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MIT 851: Digital Economy


Lecture 1

21 July 2016



Agenda

- Course admin
- HCI lecture: Prof Helene Gelderblom
- Introduction to Digital Economy
- Discussion
- Individual Assignment
- Group Assignment
- Preparation for next class



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Introduction to Digital Economy

21 July 2016



SA on brink of a digital revolution

- Opportunity to be more profitable
- New companies embrace digital era – established ones need to transform
- World Wide Worx research (2013):
 - Internet economy 2% of GDP
 - Rising 0.1% per year
 - Total spent on Internet R59 billion

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SA on brink of a digital revolution

- Three ways of opportunity:
 - First digital wave: better customer service, more effective distribution, smarter pricing
 - Second digital wave: Understanding customers
 - Third digital wave: Act as trusted fourth party on behalf of customers, managing relationships with companies offering products and services

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Africa.com

- South Africa ranked 33 for digital readiness (defined by the markets' ability to support and encourage digital commerce and payments), with Egypt ranking as number 48, Kenya at 49, and Nigeria as 50th on the list.

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Africa.com

- The shortage of tech talent in Africa is closely linked to the continent's lack of infrastructure. South Africa already has a solid foundation in industries such as financial technology, banking services and industrial-scale manufacturing, so the country should be best placed on the continent to train the next generation of programmers for the digital epoch.

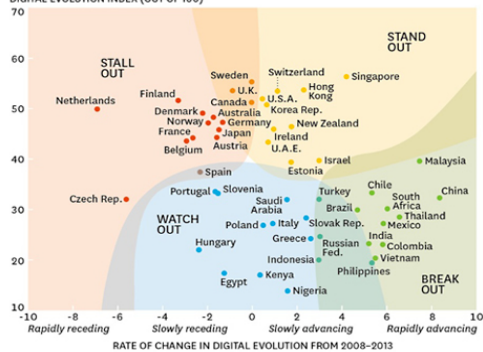
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COUNTRIES ARE BUILDING DIGITAL CAPACITY AT UNEVEN RATES

A group of 50 countries reveals four main areas of digital readiness.

HOW COUNTRIES SCORED ACROSS FOUR FACTORS ON THE DIGITAL EVOLUTION INDEX (OUT OF 100)



SOURCE: DIGITAL EVOLUTION INDEX, THE FLETCHER SCHOOL AT TUFTS UNIVERSITY. HBR.ORG

South African Digital Landscape

(2015 research, population = 53 million)

- 24 million Internet users
- 47% Internet penetration
- 28.8 million unique mobile users in 2016
- 49.1 million unique mobile Internet users by 2018
- Biggest activities: getting information, social media
- Barriers:
 - Do not know how to use Internet
 - Do not know what is the Internet

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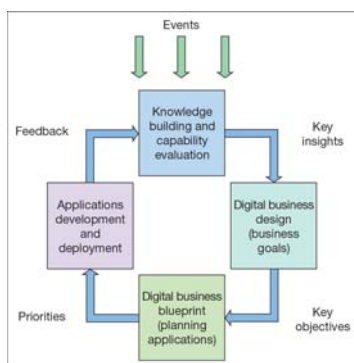


Figure 5.5 Dynamic digital business strategy model

Source: Adapted from description in Kamas and Robinson (2000).



	1 Web presence	2 E-commerce	3 Integrated e-commerce	4 Digital business
Services available	Brochureware or interaction with product catalogues and customer service	Transactional e-commerce on buy-side or sell-side	Buy- and sell-side integrated with enterprise resource planning (ERP) or legacy systems. Personalisation of services	Full integration between all internal organisational processes and elements of the value network
Organisational scope	Isolated departments, e.g. marketing department	Cross-organisational	Cross-organisational	Across the enterprise and beyond ('extraprise')
Transformation	Technological infrastructure	Technology and new responsibilities identified for e-commerce	Internal business processes and company structure	Change to digital business culture, linking of business processes with partners
Strategy	Limited	Sell-side e-commerce strategy, not well integrated with business strategy	E-commerce strategy integrated with business strategy using a value-chain approach	Digital business strategy incorporated as part of business strategy

Table 5.3 A stage model for digital business development

Discussion: Impact of Internet

For the industries below, assess how the Internet has changed the competitive forces, for example, has it increased or decreased power of suppliers and customers?

- Choose one of the following industries:
 - Banking
 - Supermarkets
 - Hotel industry
 - Taxi industry
 - Clothing industry



Individual Assignment (due 25 August 2016)

- Ten best design principles and practices for web sites
- Three JSE listed companies: critically analyse (use table)
- Use of social media

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Group Assignment (due 22 September 2016)

- Business plan
- Proposed web site (key pages)
- Presentation

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Preparation for next class

- Will be posted on ClickUP

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