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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



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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



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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



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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"



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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



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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



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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



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



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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



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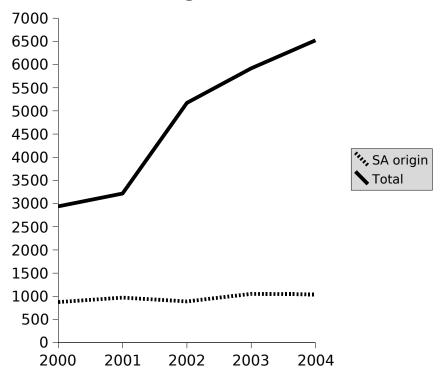
Intellectual land grab

- "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



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Patents granted in SA



From European Patent Database (espacenet)



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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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