Global ICT Capacity Building Symposium

Coping with new skills requirements in a changing ICT environment

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Overview

- Technology disrupted business models
- Strategic Human Capital Plans
- Case studies

2015: Technology disrupted business models

- Social media went commercial with buy buttons on Facebook and Twitter.
- Tesla's Powerwall changed the energy power game (despite Opec's prediction that 94% of cars will still be oil-powered in 2040)
- 52 of the largest companies in China signed the China Accord to reshape the global built environment on green principles
- driverless cars hit the road (Google is only one of 25 brands that want to occupy this space)
- and Nasa confirmed that there is water on Mars (and that astronauts ate food they grew in space).

2016: One of the most disruptive turbulent times

Some examples

- **Banking and financial services:**
  - Among the new trends are **virtual banking**, data ownership, m-commerce, loyalty schemes, wearable payments and the decentralisation of architecture through **block chain technology**
  - As the year began, MasterCard took a leap to strategically reposition itself for the **Internet of Things** (IoT) and launched the Grocery app, which is pre-loaded on Samsung's Family Hub Fridge, putting the bank in the kitchen, the home becomes a micro-retailer. Samsung becomes a **Data Analytics** company of the future.

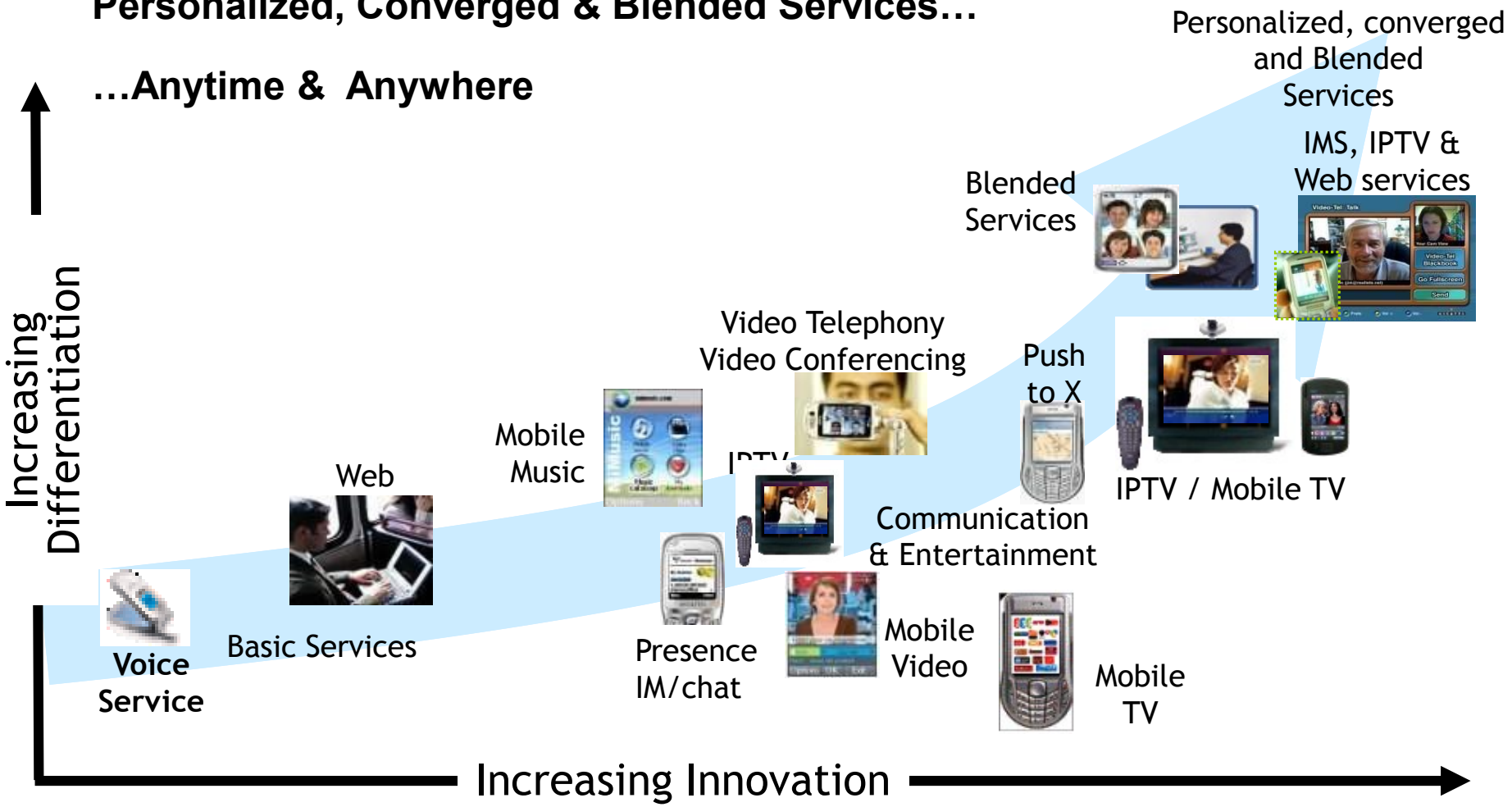
2016: One of the most disruptive turbulent times Cont.

- **Healthcare:**
  - Next generation **wearables** hit a $6 billion market, The new generation of “medical” or “clinical wearables” is going to be equipped with more sophisticated sensing, capture and analytical functionalities, thus making the clinical utility of those devices more actionable
  - This year, we will see the IoT accelerate as more than 2bn smartphone users connect to **wearables** and virtual assistants.
  - Less expensive and faster point of care (POC) testing enables new diagnostic care models, Commercialization of new POC test platforms with capabilities such as molecular POC, connectivity features, biosensors and microfluidics is able to drastically improve turnaround times (5 to15 minutes) and allow for testing services to be performed in settings previously not feasible

Institutional Readiness: Capabilities
The value-proposition of Broadband

Personalized, Converged & Blended Services…

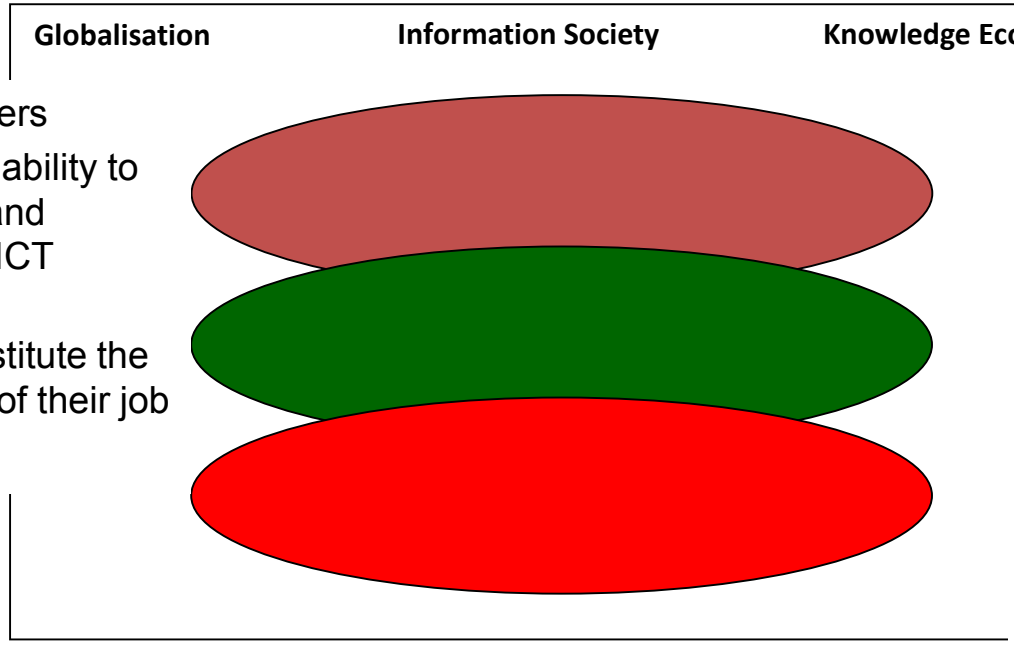
…Anytime & Anywhere



Are we ready to adopt, confront this disruption (Revolution), are we capable?

- Public Sector?
- Private Sector?

Digital Skills: Strategic Human Capital Planning



ICT Practitioners

- Have the ability to develop and maintain ICT systems
- ICT's constitute the main part of their job

ICT users/e-business

Advanced Users

- Competent users of advanced and often sector specific, software tools.
- ICTs are not the main job, but a tool

Basic User

- Competent user of generic tools (e.g. Open Office, MS Word, etc.) needed for the information society, e.g. gov. and working life. ICTs are not the main job, but a tool

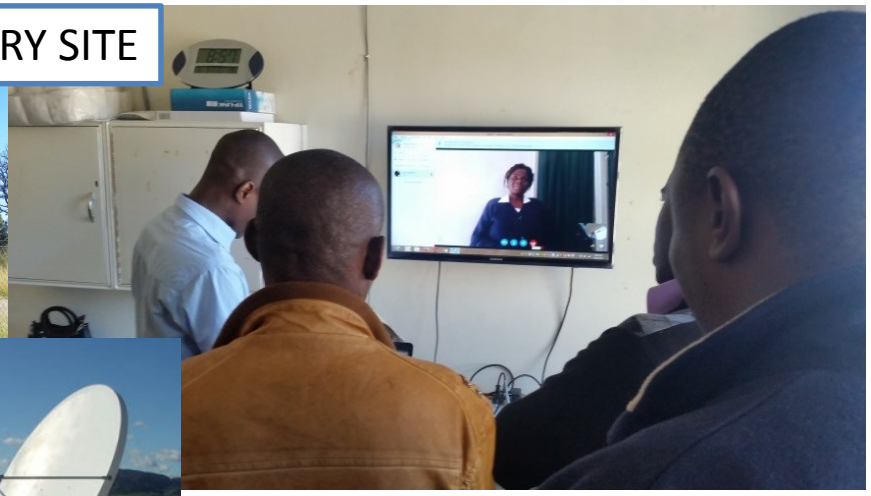
E-Literacy

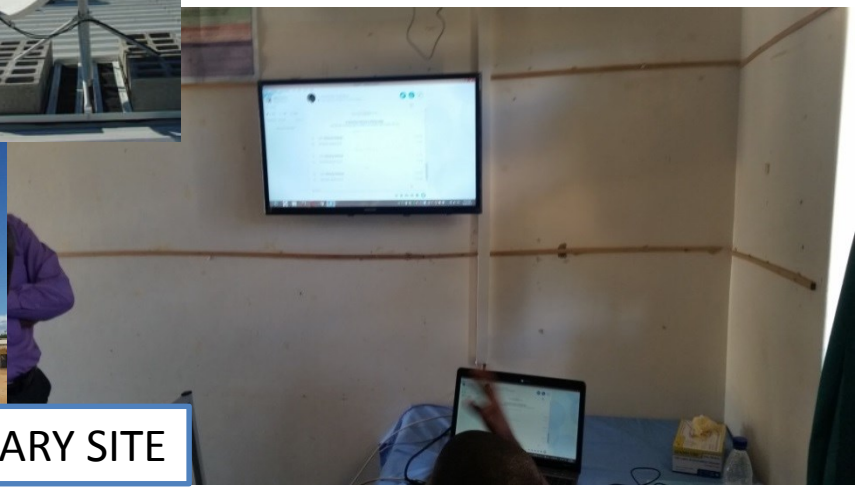
- **ICT skills needed for modern life outside the work place and in support of community development**

Digital Capabilities: Should be core to all Strategic Human Capital Plans

Case Study: e-Health Zimbabwe

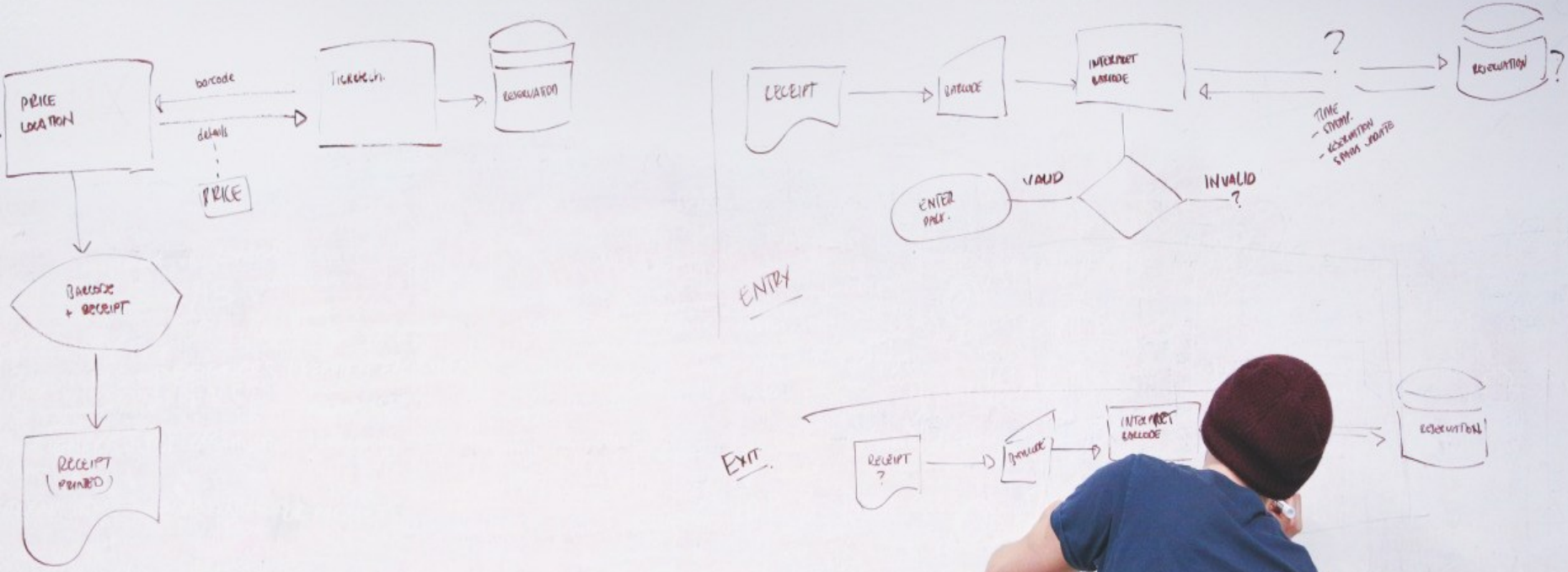
PRIMARY SITE





SECONDARY SITE

Challenges to deploy e-Health



- Infrastructure operational readiness?
- Basic e-Literacy Skills (Medical Practitioners)
- Basic healthcare industry skills (technology support specialists)

Case Study: Standard Bank

Generation Z's are challenging traditional business models to focus on UX

Developing Digital Capability

Among the new trends are virtual banking, data ownership, m-commerce, loyalty schemes, wearable payments and the decentralisation of architecture through blockchain technology.

Development building blocks

- Integrating the UX Experience in the organization
- Crypto Currency and Blockchain basics
- Data informed decision making
- Digital Product Development and Management

Recommendations for ICT Practitioners

Develop relevant ICT Capabilities in the following areas
Examples of the Types of New and Emerging Competence Development areas for 2016 (CompTIA 2016):

Chief analytics/data officer
Data scientisT Cloud systems engineer
Dataviz/Data visualizers
Internet of things architect
Social media analyst
Information Assurance Analyst
Augmented reality designer
Computer security incident responder
Content manager/strategist
Agile project manager
Marketing technologist
Responsive web designer

Thank You
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