Challenges and opportunities of convergence in building a knowledge economy

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Overview

• What is the knowledge economy?
  – Will it lead to economic and human development?

• What are some of the factors influencing its success in South Africa?
  – Deregulation – breaking of monopolies
  – Moore's law – technological advance
  – Education and training
  – Functioning patent system
What is “knowledge economy”

• “... the use of knowledge to produce economic benefits” [Wikipedia]
  – for who?

• ways in which high-tech businesses, education and research institutions can contribute to a country's economy
Drivers

• Globalisation of markets and products
  – particularly information products
• Information/Knowledge intensity
  – the “information society”
• Information Technology
  – convergence of internet, broadcasting, telecomms and mobile technologies with computer software
Will it contribute to development?

• Some argue that it is development.
  – “Rolling out” ICTs is equivalent to rolling out development

• Contrast Amartya Sen's conception of development
  – “… the process of expanding the real freedoms that people enjoy”
Development as Freedom

• Growth of GDP, individual incomes is a *means* to expanding the freedoms enjoyed by members of society.
• Freedoms mean the substantive freedoms to achieve the lives we choose.
  – requires good health, education, participation in social choice, cultivation and encouragement of initiatives, etc.
Knowledge Economy, ICTs, convergence etc

• Has tremendous potential to contribute substantially to freedom and development
  – new business opportunities, participatory eGovernment, health, education etc

• Also has potential to reproduce and amplify existing social inequalities
Ducks to put in a row

- Deregulation – breaking of monopolies
- Moore's law – promote local technological advance
- Education and training – fundamental problems eg. books
- Functioning patent system which promotes local innovation in convergence space
Patents and Knowledge Economy

- Patents as industrial policy instrument
- Good quality patents *can* be important driver for innovation in some industries
- Poor quality patents exert negative social cost on the economy – discourage innovation
- US, Europe, India, China are all confronting the issues (in different ways)
South Africa?

• Computer programs and business methods not patentable
  – last four years have seen a growing number of these being granted

• Patent applications are not examined for “quality”

• Patents are granted in SA for “inventions” which have been rejected elsewhere
Threat to local innovators in convergence space

• There is a patent granted for a “convergence platform” for mobile commerce
• There is a patent granted for SMS ticketing/vouchering
• There are many patents granted for basic computer program ideas
• The vast majority to foreign companies
Intellectual land grab

• “19th Century ... combination of British indifference and incompetence and the driven self-interest of the European settlers spelt disaster in respect of land.”
  • DL Carey Miller (Land Rights in South Africa)

• There are new echoes of the same driven self interest, indifference and incompetence in the field of patent rights in South Africa
Patents granted in SA

From European Patent Database (espacenet)
Way forward?

• We must create conditions for local, free, innovative and non-monopolistic competition
• The functioning of the patent office must reinforce these objectives
• As an industry we need to temper our self interest so as not to destroy the environment
• There are no good models – plenty of bad ones.
• Industry, government and civil society need to collaborate to define patent policy
Thank you

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