Learning Management System (LMS)

HARNESSING THE TECHNOLOGY FOR EXCELLENCE IN DENTAL EDUCATION

Presented by,
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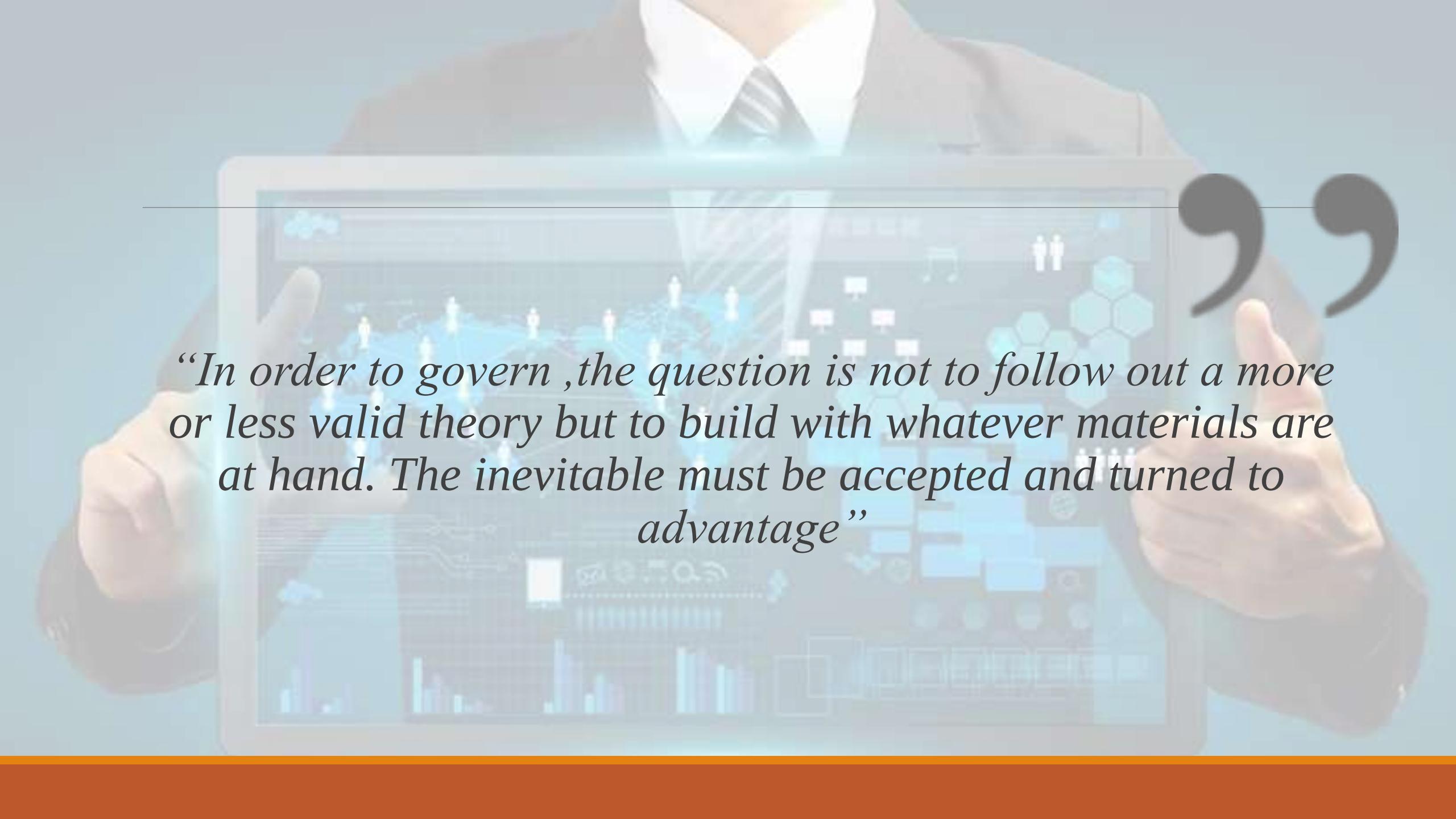
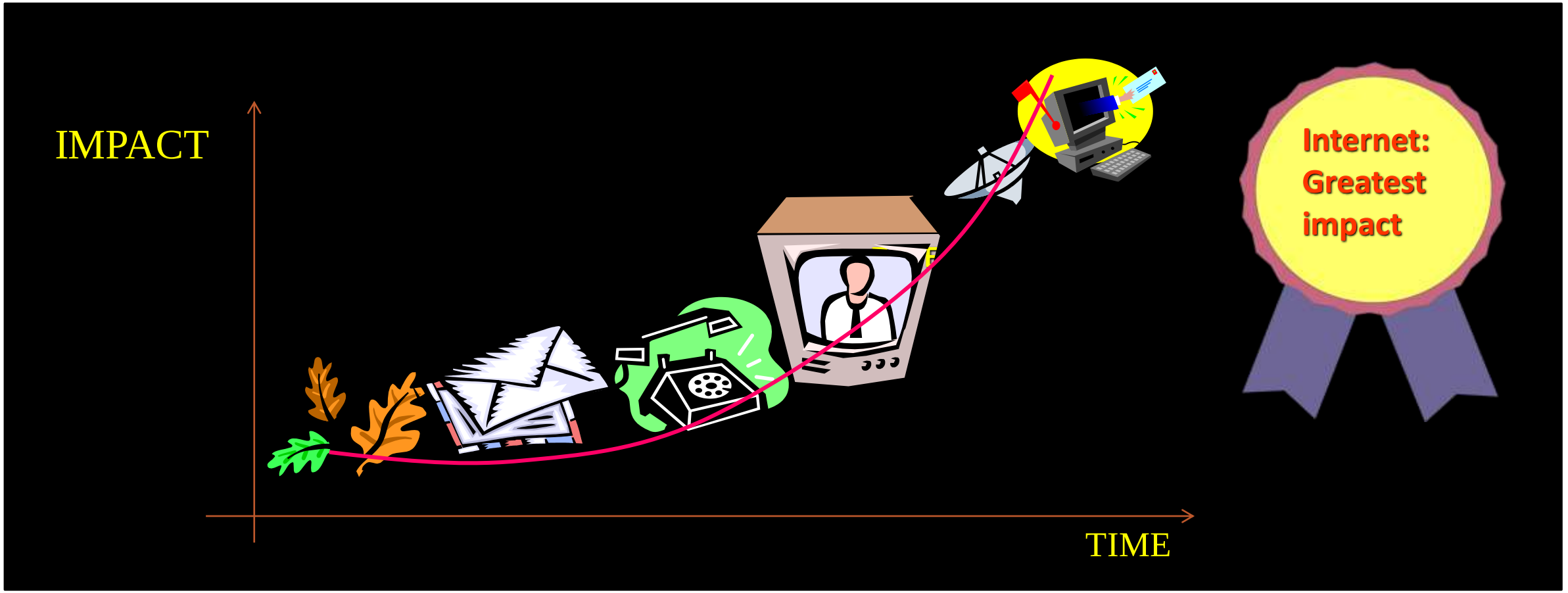


“In order to govern ,the question is not to follow out a more or less valid theory but to build with whatever materials are at hand. The inevitable must be accepted and turned to advantage”

Evolution of Education Technology



Specific Learning Objectives

Primary :

1. Build capability of students and teachers for handling technology for TLA purposes
2. Effective usage of technology to aid in management
3. Warrant academic progress of learners
4. Make operative use of simulation for TL purposes
5. Maintain global criterions of HE during COVID 19 Pandemic

Secondary :

1. Create e learning resources
2. Inculcate SDL skills amid learners

Introduction

1. There can be no doubt that technology has transformed the way education is delivered to people across the globe.

2. The emergence of sophisticated communication technologies and mobile devices has enabled a new generation of information consumers to satisfy their demands for knowledge without the need to meet in a physical location.

"this exact moment in time, right now, is the slowest rate of change you will experience ever again"

Learning models will need to change

TRADITIONAL LEARNING MODEL

DIGITAL LEARNING MODEL

How do people learn in a digital environment?
Is e-learning effective?
Are learners ready?
New learning model are needed

LMS

Courses
Documentation
Software
Tracking
LMS
e-Learning
System
management
Education

Use of e-learning in medical education

Acquisition of knowledge

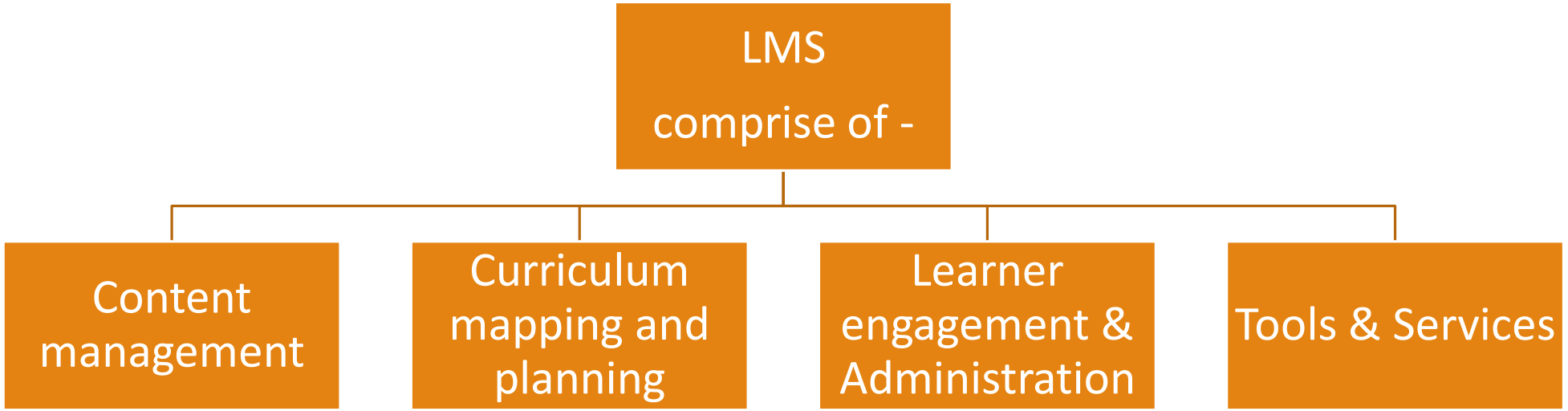
Learning Skills

Developing attitudes

Assessment

LMS: One solution to many problems

LMS (Learning Management Systems) : The Combinations of several frameworks to enhance the evaluation process.

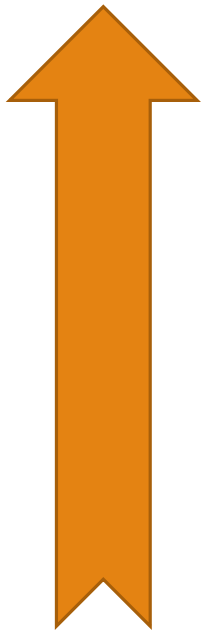


Features of LMSs

- **Course Management**
- **Assessment**
- **Tracking Progress**
- **Gradebook**
- **Communication Tools**
- **Social Connectivity**
- **Security and Privacy**
- **Ubiquitous access**

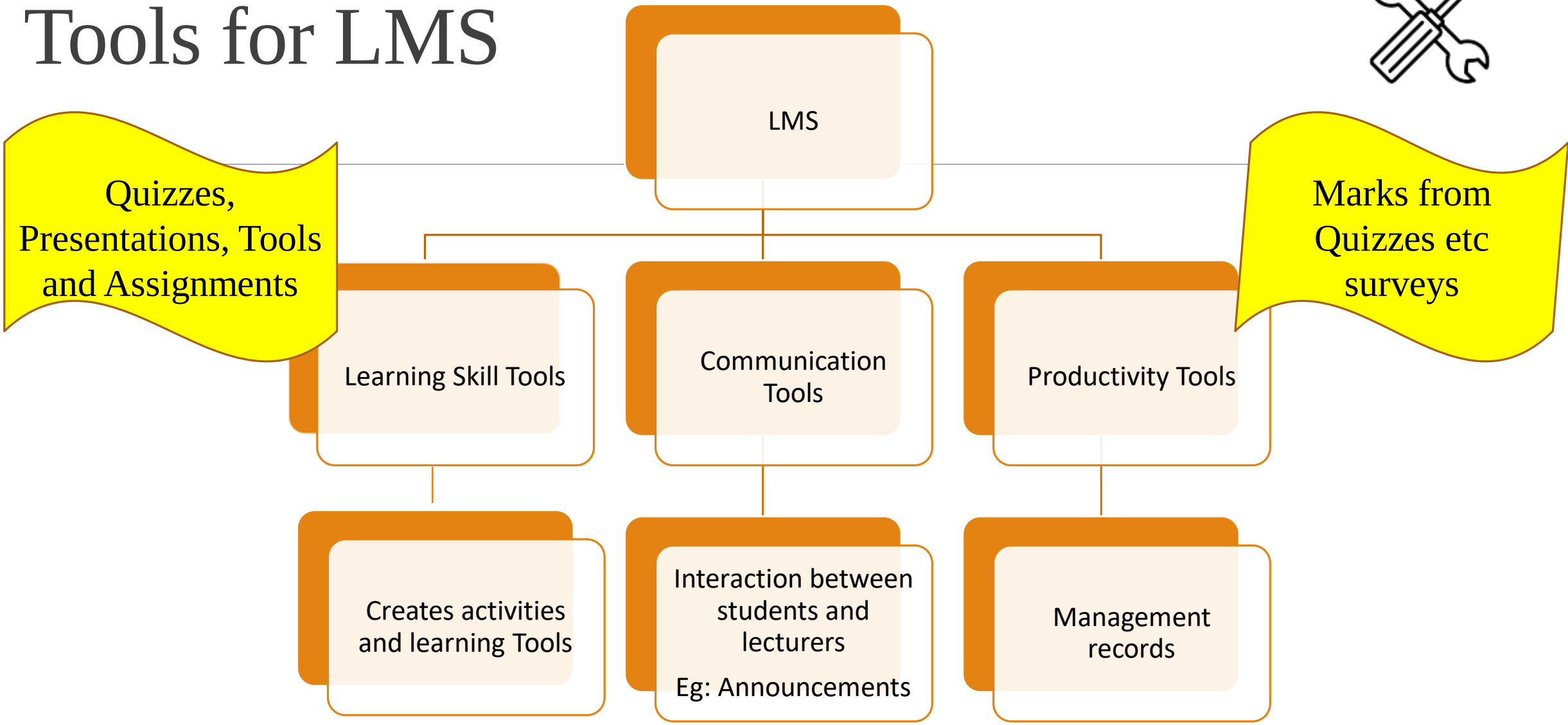
The LMS enables us to:

LMS

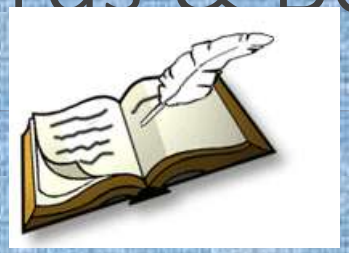


- Furnish learning experiences that are meant for individual learners
- Convenience for educators to indicate the notes and changes
- Provide the educators as well as learners the chance for virtual collaboration
- Form a global culture-sensitive, stamped existences for learner
- Allow to calculate globally as the organization expands

Tools for LMS

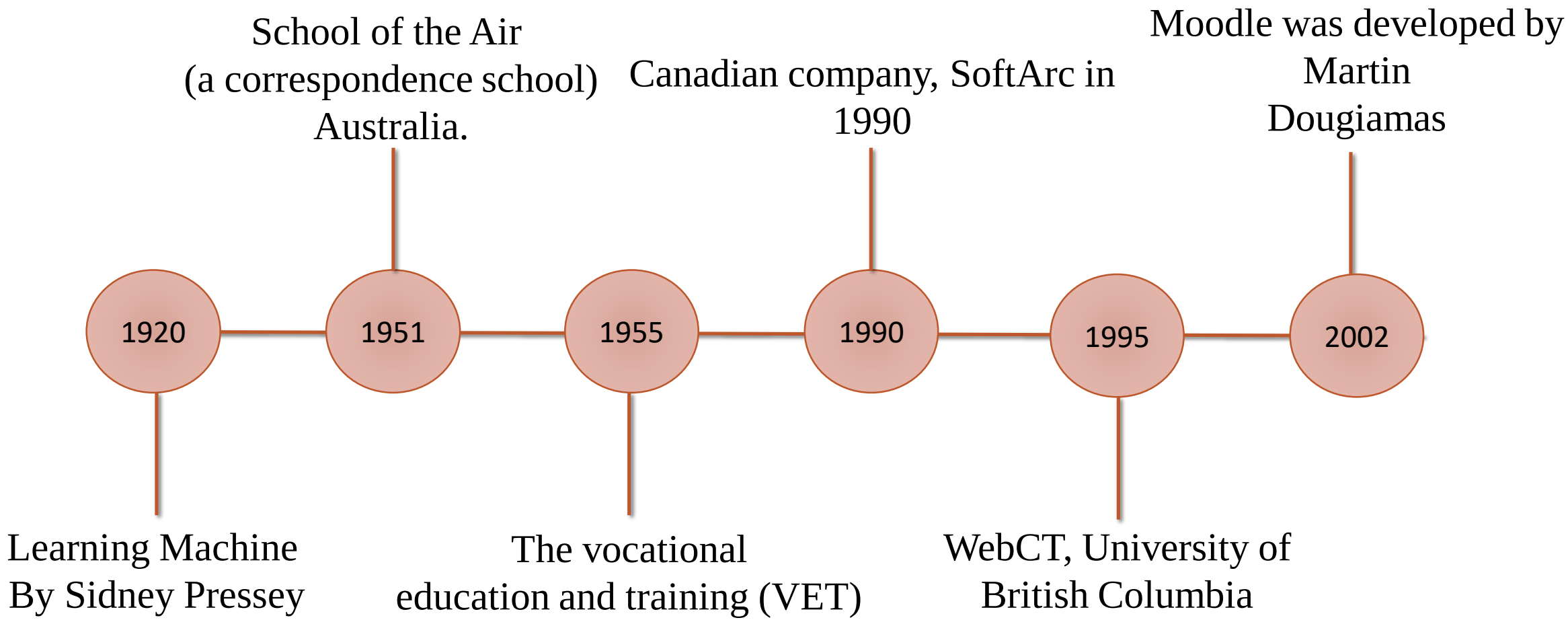


Evolution from Blackboards & Books to



Digital Screen & e-libraries

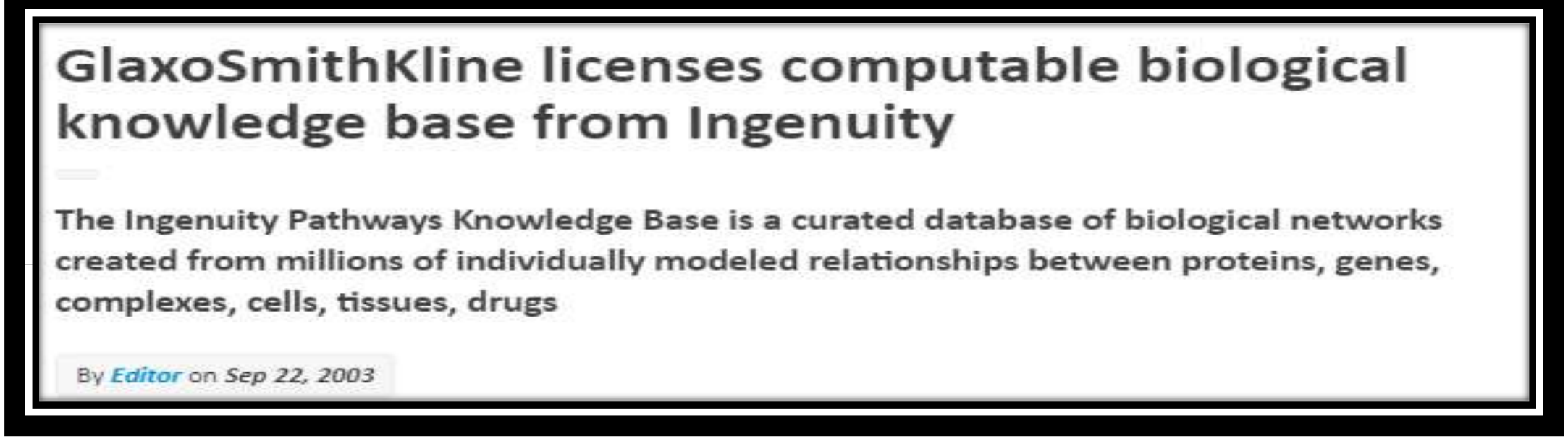
Historical Back-ground



Present Day Scenario in India

Symbiosis Centre of healthcare:

Pune has successfully implemented e-learning and is offering Post Graduate courses in Medico-Legal and health care management enabling e-learning doctors, nurses and other medical related professionals from all over the globe.



GlaxoSmithKline

has licensed part of ingenuity pathways knowledge base to facilitate genome-wide computational analysis of biological systems underlying diseases.

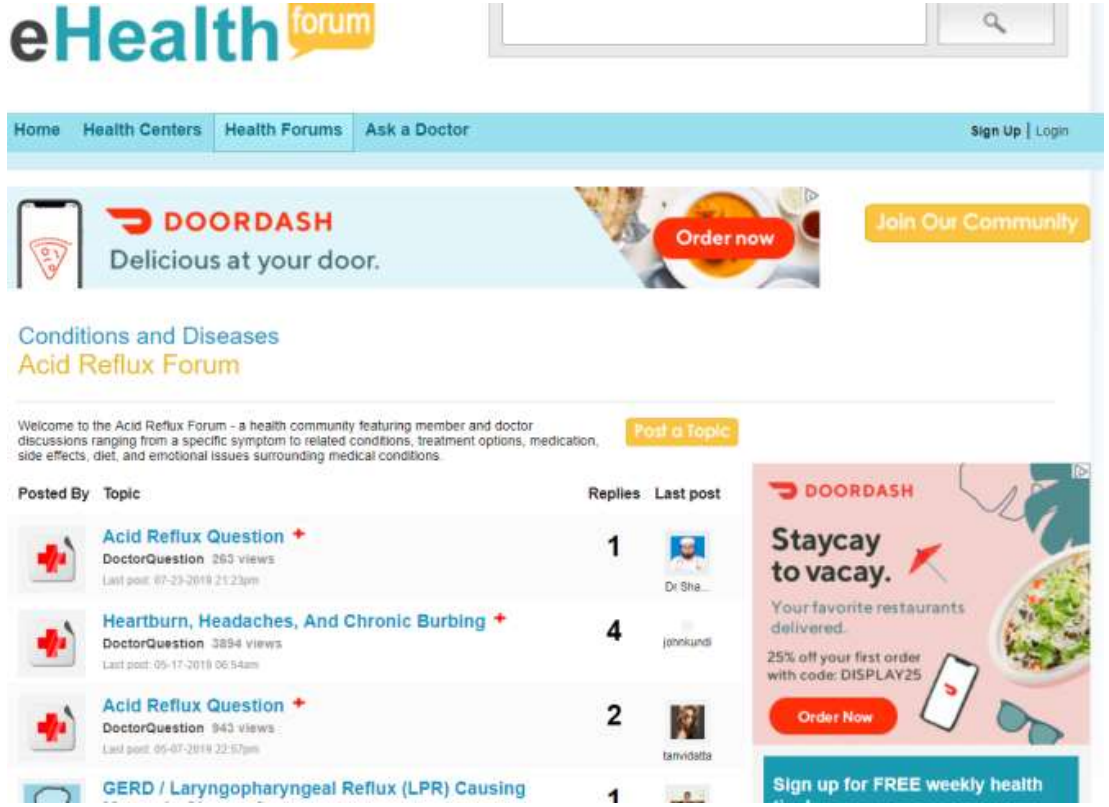
There are lots of sources of biological content out there, but nothing is of Genome-scale and human cured based information of our offering.

Present Day Scenario in India

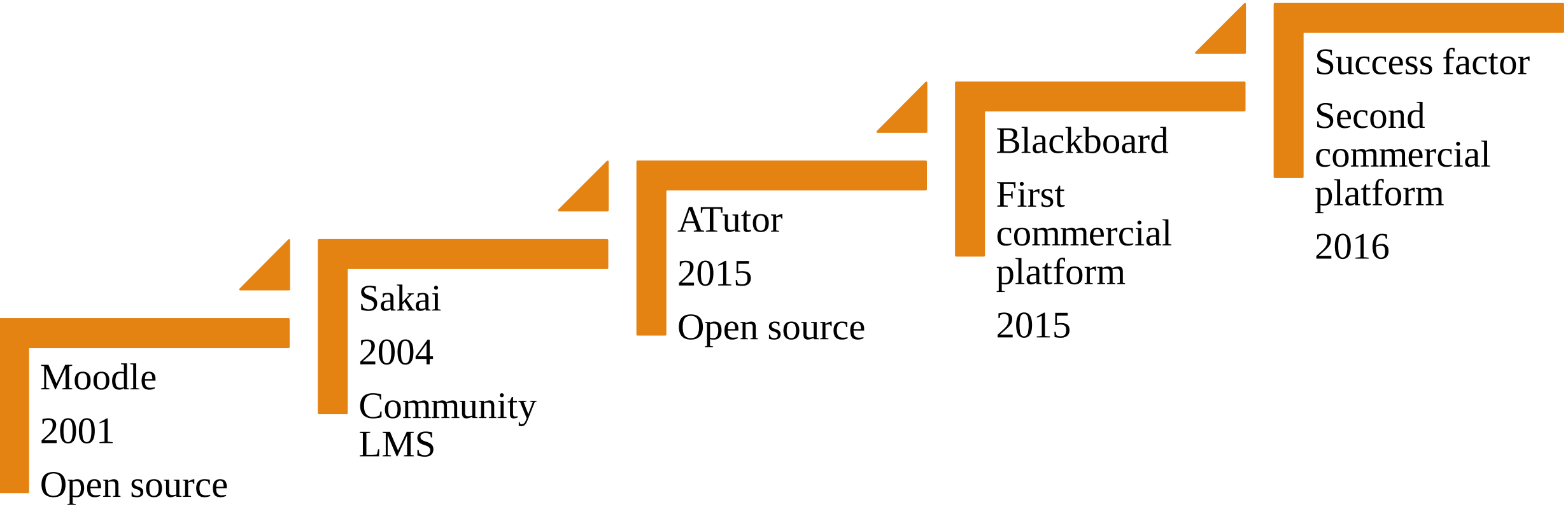
WHO

provides several resources in health information.

Development of various online medical libraries like WHO-discussion forum, Health Information of India Providing Health Online Library.



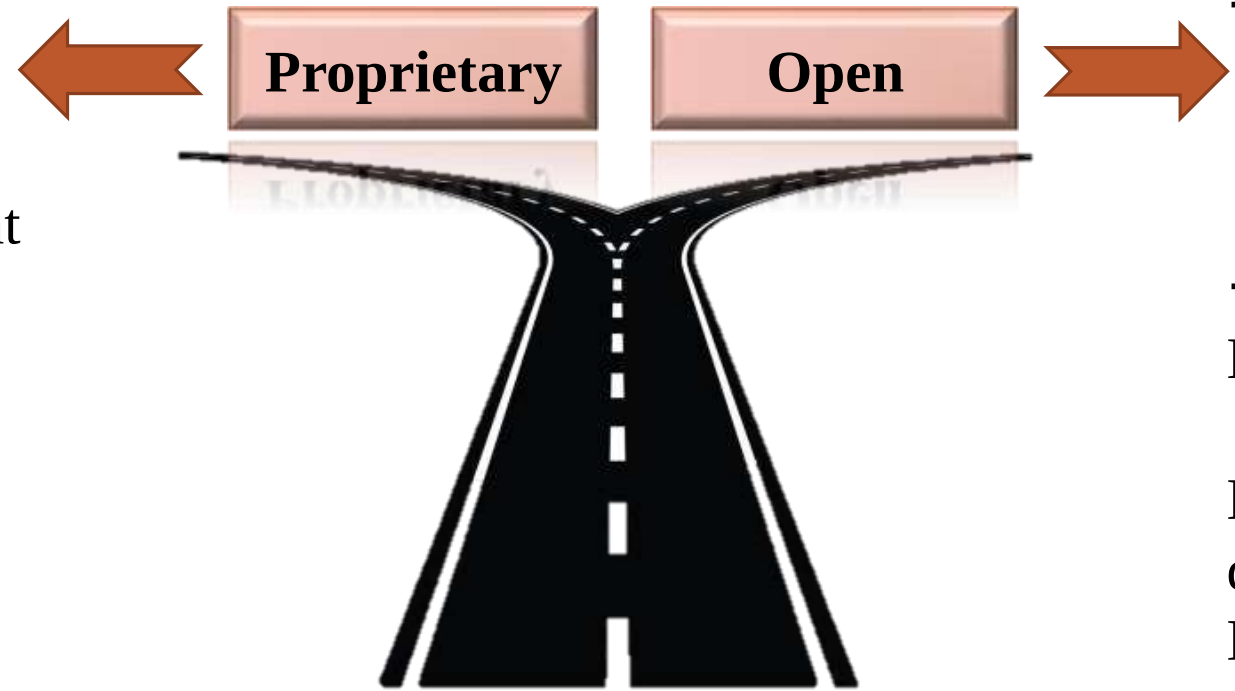
LMS platforms



LMS Systems

Inspired by research by the provision of web based resources.

Eg:. WebCT, developed at the University of British Columbia in 1995.



Developed by software specialists

→ making the source code readily available to organizations.

→ build their own tailored LMS solution.

Eg:. Moodle was developed by Martin Dougiamas in 2002.

National ICT Agenda

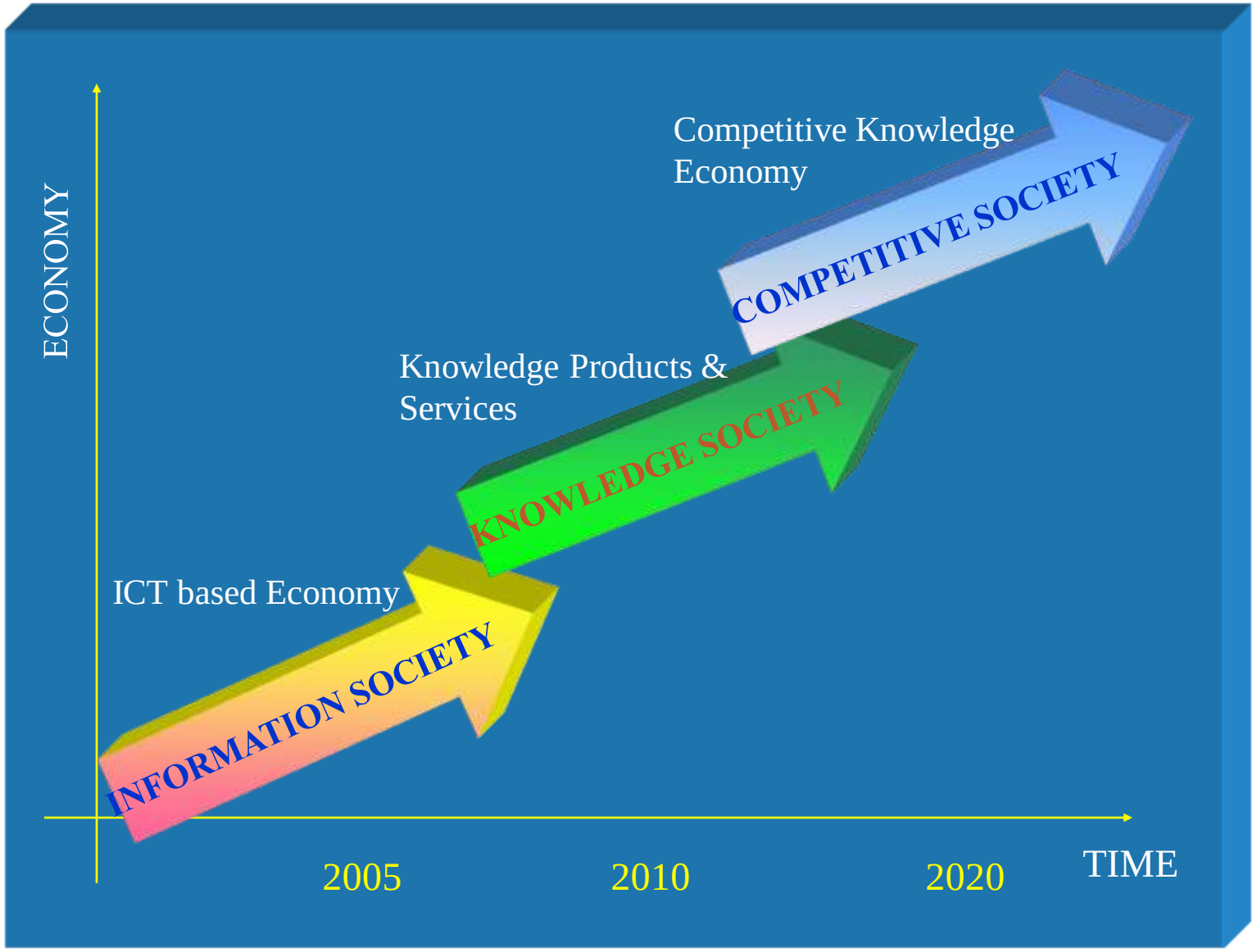
PEOPLE
- Work Culture
- ICT Skills
- Knowledge worker
- Learning Society
- United, moral & ethical

INFRASTRUCTURE
- Communication
- Fibre-Optic Cabling
- Gigabit ATM
- Satellite
- Transport/Logistic
- etc

KNOWLEDGE-BASED ECONOMY

APPLICATION & CONTENT
- Smart Schools
- e-govt.
- Smartcard
- Tele-medicine

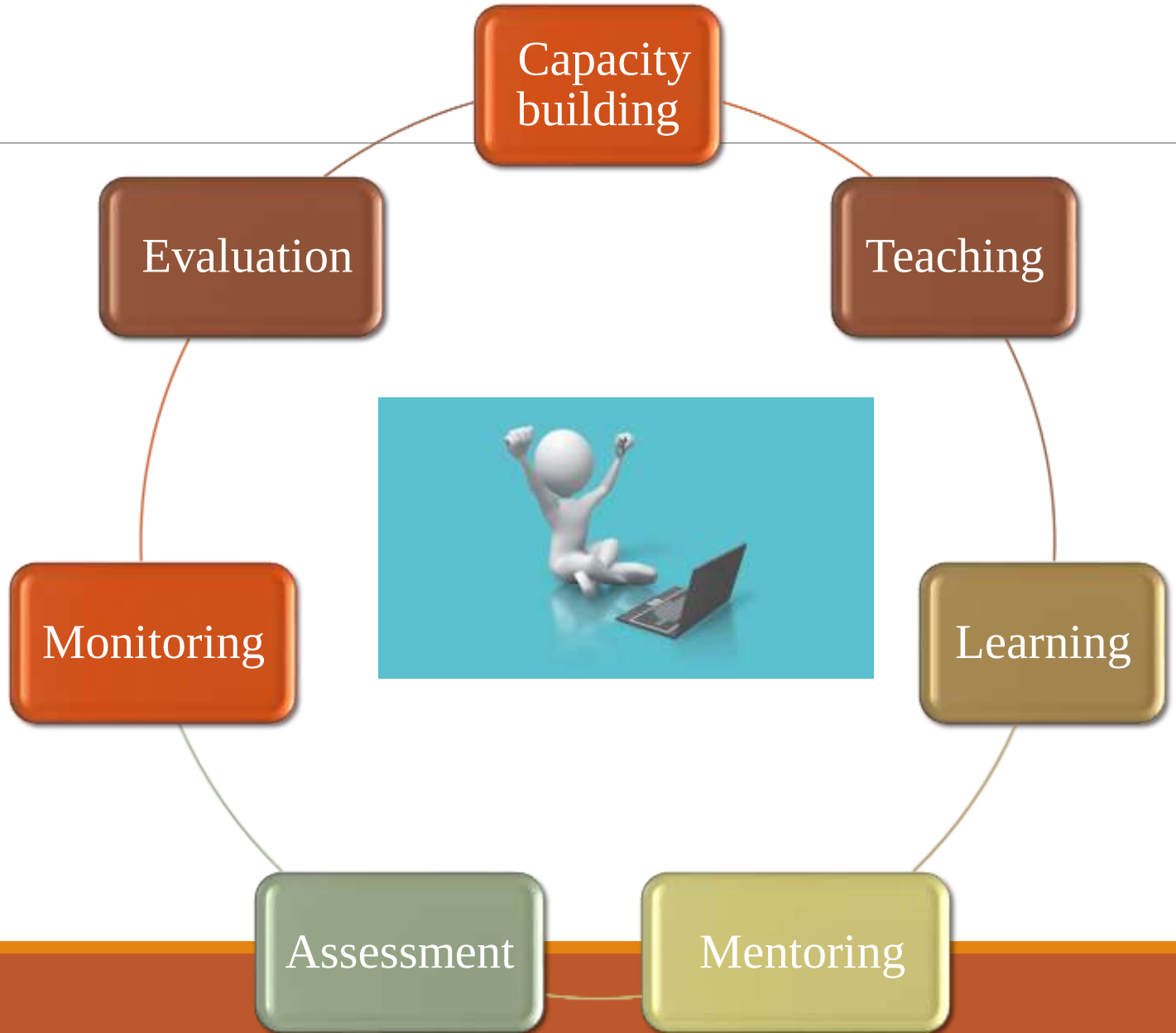
Nation’s ICT Education Vision

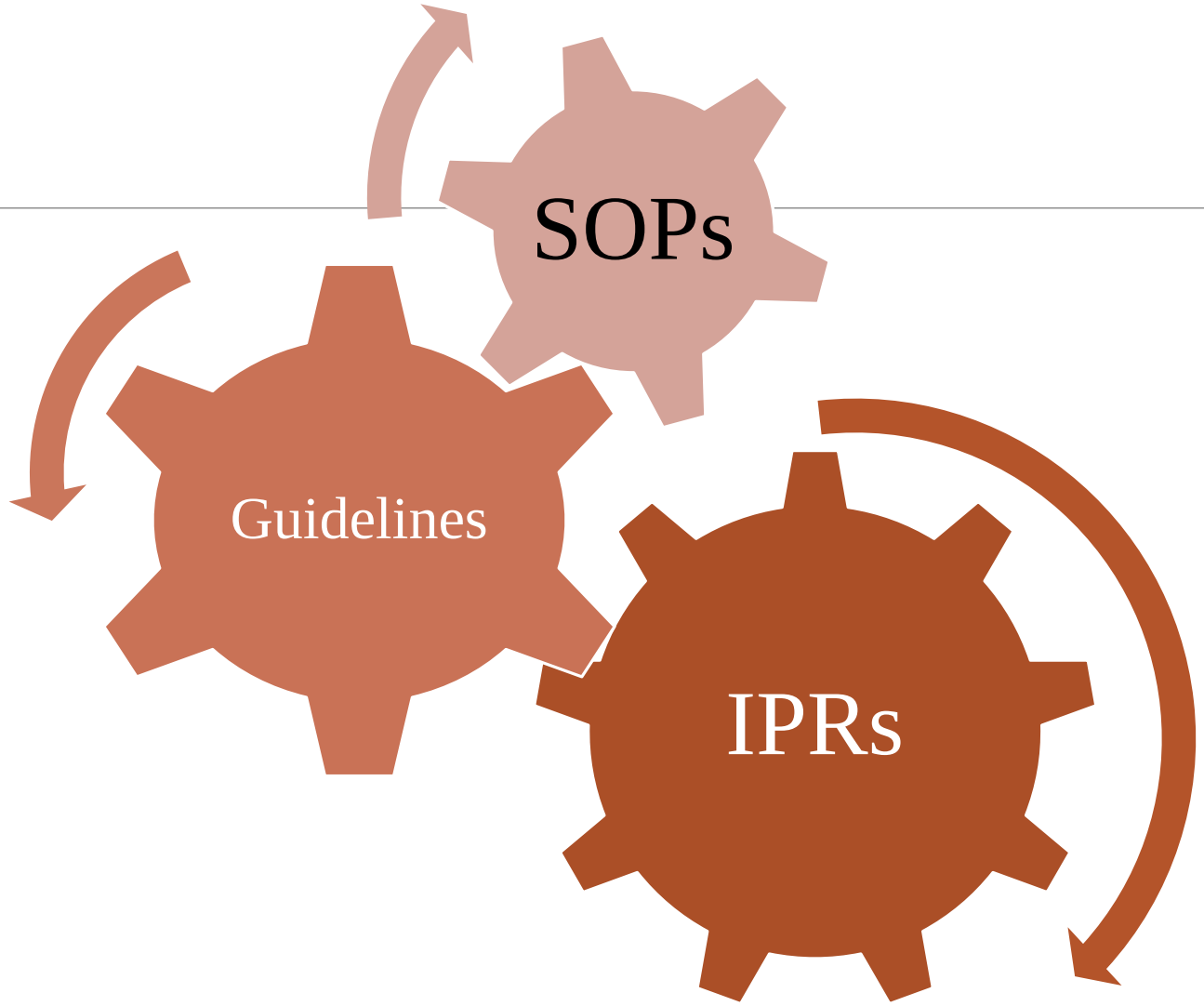


Need

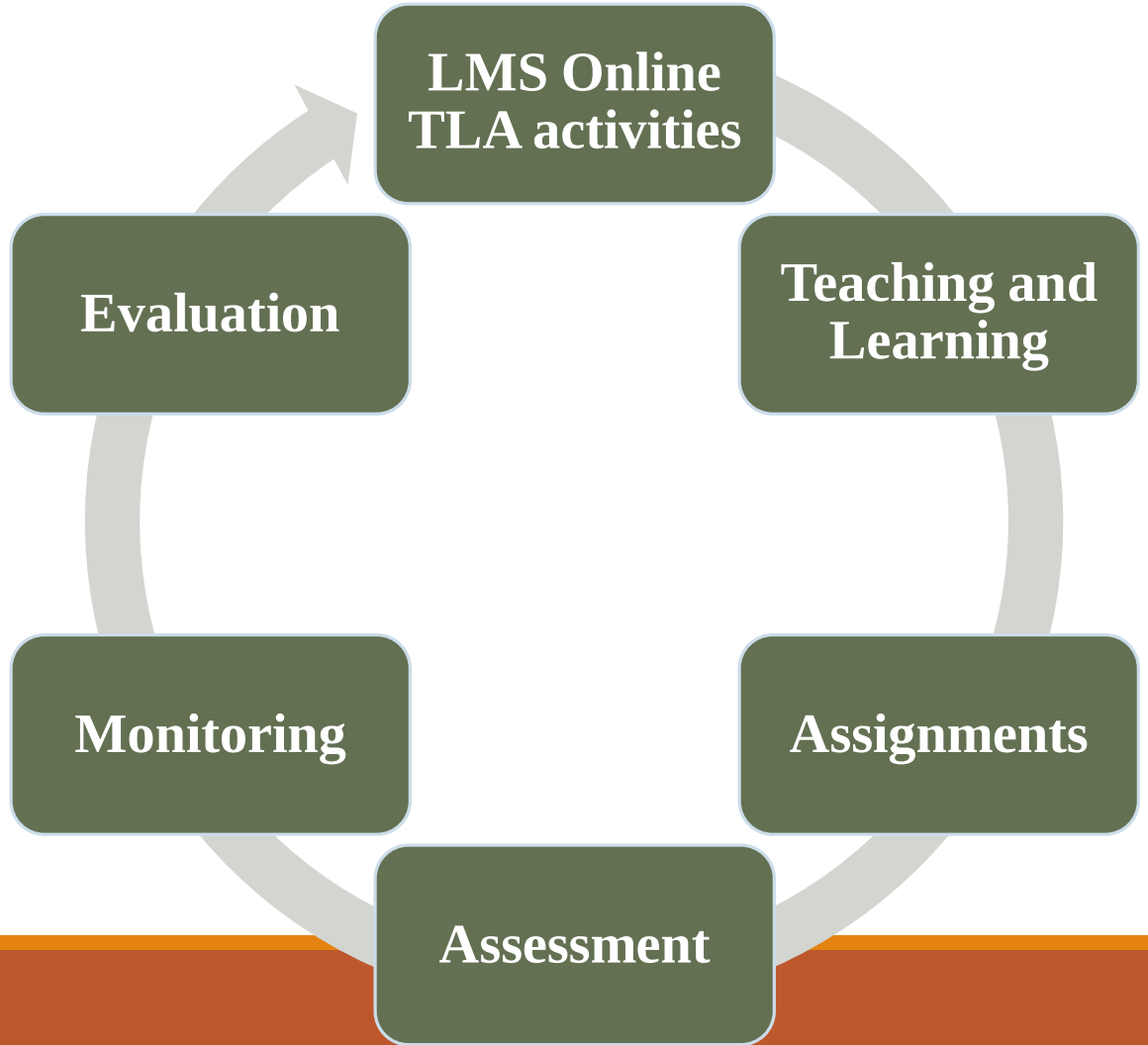
To ensure effective instruction during Pandemic lockdown, by judicious use of technology, supported by educational principles.

Latitude of initiatives




SOPs
Guidelines
IPRs

ICT based Teaching learning and assessment strategies for CBDE



Paradigm shift from learning to e-learning

E-Learning : Blended Mode

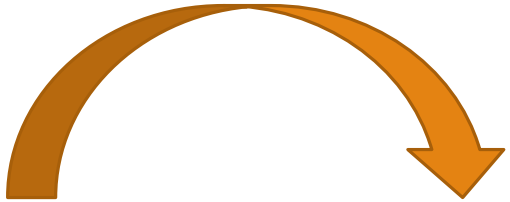
Chalk-and-board has long ruled the classrooms

will not be eliminated

Less emphasis

Interactive Digital Content:

- more emphasis
- on demand learning
- interactive



Learning to e-learning

1. E-learning is also called Web-Based Learning, Online learning, Distributed learning, computer-assisted instruction or internet based learning.

2. E-learning adds many dimensions to the educational process and if utilised well, has the potential to enhance both the students and instructors educational experience.

3. Centres on the production of interactive scenarios that allows trainees to develop and practice the key skills outlined in the curriculum.

Teacher’s Obligation

Lay Foundation for Lifelong learning

Incorporate ‘old’ & ‘new’

Teacher’s Obligation

Encourage Collaborative Learning

use all available technology

Incline towards e-learning

1. Education has changed dramatically over more than a year, with a considerable rise of e-learning, whereby teaching is executed remotely and on digital platforms.
2. Digital platform allows a student to attain transferable skills and competencies.
3. It is learner-focused and not dependent on any other factor.

e -lectures	e -tutorials	e-practical	e- clinics	Videos of clinical procedures

Traditional & e-learning Approach

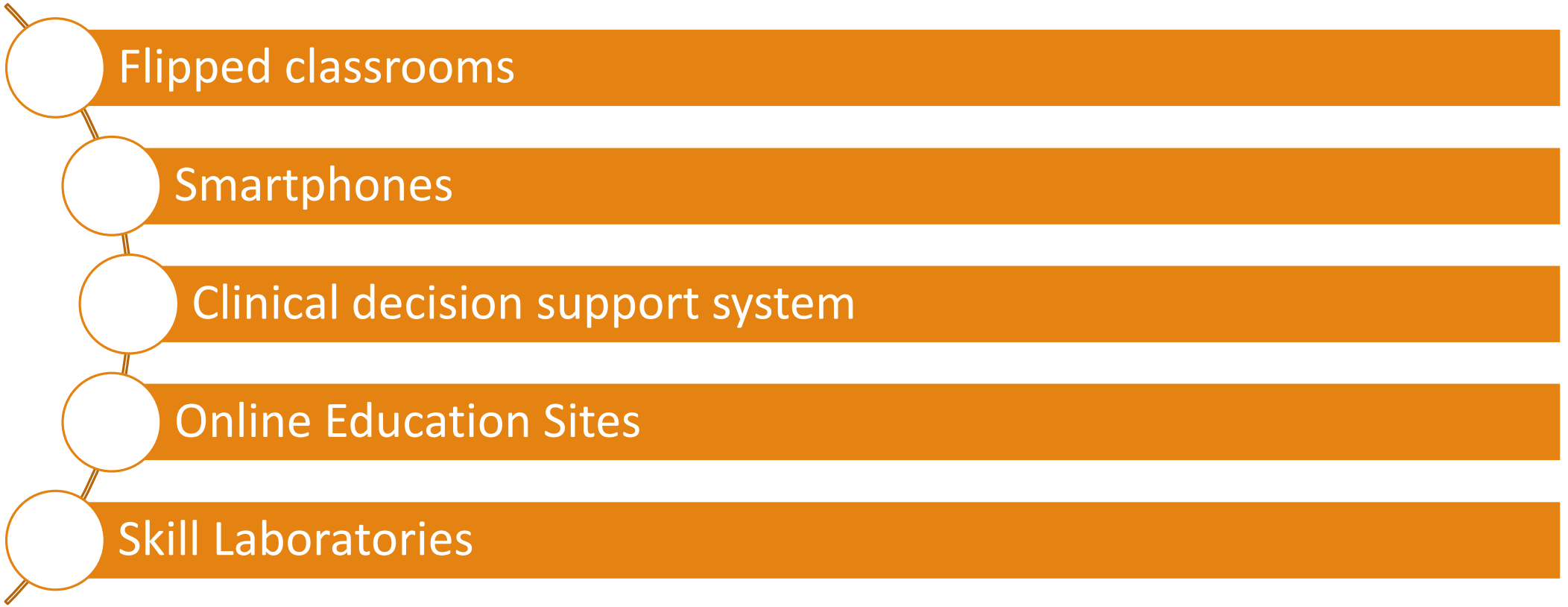
Traditional and E-learning approaches		
	Traditional Classroom	E-Learning
Classroom	• Physical – limited size • Synchronous	• Unlimited • Anytime, anywhere
Content	• PowerPoint/transparency/etc • Textbooks/library • Video • Collaboration	• Multimedia / simulation • Digital library • On demand • Syn & Asyn. Communication
Personalisation	• One learning path	• Learning path and pace determined by learner

Teaching aids will change

Blackboard → **OHP** → **TV/VHS** → **LCD PC Whiteboard**

LMS

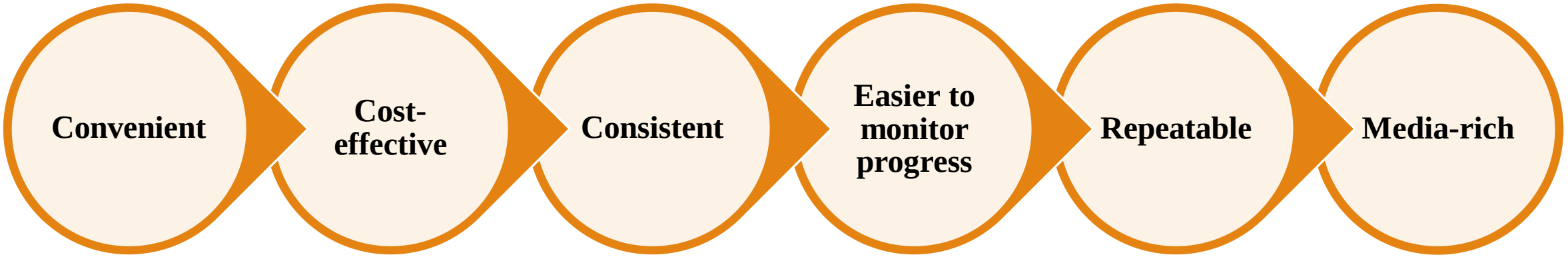
Modalities of e-Learning



Application of concept

Domain	Identification of competencies accordingly
In clinical medicine	Lectures and short group discussions
Reasoning	Virtual Patients
History & Examination	Standardized patients
Procedure	Simulation
Hands-on	Real-life patients

Benefits of E-Learning



Evaluation of e-learning for medical education in low- and middle-income countries: A systematic review

Sandra Barteit [a,*], Dorota Guzek [a], Albrecht Jahn [a], Till Bärnighausen [a,b,c], Margarida Mendes Jorge [a], Florian Neuhann [a]

1. It identified and reviewed 52 studies on e-learning for medical education in LMICs. Most of these studies were from UMICs in Asia, South America or Africa, while only a few were from lower-middle-income-countries (only one from an LIC)

2. It was found that a total of five methods (questionnaire, document review, interviews, focus group discussions, system log data) were used to evaluate a wide spectrum of outcome measures and most corresponded to an individual level of assessment.

3. In line with the predominance of subjective evaluation of the learner's perspective, many studies defined e-learning effectiveness based on subjective measures, such as perception, satisfaction, opinion, and student feedback.

Which LMS is better?

SumTotal → human resources field compared to the other platforms

Moodle → is the recommended open source platform.

Meets the needs of students and it has had more than 80 million users.

For institutions that have larger budgets→ **Blackboard** is recommended.

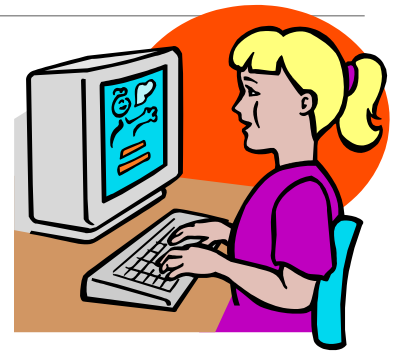
Characteristics	LMS					
	Open Source			*Commercial*		
	Moodle	*Sakai*	*ATutor*	*Black board*	*Success cess-Factors*	*Sum Total*
Based on the Cloud	✗	✗	✓	✓	✓	✓
Flexible	✓	✓	✓	✓	✓	✓
Easy to use	✓	✓	✓	✗	✓	✓
Able to integrate with other systems	✓	✓	✗	✗	✗	✓
Accessible	✓	✓	✓	✓	✓	✓
User-friendly	✓	✓	✓	✓	✓	✓
Synchronous and asyn-chronous interaction	✓	✓	✗	✓	✗	✗
Able to see who is online	✓	✓	✗	✗	✗	✗

Delivery mode will change

BRICK

Delivery Mode
100 : 0 (F/T)
80 : 20 (F/T)
20 : 80 (DE)

CLICK



Growing student population

Increase in tuition fee

Lack of facilities and funding

More virtual universities

Cost effective solutions (e.g. e-learning)

Privatisation of education

Future of LMSs

- Cloud like Functionality
- Adaptive Learning
- Microlearning with LMSs Connected Devices
- Analytical Tools
- Social Capabilities
- Gamification

Limitations of LMSs

1. Failed e-learning implementation blocks resources and slows down the overall development process and people may simultaneously lose their trust in the usefulness of technologies for medical education and its potentially “revolutionary effect” in low-resource contexts.

2. Main weaknesses for the sustainability of e-learning interventions have been identified and include inadequate training of all involved parties, poor technological support, unmet expectations and inadequate allotment of financial resources

Summary

- Humans are meant to take care of their mind and not computers.
- Proper learning through LMS requires a stable Infrastructure which is undeveloped
- To attain a efficient e-Learning modality demands a highly developed intellectual infrastructure

CHANGE IS

HARD AT THE BEGINNING
MESSY IN THE MIDDLE
GORGEOUS AT THE END

THANK YOU
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