

Emerging Technology and Youth Empowerment

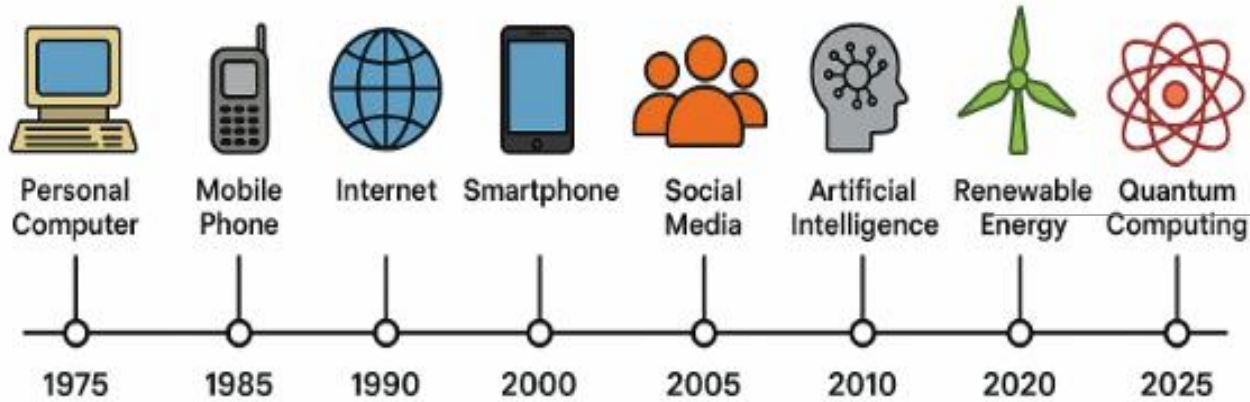
Shaping Tomorrow, led by Tech-savvy Youth of Today

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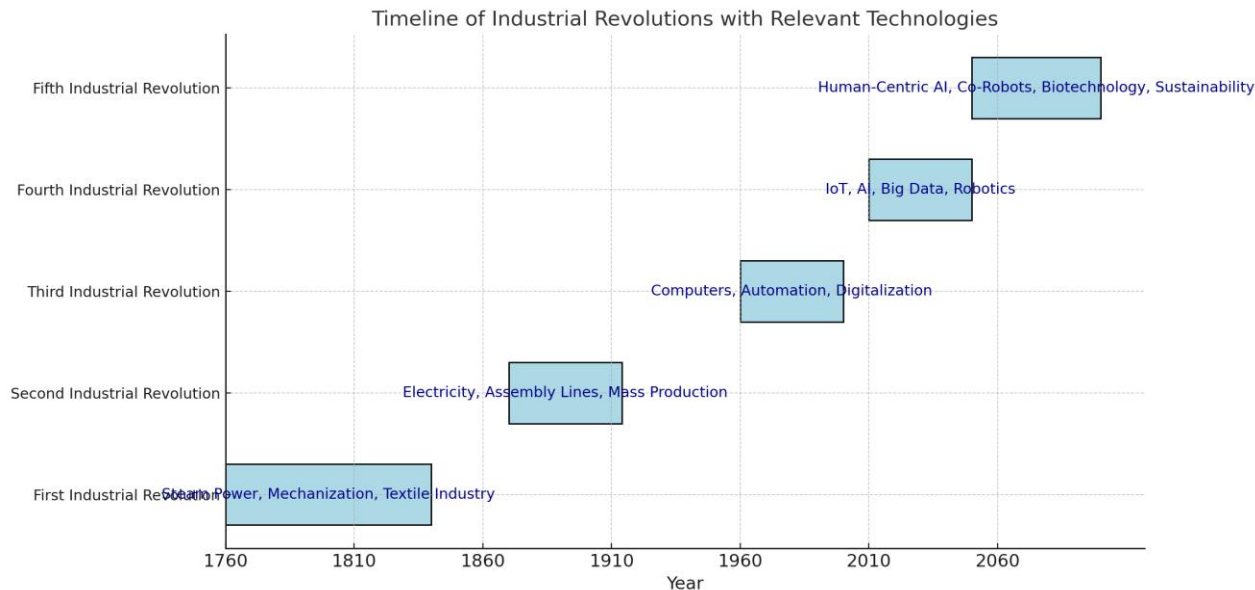
What are we talking about?

- What are Emerging Technologies? Are they outpacing us? Are they in a collision course with my ethics, and belief?
- Why Youth matters? What entails Youth Empowerment? 65% of today's students will work in jobs that don't exist yet-- Does it make you concerned?
- Why are we tying these two up? How to leverage/integrate Technology for greater good?
- Can technology make one a better Muslim and vice versa? Can there be a symbiotic relationship? What are some Manifestations of this Integration?
- How can You(th) make the empowered contribution?



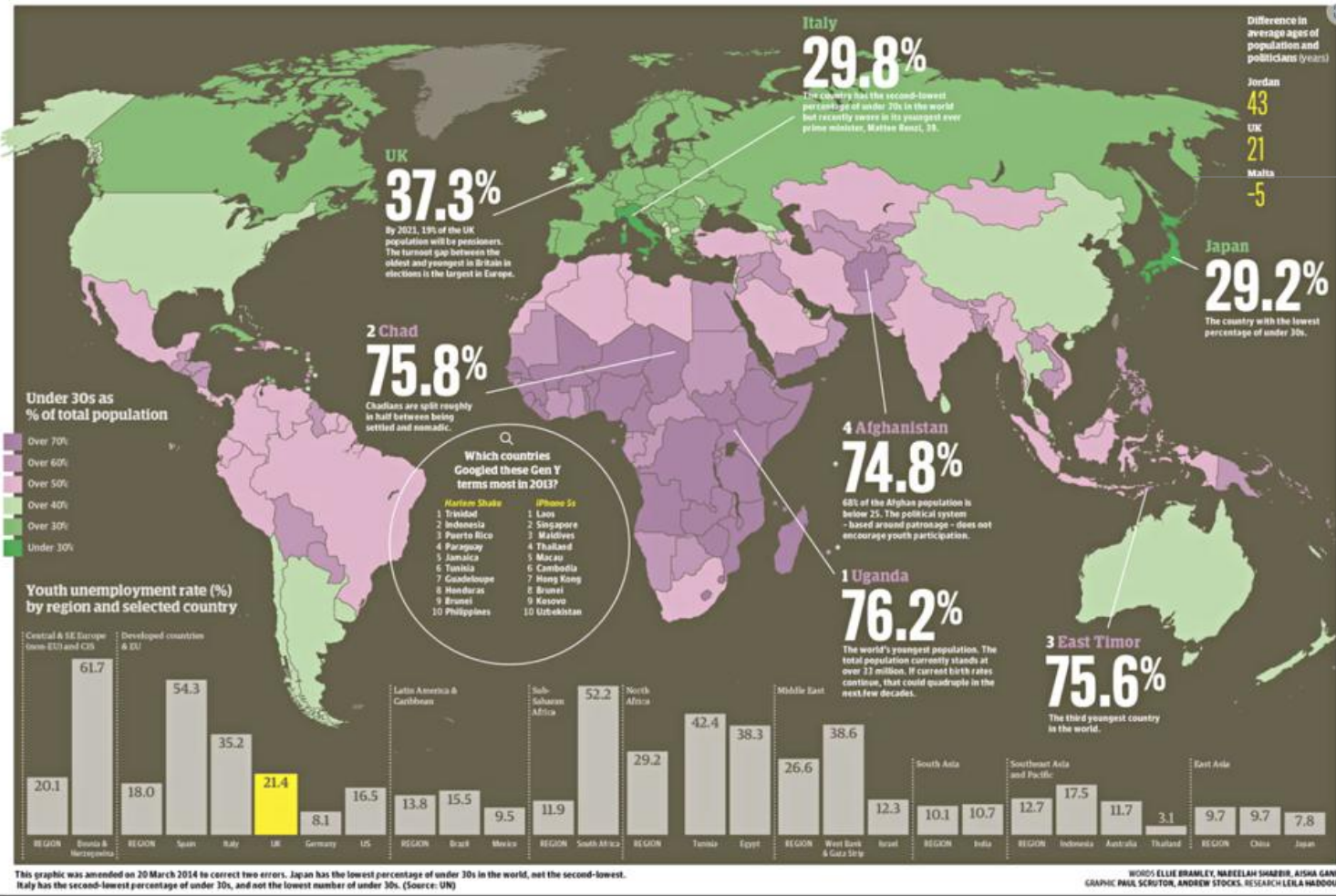
Emerging Technologies

- Radically Novel and Disruptive
- Significantly Impactful
- Fast changing
- Synergistic, Decentralized
- Uncertain & Ambiguous in terms of Safety, security, sustainability, ethics etc



Youth Empowerment

- Youth are: Change catalysts, Agile, impactful, coalition building, steadfast, Future Leaders
- Empowerment involves
 - Flexible, versatile Access and Usage
 - Producer vs Consumer
 - Innovation, Leadership and Entrepreneurship
- Empowerment comes with Responsibility



Global Youth Heatmap

Challenges of Emerging Technologies

Technological Challenges- Bias,
Insufficient testing

Economic Challenges: Job
Displacement, uneven economic
growth

Social Challenges: Digital Divide,
Resistance to change

Ethical & Governance
Challenges: Lack of Regulatory
frameworks, Ethical Misuse

Environmental Challenges:
Energy consumption, resource
scarcity

Geopolitical challenges: Cross-
border issues,
Misinformation/Disinformation

Human-centric challenges:
Mental Health, Human-Machine
interface

**Your mind is
a garden. Your thoughts
are the seeds. You can
grow flowers or you can
grow weeds.**



Overcoming the Challenges

- How can You(th) navigate through the challenges and best leverage the opportunities?
- Solution can be multi-faceted and involves good governance, policies/guidelines, resources, upskilling/education/training along with curriculum, culture, ethics, morality, and social responsibility, etc.
- What can be done as an individual & institution?
 - Have the Right Mindset - Don't forget your IPAD
 - Learn/Re-learn, Upskill, Train
 - Act locally, Think globally
 - Adapt, Integrate, Collaborate
- Technology in Education use case

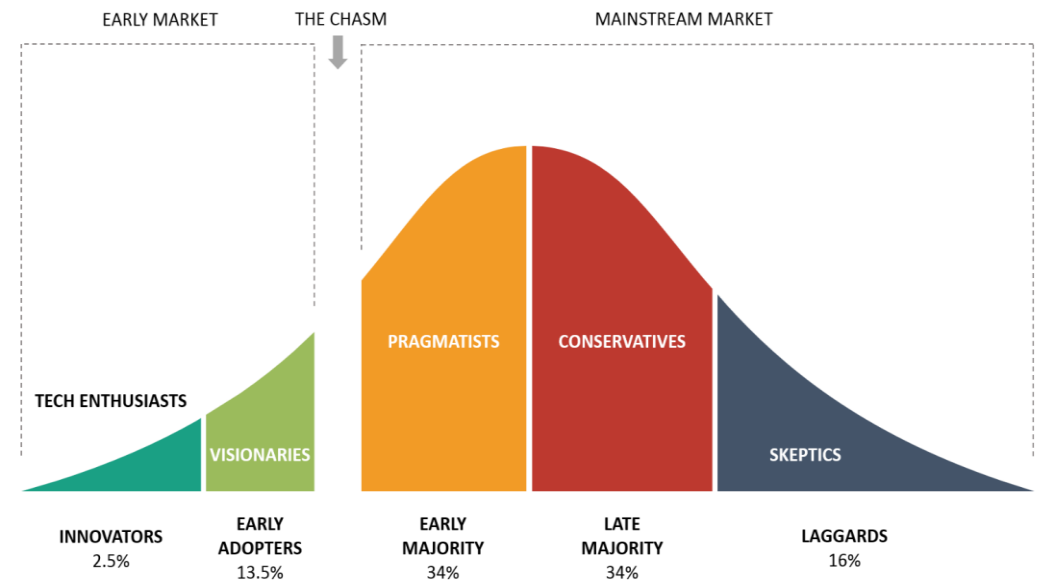
Technology Mindset: Perspective and Approach

Sometimes the thing that is holding you back is all your mind.



- A great Gift from Allah swt (45:13, 3:110). Privilege plus responsibility
- Prophet Ibrahim's Integration perspective- Signs and Science lead us to Truth; Faith and Action

وَإِذْ قَالَ إِبْرَاهِيمُ رَبِّ أَرِنِي كَيْفَ تُحْيِي الْمَوْتَىٰ ۖ قَالَ ۙ أَوَلَمْ تُؤْمِنِ ۖ قَالَ بَلَىٰ وَلَٰكِن لِّيَطْمَئِنَّ قَلْبِي [2:260]



- Which group you belong to?
- Do you have to be a tech-nerd?
- Apply your competitive advantage

Whatever you are good at, enhance it with Technology

Win The Race of Technology & Education

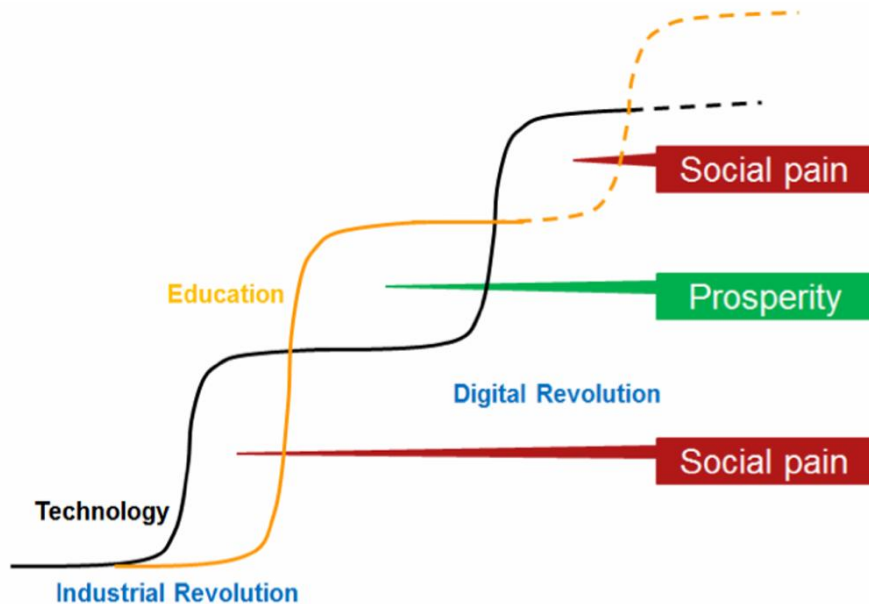
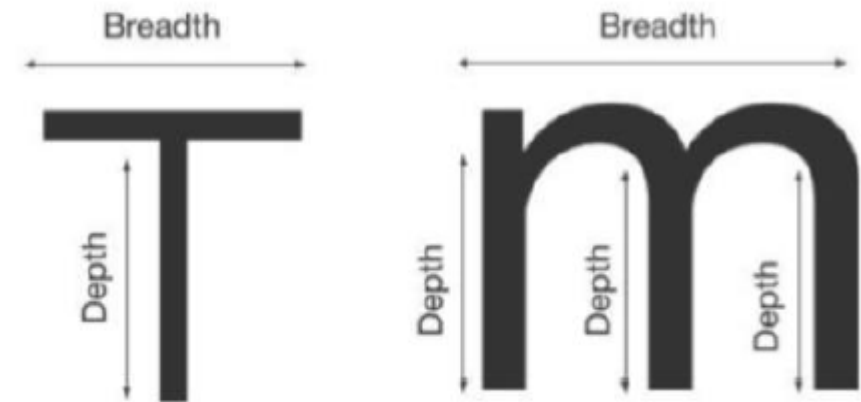


Figure 1.12 Technology and Education
 Source: CCR (inspired by *The Race between Technology and Education*.)

When Education lags behind technology, unemployment/underemployment, technology-divide, income gaps lead to social pain.
How do we get to 'Prosperity' phase?



T-shaped and M-shaped person, for comparison.

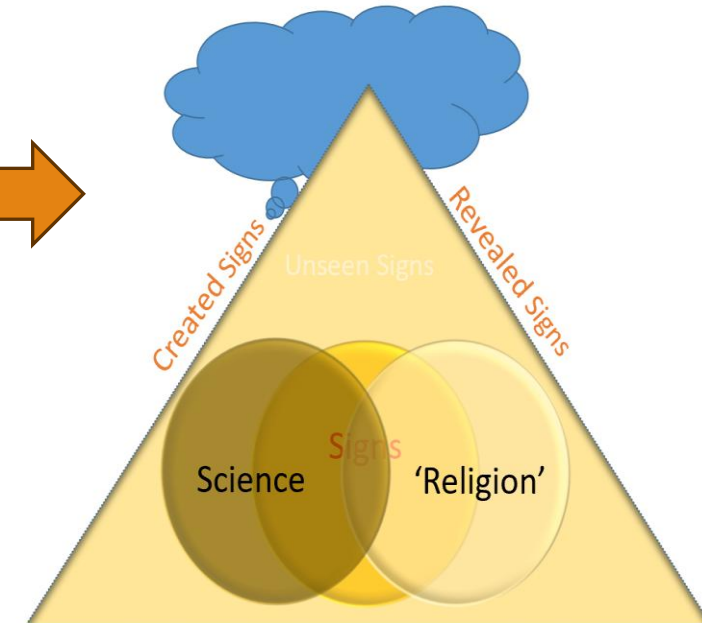
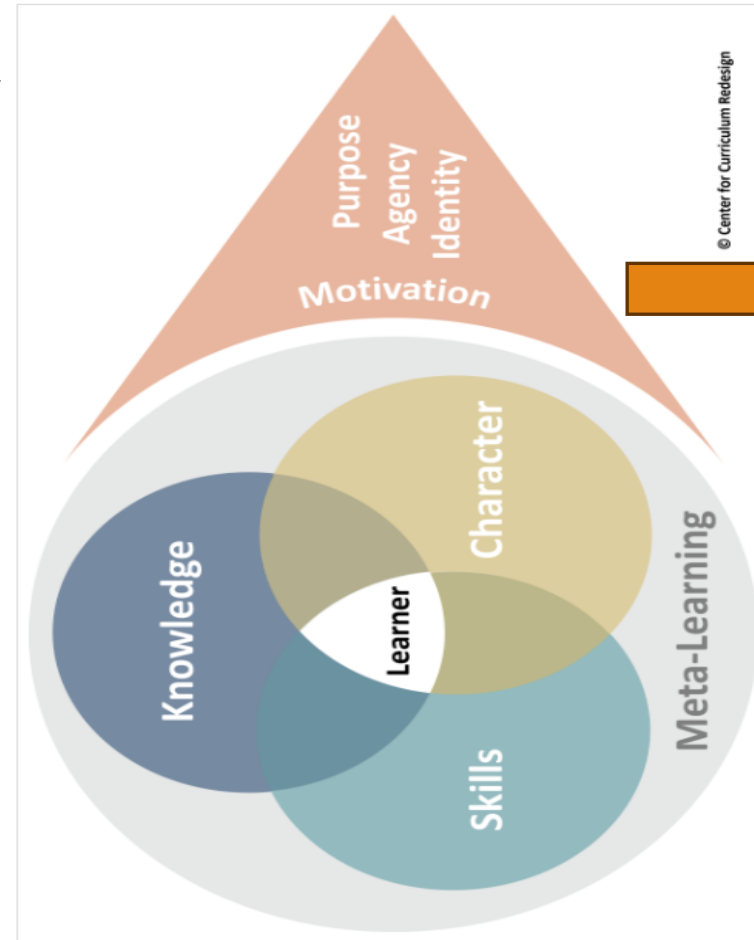
Source: CCR based on Spohrer.

Need versatile learner capable of both depth and breadth; Changing landscape calls for an m-type learner. Curriculum should be Adaptive, Modular, and rapidly Customizable

Proactive Empowerment needs one more step



Adoption of Technology allows better use of skills and concepts [Enhancement] as well as strategic and extended thinking [Transformation]



A Holistic education, where learners can leverage technology to focus more on the creative part -
Tafakkar, Tazakkar, Tadabbar, with True purpose and context

Technology in Education- Example Use case for AI

- Does AI make students cheaters?
- How can students make both ethical and productive use of an AI tool?
 - Write an essay for the student or with the student?
- Will AI take my job?
 - *“You wont be replaced by an AI, but you might be replaced by someone who is using AI”- Andrew Ng*



It has to be a Symbiotic relationship

Automation, efficiency and productivity of ‘Artificial Intelligence assistant’ must work in collaboration with wisdom, experience, faith, and compassion of ‘Real Intelligence being’, such as those requiring creativity, emotional intelligence, and complex decision-making.

'Tech' Home Message

- **Think:** Install the IPAD framework in your internal operating system
- **Explore:** Adjust your skillset and learn new tech (*i.e.*, Coursera, edX, etc)
- **Collaborate:** Join forums (*i.e.*, Github, Kaggle, etc), Hackathons. Collaborate across disciplines
- **Help:** Mitigate missing dimensions of Emerging Technologies

Parting Challenge Question: If you could solve one local/global problem using emerging technology what would that be?



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Collaboration possibilities

STEAM Research		
Internships		
Workshops/Webinars on Emerging Technologies		
Round Tables: Preparedness for Emerging Techs		
Local Projects		