

M-LEARNING FOR INTEGRAL CHRISTIAN SCHOLARSHIP IN AFRICA

Dr Vasantha Kalyani David

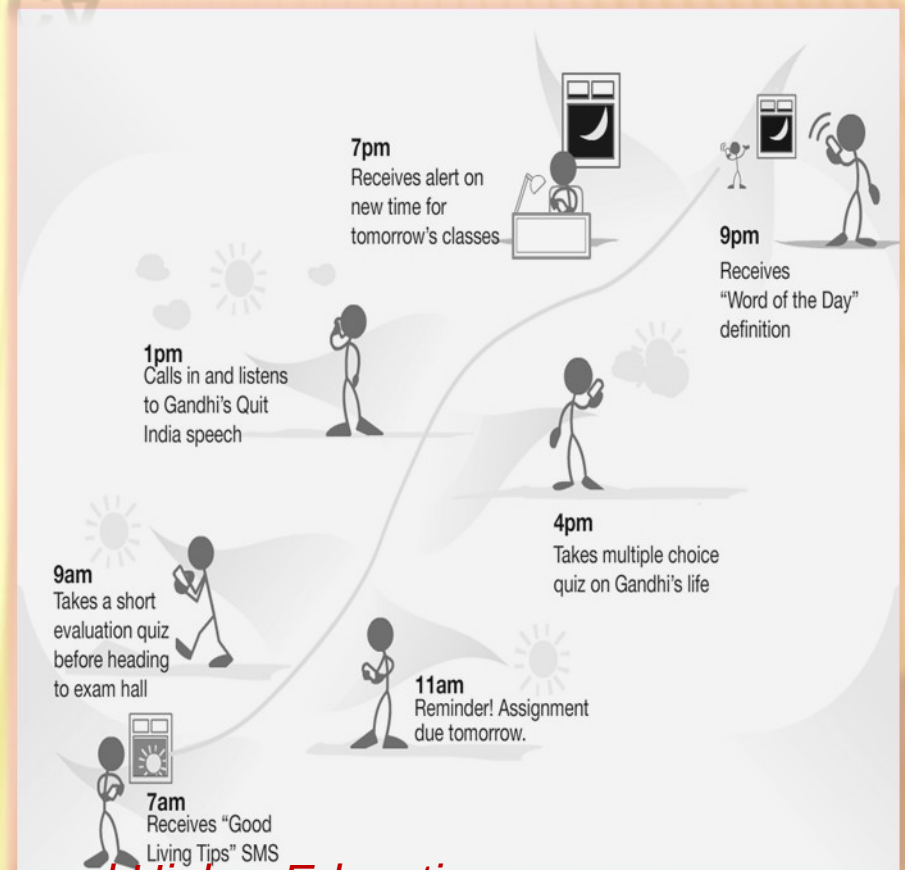
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WHY ?

- To implement equipments and tools in Teaching-Learning process as a media and a methodology.
- To promote equity in education
- To provide educational opportunities to the people of all ages
- To improve general socio-economic conditions.
- To improve the flow of information and communication in a society

WHY NOTS ?

IMPEDEMENTS

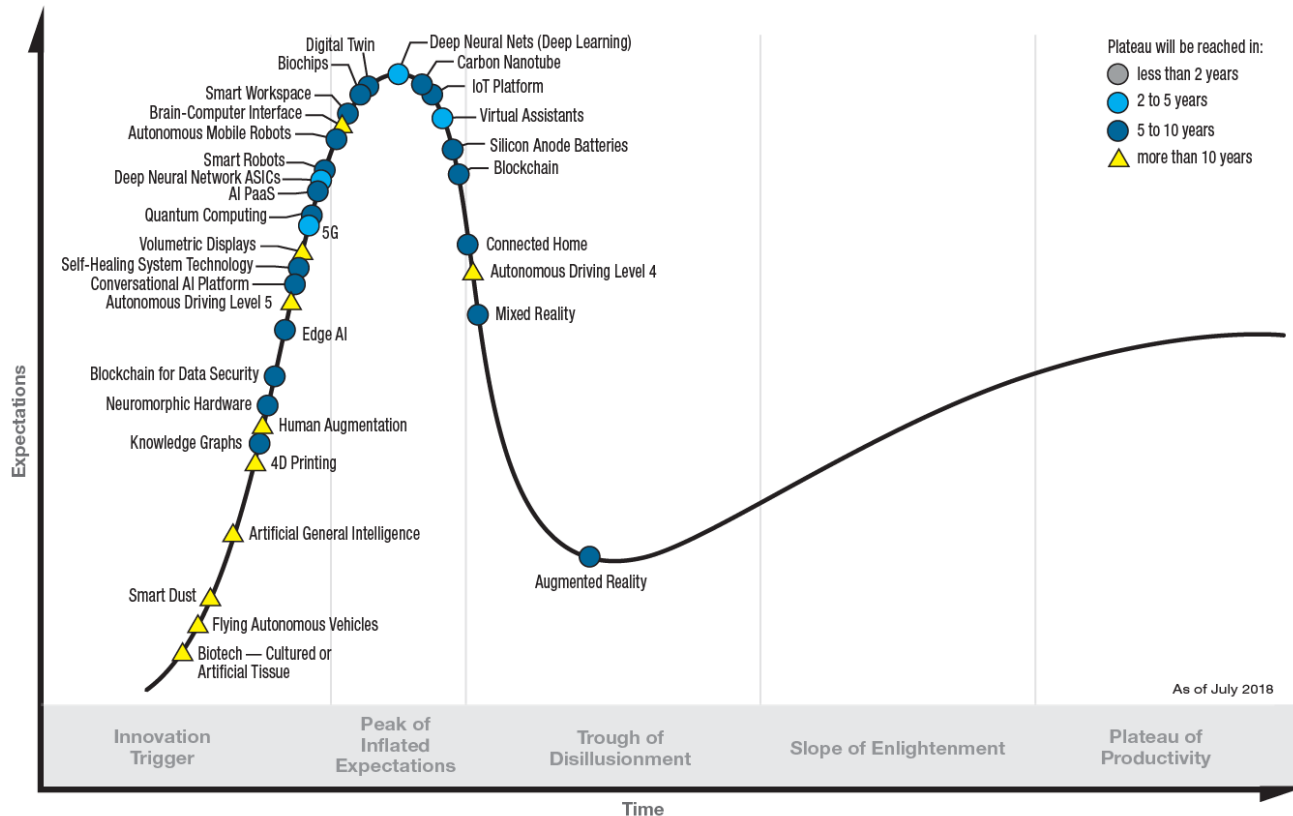
- **Infrastructure** (human infra, legal infra,tech infra)
- **Finance**
- **Improper data systems and lack of compatibility**
- **Attitudes and lack of skilled personnel**
- **Hunger, illiteracy, corruption, short term grants,**
- **Training programmes during unsuitable time for users,**
- **brain-drain**
- **Lack of support from the local government**

M-LEARNING - ADOPTION

- Rapid and unforeseen increase of mobile device adoption
- Surge in social media adoption and participation
- Growth in cloud computing
- Increase in awareness-that elearning, mLearning and online training is a way to save on training costs, provide just-in-time performance support, and improve productivity
- Autonomous learning
- the mobile becomes our computer and goes global.

GARTNER'S HYPE CYCLE FOR EMERGING TECHNOLOGIES, 2018

Hype Cycle for Emerging Technologies, 2018

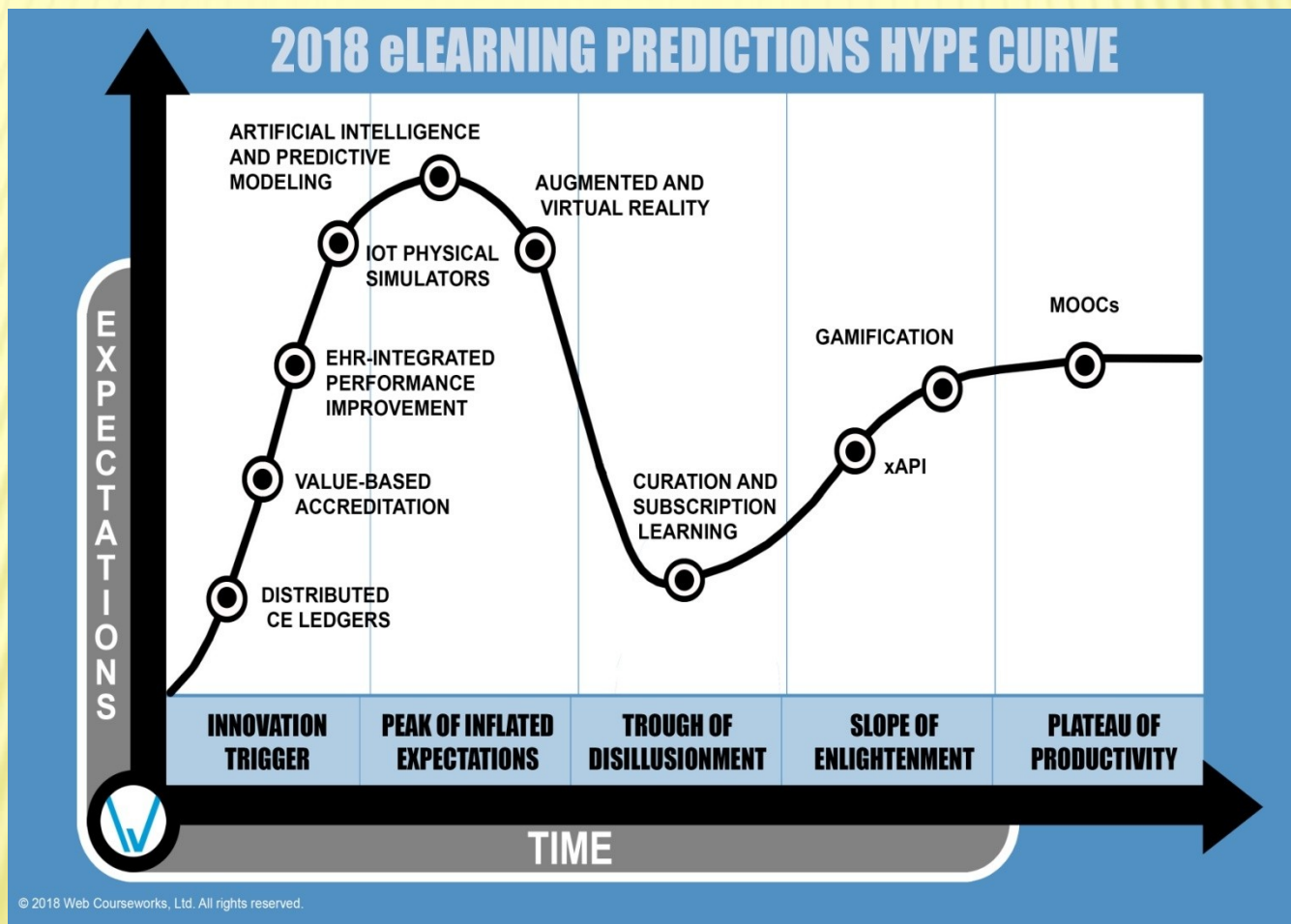


gartner.com/SmarterWithGartner

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IS LIFE WITHOUT A MOBILE END OF LIFE? NEW MOBILE LEARNING TRENDS



MOBILE PENETRATION IN SOUTH AFRICA

- *There are 960 million mobile subscriptions across Africa.
 - *80 percent penetration rate among the continent's population
 - *Internet penetration is at 18 percent with 216 million internet users
 - *South African residents are one of the highest users of mobiles.
 - *South African adolescents and youth are the first to use mobile technology, with 72 per cent of 15 –to 24-year olds “having a cell phone.”
 - *South Africa is the leading innovator in social networking, microblogging and content creation
 - *There is a divide in South Africa with regard to ICT ownership, access and use. (due to race, socioeconomics, and geography)
- Risks faced** – cyberbullying, sexting and meeting strangers

M-LEARNING IN DIFFERENT SCHOOLS

- Rural Schools—low income area, proximity to rural areas, lack of laboratories and public libraries.
- Location based schools –located within cities in low income area and have access to libraries
- Urban schools- situated in high income areas, with access to libraries, science parks, museums

Challenges –languages play crucial role in mathematics and science.

STEM subjects-

Science, Technology, Engineering, Mathematics



CONT...

- ✓ Women can be empowered economically
- ✓ Traders need to travel less
- ✓ Providing emergency-related communications in disaster relief efforts.
- ✓ Locally-relevant educational and health information can be spread through mobile phones in the local language too.
- ✓ Promoting cooperation among social networks ensures to act together more efficiently so as to pursue their shared objectives.

M-LEARNING - NEED IN HIGHER EDUCATION



- ▣ New challenges faced in Universities
- ▣ Exponential growth in the demand for higher education.
- ▣ Significant decrease in government funding for education.
- ▣ Changing nature of knowledge.
- ▣ Changing student demographics and expectations .
- ▣ Global competition in the provision of higher education.
- ▣ Rapid advances in ICT
- ▣ Application of knowledge to real life problems
- ▣ Virtual universities












- Allows just-in-time, just-for-me access to personalized education which is different from PC based platforms.
- ensures a better alignment between the learner's expectations and societies' demand for new kinds of skills
- Assists students to apply knowledge to real life problems using the ICT particularly the internet.
- liberates learning constraints such as time, speed, and space
- shifts from teacher- centric to learner- controlled learning systems

M-LEARNING

The Benefits

-  Rich interactive learning experience
-  Easy accessibility & Anywhere and anytime use
-  Less space occupied than computer
-  Size, shape & portability for the effective usage by people even with disability.

Demerits (can be overcome)

- Small screen size 
- Limited storage 
- Low backup for the batteries 
- Constrained bandwidth when wireless networks are engaged.

Features to be considered for Mobile Content Development



- ▣ Design constant and instant communications in minute(s)-long sound bytes, podcasts and video clips via mobile phones, PDAs and Blackberries
- ▣ Integrating m-learning with LMS & course/instructional design
- ▣ Portability,
- ▣ Social Interaction,
- ▣ Sensitivity to context,
- ▣ Connectivity
- ▣ Customized Learning

CONTD..



- ▣ Write once to publish on many platforms
- ▣ The content be developed once (single source)
- ▣ Deployed in multiple formats (multiple handhelds, mobile phones & tablets)
- ▣ Use of communication platform that is device and operating system independent
- ▣ By delivering learning content in small, consumable portions, mobile learning enables users to access material through a method of quick reading, reviewing and testing
- ▣ The device independent mobile content should be developed so as to create surveys, quizzes, and assessments.

- Device independent --It is developed once and the system adjusts to the display factors for different devices.
- The content is delivered to any internet-enabled mobile device without the need for customization such as basic mobile phones, Smart phones, and tablets.

SUCCESS FACTORS FOR M-LEARNING

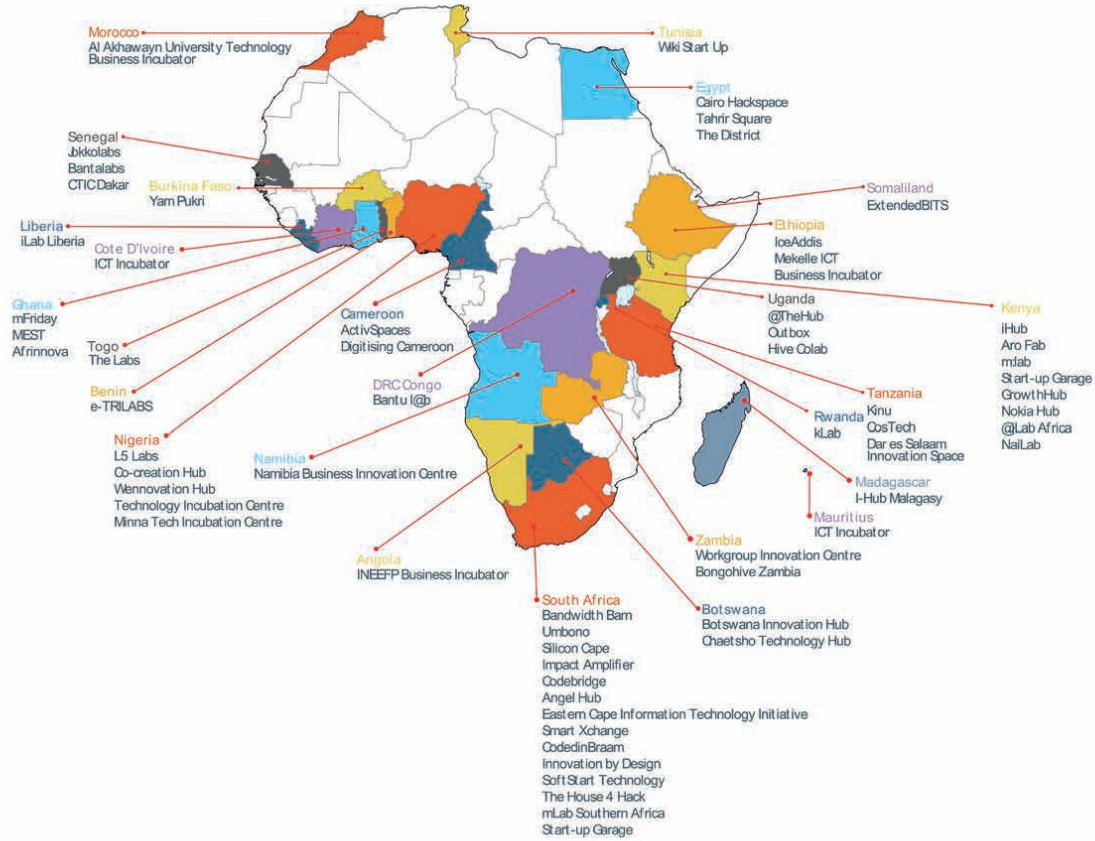
- ▣ Access to technology
- ▣ *Ownership*
- ▣ *Connectivity*
- ▣ *Integration*
- ▣ *Institutional support*

CHALLENGES TO BE FACED



- a new paradigm to be adopted, the content providers, technology companies (both carriers and device manufacturers) and users of the mobile platform have to continually interact to foster innovation
- One challenge highlighted at the Google's Open Source discussion event was the absence of standards for the developers in the industry
- Optimizing these applications for different Operating Systems and broad range of mobile devices with varying screen sizes and versions remains the biggest problem for the mobile content developers

- Mobile banking provide the rural and urban bankers with easy options for both personal and business use
- In Africa 81% use Twitter for conversations
- Mxit is a free instant messaging operating on multiple mobile platforms. They send and receive text and multimedia messages in one to one chat rooms, play games , download music ,access movie clips and news, buy and sell products and thereby have grown exponentially (6.3 million users)
- 71% of Mxit users access through mobile phones
- 91% of Mxit users live in urban areas and 9% in rural areas and it is not in use
- Safety risks are involved like cyber bullying, piracy,exposure to inappropriate content by the young as 63% need not ask for permission.
- Talking with and meeting strangers and tempted to meet them.
- Exposed to sexual content online



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- As Christian teachers we are a blessing to our student world
 - Moral and spiritual transformation is much needed in every teaching fraternity.
 - CHE shall influence the student's lives, work, families and in turn communities
 - Efforts to bring about change to be focused on the young (who will be the future)
 - Father of Christian Higher Education Abraham Kuyper assures everything belongs to Christ.

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- Christian academics should make honest Christian Professional and transform the world(commence to be honest bank employees)—my husband(whole life ,marriage,family,business,education and professional life)
 - Understand the difference between faith and science

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- Believers are the fifth Gospel ,oriented to influence the unbelieving world and live up to their calling
 - Are responsible to make the world a better place to live in all areas of life
 - Irrespective of their careers Christians are in full-time service of God.
 - Compassionate and passionate teachers ever willing to sacrifice for their students

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- Christian approach (encouragement, support and unconditional acceptance from teachers)is needed in teaching and other related activities.
 - Students should be equipped to face ethical challenges as future employers and employees
 - Decision making on the basis of Christ's nature(love, self denial, stewardship and Obedience to God).
 - Christian Ethics to be included in curriculum

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- The centre for promotion of Christian Higher Education in Africa (CPCHEA8) has been started to provide necessary leadership
 - Producing managers, professionals, researchers and scholars to be Christian servant-leaders to transform the society and church in Africa (Daystar University 2012)
 - The development of student's moral character.

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- Seven core values to guide in academics
loyalty, honesty, responsibility, compassion
justice, respect and quality

CONCLUSION

- Globally speaking no other device can come any closer to mobiles, not even computers.
- No demography is untouched by the mobile phone and it is associated with the youth in a big way.
- The content developed for m-learning has progressed in a way to benefit learners having sensory difficulties (i.e) with provision like speech to text and vice-versa.
- Research is going on to deliver contents effectively on different mobile platforms.
- To successfully enable m-learning, it is important to understand the role content design plays in facilitating learning and comprehending.
- Explore and evolve newer ways to organize content,

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