Secondly, boycott strategies work only where there is alternative forms of services and currently Internet has no alternative.



Assumptions & Validations(2)

- **Civil Society/Consumer Groups**
- *Strategy*: Pursue Advocacy and form Consumer pressure groups to force suppliers reduce prices.
- *Assumptions*: That they are well organized and Consumers have alternatives to chose from.
- *Reality*: Civil Society in the recent past has been dormant and generally Consumer groups in Kenya are not well-structured to be effective.



Assumptions & Validations(3)

- **Media**

- *Strategy*: Sustain publicity of the Internet Pricing debate and demonstrate anticipated public good vis-a-vis private good regarding the Internet Pricing.
- *Assumptions*: That technology issues are well understood by the general population to have sustainable and profitable readership.
- *Reality*: Technology issues rarely make headlines and cannot sustain profit from a Kenyan readership that is heavily biased towards political issues.



Assumptions & Validations(4)

- **National Regulator**
- *Strategy:* Ensure competition and fair play – hoping this would drive prices down.
- *Assumptions:* That national regulator has jurisdiction over International commercial Interconnection Agreements between Operators and secondly that more Undersea Cables implies competition.
- *Reality:* As demonstrated by Atkinson (2000) of the US Federal Commission of Communication, National Regulators the world over DO NOT and should not have any role over International Interconnection Agreements between Internet Backbone Providers (IBP) and Internet Gateway Providers (IGP). Furthermore, as much as more undersea cables are expected to land in Mombasa, most Telco Operators/Investors have huge stakes in all of them making competition amongst them less effective.



Assumptions & Validations(5)

- **Government Institutions:**
- *Strategy:* Constructing and owning and the undersea cable would allow the Government to dictate affordable pricing for Internet Services.
- *Assumptions:* That retail internet pricing depended largely on the capital cost of the cable and that the Government had the full funds to build and own the cable on its own.
- *Reality:* . Even if the Government wholly owned the cable (which it does not) it would be able to dictate ONLY the Cable Cost portion of the Pricing while the other three components of (Interconnection, Local Loop, Profit) would remain outside its *direct* influence.



Assumptions & Validations(6)

- **Financial Institutions (Banks)/Investors (Cable Owners):**
- *Strategy:* Lend money to Investors and Operators to build the undersea cable with a view to making (quick) Returns on Investments.
- *Assumptions:* That the undersea cable construction is a worthwhile investment – particularly from a financial perspective.
- *Reality:* Very true. Undersea cable is a worthwhile investment that can be used to recoup investments at the convenience of the Banks/Investors.



Assumptions & Validations(7)

- **Telco Operators(IGP/IBP):**
- *Strategy:* Borrow money from Financial Institutions/Investors to build the undersea cable with view to providing PROFITABLE services and increase shareholder value
- *Assumptions:* That demand for quality Internet bandwidth sufficiently exists to make returns to investors and increase shareholder value.
- *Reality:* Demand does exist and Operators have a choice of business models to recoup their investments i.e low-volume high-cost vs high-volume low-cost models.

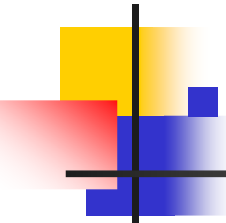


Assumptions & Validations(8)

- **ISP/ASP**
- *Strategy:* Get competitive WHOLESALE Internet Prices from IGP/IBP and RETAIL to Consumers at a Profit.
- *Assumptions:* That demand for quality Internet bandwidth sufficiently exists to make profit and increase shareholder value.
- *Reality:* Demand does exist and Operators have a choice of business models to recoup their investments that is, low-volume high-cost vs high-volume low-cost models

N0	Stakeholder	Power over Internet Pricing	Possible Interventions
1	Public	Low	*Develop interest *Join pressure groups.
2	Civil Society/Consumer Groups	Low	*Get more organized to sustain campaign. *Consolidate and make Bulk Purchases (e.g KENET)
3	Media	Low	*Support the cause by educating and informing the Public – even if it means at a loss.
4	National Regulator	Moderate	*Continue opening up Local Loop market e.g. ensure Civil Works incorporates Data Ducts. *Re-examine level of Competition at the Internet Gateway Level (Competition Law?)
5	Government Institutions(Finance/ICT Min)	High	*Grow domestic Network/Usage by increasing eGovernment Content. *Consider Tax Breaks to Financial Institutions/Investors *Support ICT Literacy Campaigns to increase Usage
6	Financial Institutions (Banks) & Investors (Cable Owners)	High	*Consider alternative ROI alternatives (e.g Tax Breaks in exchange of longer time-frames)
7	Telco Operators (IGP/IBP)	High	*Grow domestic Networks/Usage in order to secure better Internet Interconnection Charges.
8	Internet Service Providers	Moderate	*Grow domestic networks/Usage (Local Content) to reduce demand for International Traffic

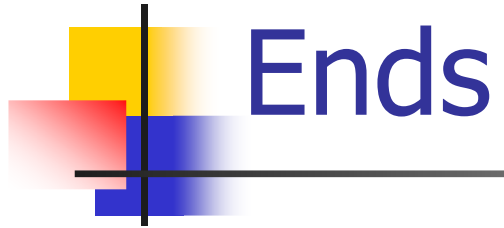
Conclusions

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- Internet Retail Prices are not within the jurisdiction of an single stakeholder
 - Interventions must be holistic and address multidimensional interests of various stakeholders
 - Key Interventions includes
 - Lowering the cost of the local loop
 - Growing the Domestic Network
 - Re-examining competition at Gateway Level
 - Re-negotiating and re-scheduling financial commitments.



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Ends

- Q&A