

## • Education 4.0 -Are we still relevant

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Director - Executive Board of BANPT

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"Education is the Most Powerful weapon which you can use to change the world."

Nelson Mandela

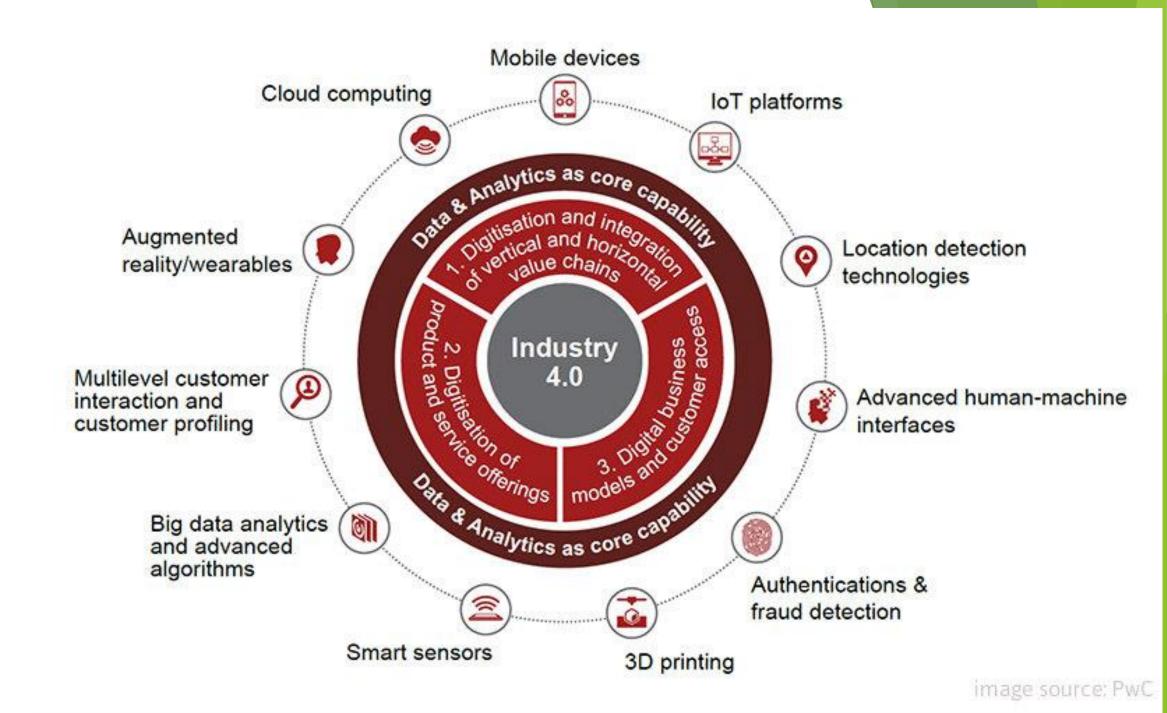


#### The future is here

Siri, <u>Alexa</u>, and Google Duplex

Meet Jill Watson (https://www.cc.gatech.edu/holiday/jill-Watson)

Meet LISA the robot lawyer (<u>https://robotlawyerlisa.com/</u>)



#### Foreseeable impacts

- Different setting of workplace
  - Interoperability between: people, devices, machine, sensors...
- Different set of competencies
  - ▶ data, technology, and human literacy  $\rightarrow$  robot proof
- New society
  - Social credits, X-on-demand, digital marketplace, etc.
- New approach to learning/new way of thinking
  - Digital tutors, students' learning ability, learning environment;

## Challenges for the workforce

- Rapid change of needed competencies
- Improvement and expansion through the use of robots
- Creation of new jobs for high skilled workers in the areas of planning, configuration and maintenance of the new technologies
- Formal qualification is no longer used as entry requirement for jobs
- Increased expectations regarding individual flexibility

#### Akreditasi PT dan PS di Indonesia

ΑΡΤ	Peringkat	31 Desember 2016		31 Deser	mber 2017	31 Desember 2018		
		Jumlah	Persen	Jumlah	Persen	Jumlah	Persen	
	Α	48	4%	65	4%	85	4%	
	В	336	30%	531	34%	725	37%	
	С	733	66%	954	62%	1.164	59%	
	Total	1.117	100%	1.549	100%	1.974	100%	

APS	Peringkat	31 Desember 2016		31 Desem	ber 2017	31 Desember 2018		
		Jumlah	Persen	Jumlah	Persen	Jumlah	Persen	
	Α	2.369	12%	2.823	15%	3.471	17%	
	В	8.875	46% 41%	10.323	53%	11.107	56%	
	С	7.849		6.171	32%	5.273	27%	
	Total	19.093	100%	19.317	100%	19.851	100%	

#### Akreditasi Perguruan Tinggi – 31 Juli '19

PT Penyelenggara	Α	В	С	Total	Expired
PTAN	7	48	19	74	
PTAS		35	308	343	
PTKL	7	67	4	78	
PTN	42	48	3	93	1
PTS	39	679	946	1664	14
Total	95	877	1280	2252	15

#### Akreditasi Program Studi – per 31 July '19

PT	BAN-PT			LAMPTKES			Tetel	Expired	Expired Sudah		
Penyeleng gara	A	В	С	Total	A	в	С	Total	Total	Belum Mengajukan	Mengajukan
PTAN	296	873	250	1419		11	4	15	1434	14	5
PTAS	13	548	875	1436					1436	20	5
PTKL	75	232	38	345	28	283	49	360	705	1	1
PTN	2050	2544	373	4967	394	210	18	622	5589	5	18
PTS	850	5679	2871	9400	43	1348	561	1952	11352	73	30
Total	3284	9876	4407	17567	465	1852	632	2949	20516	113	59

#### Trend1: demographic change and diversit

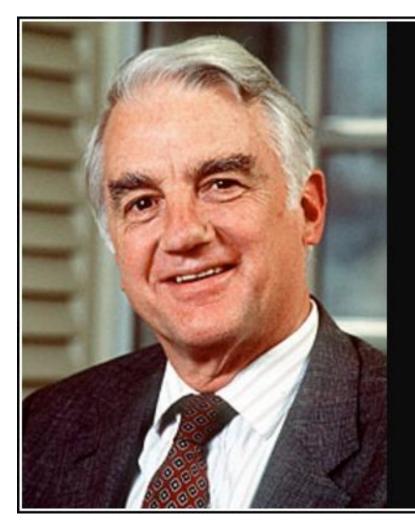
Global increase of student numbers, but with regional differences

Increasing number of non-traditional students

More and more working students /life long learning



Challenge  $1 \rightarrow$  need to support more complex institutional setting as well as variety of programmes



As countries embrace mass higher education, the cost of maintaining universities increases dramatically relative to an elite system.

— Derek Bok —

#### Trend2: Digitalisation

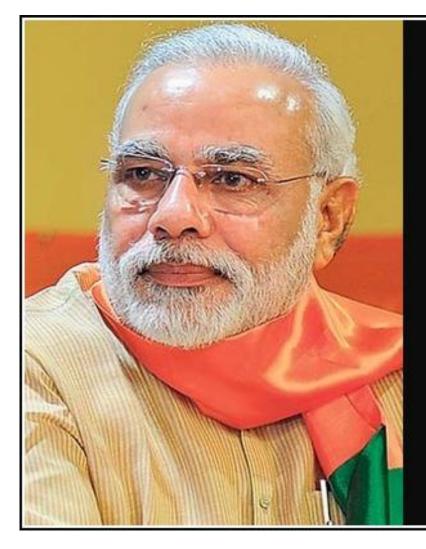


Learning technologies are rapidly changing

Big data is becoming basis for decision making as well as operation

Job market is rapidly changing driven by new technologies;

Challenge 2  $\rightarrow$  need to keep track with new technological possibilities (learning analytics, mobile feedback, staff development...) AND cycles of programme innovation and development will need to be more flexible



I dream of a Digital India where quality education reaches the most inaccessible corners driven by Digital Learning.

— Narendra Modi —

#### Trend 3: Competition

More and more higher education institutions emerge every year, including non traditional providers

Governmental funding is often decreasing and the competition for students and research funds grows fiercer

Competitors include free contents on Internet



Challenge 3  $\rightarrow$  need to focus more on environmental analyses, become more strategic and will likely become more intertwined with higher education marketing

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You should learn from your competitor, but never copy.

Copy and you die.

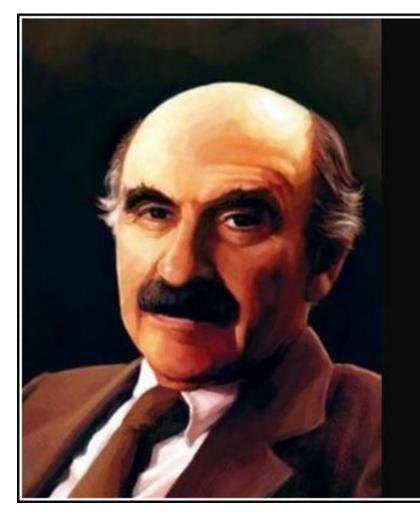
# Trend 4: Entrepreneurship, creativity, innovation



Interdisciplinary and cross-disciplinary research and teaching are clashing with how higher education is traditionally organised

Great societal challenges require integrative solutions

Challenge 4  $\rightarrow$  need to support innovation (instead of documenting what is already there) and to become better aligned with areas like strategic planning, organisation development, didactics...



Creativity is thinking up new things. Innovation is doing new things.

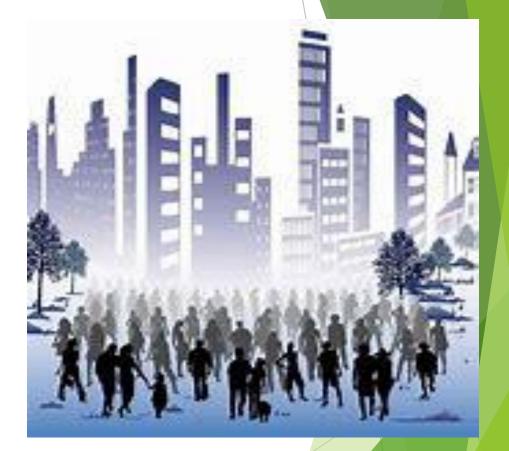
— Theodore Levitt —

#### Trend 5: Service to Society (Third Mission

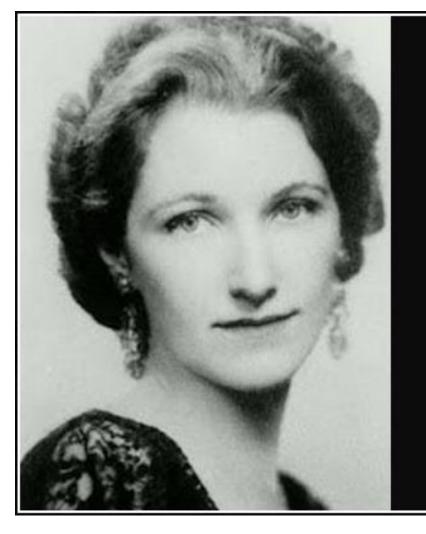
Service to society and civic engagement are becoming more and more important for HEIs

EQA and IQA are still rather focused on teaching, research and structure/ infrastructure

University loses its legitimacy when it fails to fulfill its obligations to the society



Challenge 5  $\rightarrow$  need to find ways for measuring the instutional impact to society as well as its subsequent impact on the institution



Nothing in science has any value to society if it is not communicated, and scientists are beginning to learn their social obligations.



#### Quality challenges

Redefining quality
Jobs market is changing fast
Rethinking objectives of HE
Technocratic vs idealistic
Setting standard
Global standard?



## **Development Trends in EQA**

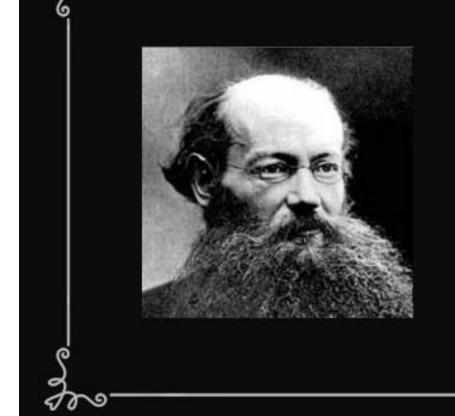
- From governmental lead (inspectoral approach) to market demand approach
- From compulsory to voluntary
- From input to outputs and outcomes
- From academic focus to much broader functions such as social responsibility

## Trends in IQA

- From assurance to enhancement
- Students' involvement as core element
- Quality as core values
- Data and analytics are integral parts of QA function
- Explicit indicators and dashboard

## **Closing remarks**

- To stay relevant, substantial changes are needed both at sector and institution levels
- Quality measures need redefinition
- Quality management becomes core-functional areas and is embedded within
- Institution autonomy is a must



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Competition is the law of the jungle, but cooperation is the law of civilization

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~ Peter Kropotkin

