

ACER conference
Livingstone, 10 – 11 March, 2016

**ICT regulation
for fostering the digital complexity economy
in the SADC region 2016 – 2020**

Luci Abrahams, LINK Centre



Part I

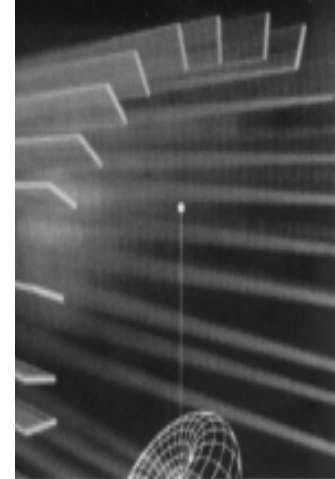
Digital complexity economy

It's complicated! difficult, challenging!

There is both certainty and great uncertainty about the future...of electronic communications markets

The future is unpredictable!

Regulatory certainty can improve ICT sector innovation and innovation in Internet-enabled sectors



Digital complexity involves

“the interconnected facets of globalization; knowledge, innovation and learning; mobile, wireless and broadband [Internet-based] communications; and the shift from relatively simple and basic forms of e-commerce and e-government to the complex e-transformation of all sectors of the economy, from agriculture to manufacturing and knowledge services”

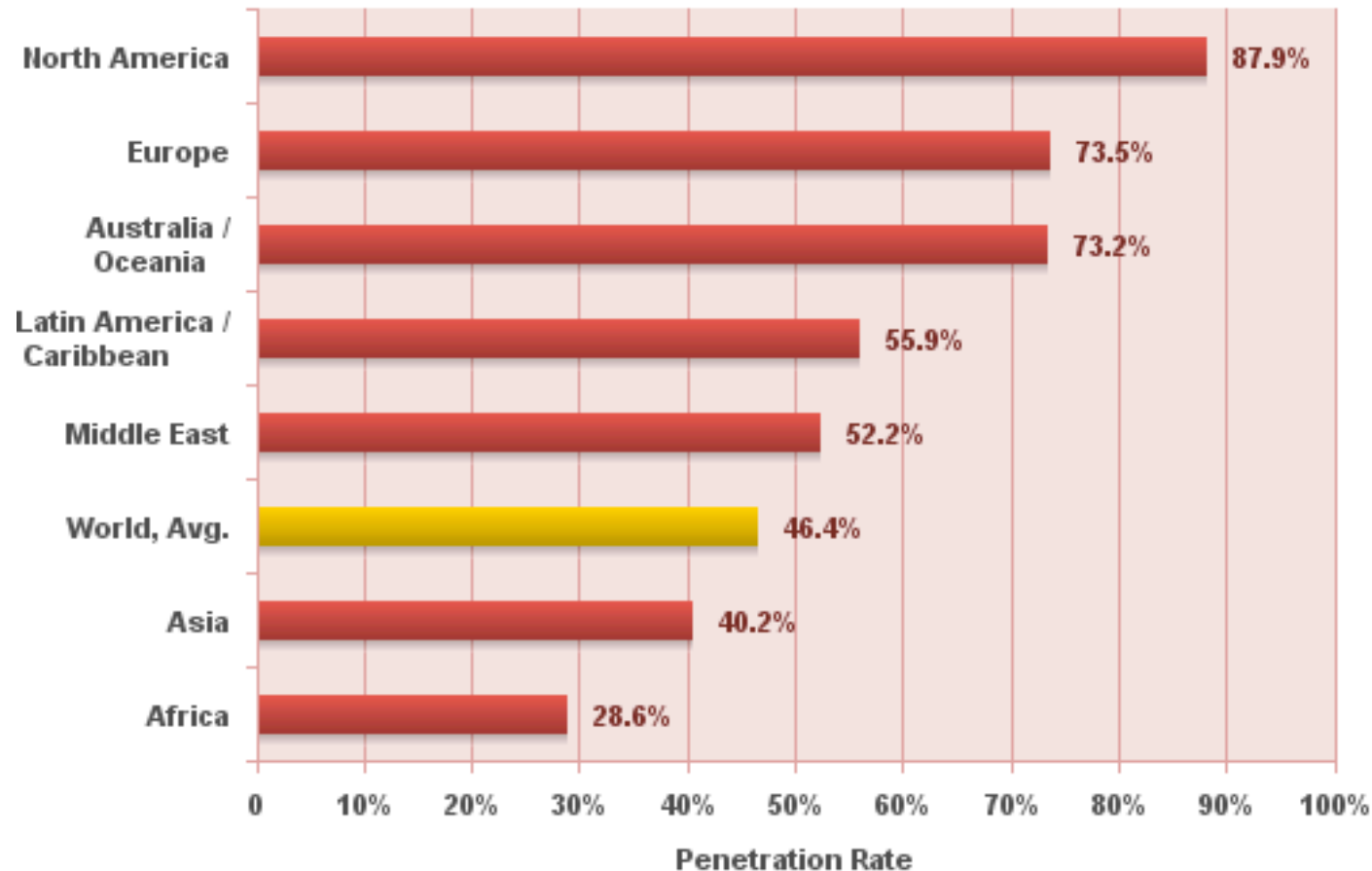


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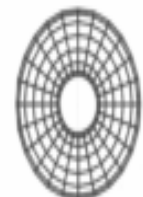
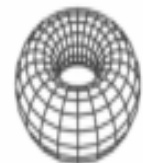
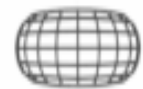
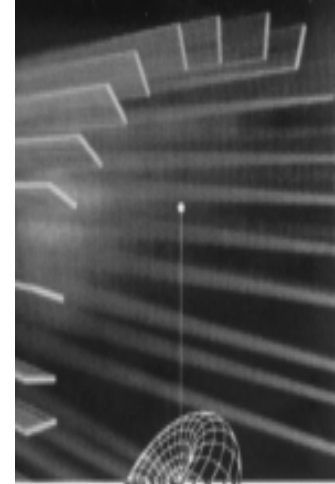
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Internet World Penetration Rates by Geographic Regions - November 2015



Source: Internet World Stats - www.internetworldstats.com/stats.htm
Penetration Rates are based on a world population of 7,259,902,243 and 3,366,261,156 estimated Internet users on November 30, 2015.
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Part II

**SADC people, economy, Internet
Mobile money ecosystem
Cloud computing and personal data
Internet of Things (IoT)
e-education
e-health and Internet of People (IoP)
Universality of the Internet**



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Readiness

Education and Human Resource Development:
 Usage and innovation requires increasing orientation towards advanced knowledge for innovation in order to promote advanced utilisation

Knowledge and Digital Divide
Socio-economic Development:
 Research and Innovation: from sms to OTT services, mobile money transfer, mobile Internet, lots of apps, health, longevity and sport diagnostics and e-wearables, data and big data analytics
E-SERVICES IN SOCIETY

DIGITAL, INTERNET, KNOWLEDGE-BASED, COMPLEXITY CYBER-ECONOMY

Development of economic sectors requires innovation in network infrastructures (power, electronic communication services), in apps and e-services, NRENs and RRENs linking to global cyber-infrastructure

Policy and Regulatory Environment:
 All conversations lead back to the weak role of key contributors to the enabling (or not disabling) environment and access strategies for ubiquitous access

Readiness



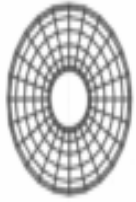
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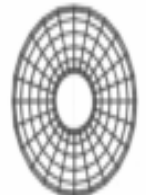
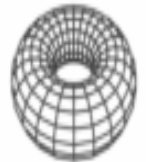
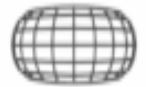
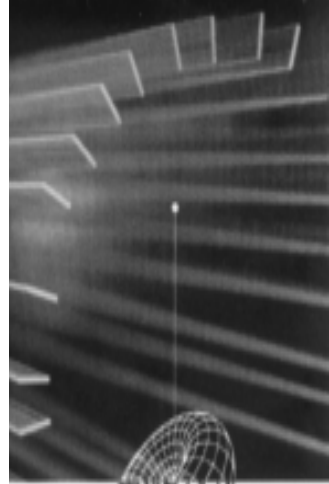
Readiness

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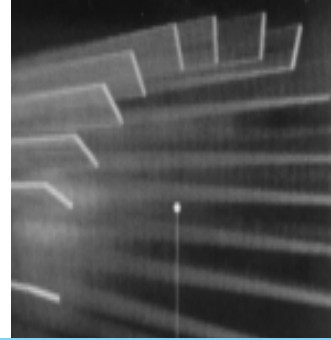


SADC people, economy, Internet


- e-Services, e-business, e-content, e-transactions
- The mobile money ecosystem
- Internet of Things (IoT) uses cloud computing services and personal data in the cloud
- Universality of access and service to Internet and cyberspace: e-education and e-health, key service for the Internet of People (IoP)



Mobile money



MOBILE MONEY
IN TANZANIA

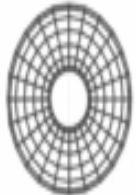
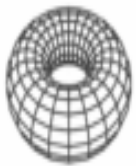
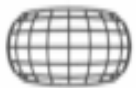
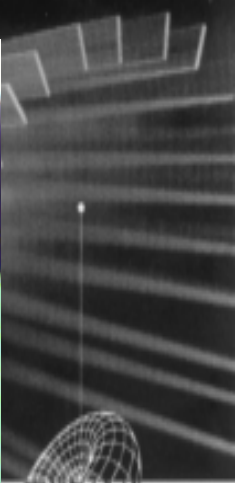


48.5M
POPULATION
86.4% RURAL / 13.6% URBAN



A cartoon illustration on a teal background. On the left is a white refrigerator with a grey side panel and two doors. A speech bubble originates from the top of the refrigerator. To the right, a person in a grey suit is walking away from a red door, carrying a brown briefcase. The scene is set in a room with a doorway leading outside.

**Don't forget
to buy milk!**

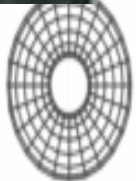


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Part III

Challenges in SADC ICT sector regulation

Regulating activities in cyberspace

Regulating mobile money/mobile payments

Regulating cloud computing environments

Regulating IoT

Regulating to foster e-education



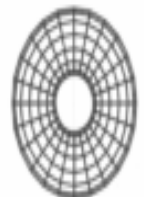
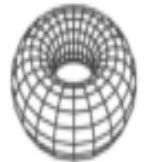
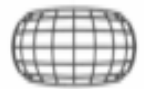
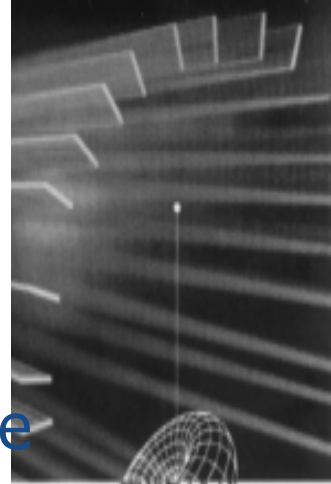
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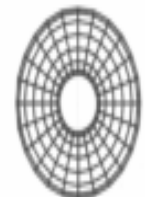
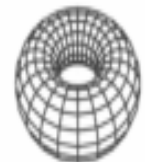
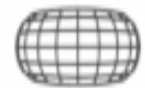
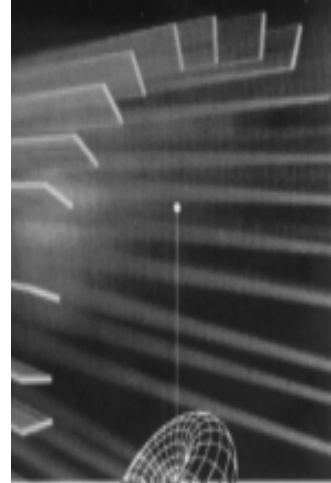
Requirement for advances in law, social and economic regulation with respect to cyberspace

- Mobile money payments – interconnection of mobile money services in country and cross-border; consumer rights and consumer protection; concurrent jurisdiction of multiple regulators eg electronic communications sector regulator and banking regulator; collaboration amongst regional and global regulators
- IoT = regulatory issues = spectrum management reform (spectrum sharing, dynamic spectrum assignment/access, addressing and numbering for “globally addressable things”, competition regulation to address abuses of dominance, privacy, security and cybercrime



Requirement for advances in law, social and economic regulation with respect to cyberspace

- Universality – in e-education, in e-health
 - Regulation of TVWS for various uses including but not limited to e-education in urban and rural areas
 - Concurrent jurisdiction and clarity of roles between ec regulator and health professions regulator
- Consumer protection with respect to cloud services and privacy issues with respect to personal data held in the cloud – ex ante consumer protection includes codes of conduct – require amendment/refinement and regulatory guidelines or practice note



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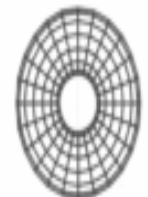
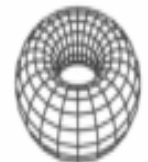
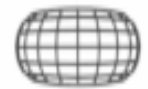
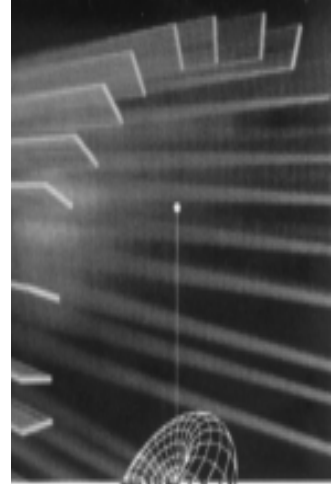
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Concluding remarks: key regulatory issues

- Regulation of cyberspace and regulatory harmonisation across economic regions – SADC
- Concurrent jurisdiction of regulators – competition regulator, electronic communications sector regulator, banking regulator, consumer protection regulator, information regulator (POPI Act), health professions regulator, other
- Capacity and knowledge-building: Regular regulatory position papers published by academics and practitioners and academic-practitioner forums



Thank you - Questions????



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