

FUTURE PHYSICIANS & THE 4TH INDUSTRIAL REVOLUTION



VISION &
ROBOTICS
LAB

Imad H. Elhadj

American University of Beirut
Electrical and Computer Engineering

ie05@aub.edu.lb

@imadelhadj

P4

Preventive

Predictive

Personalized

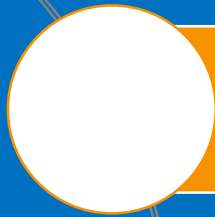
Perpetual

What knowledge and skills in **emerging technologies** will future physicians have to acquire to remain competent in the era of the 4th industrial revolution?

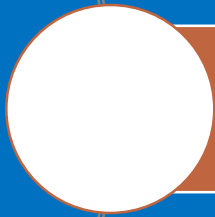
WE DO NOT KNOW!



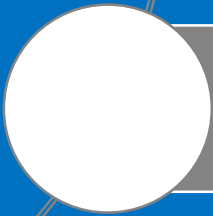
Why?



Rate

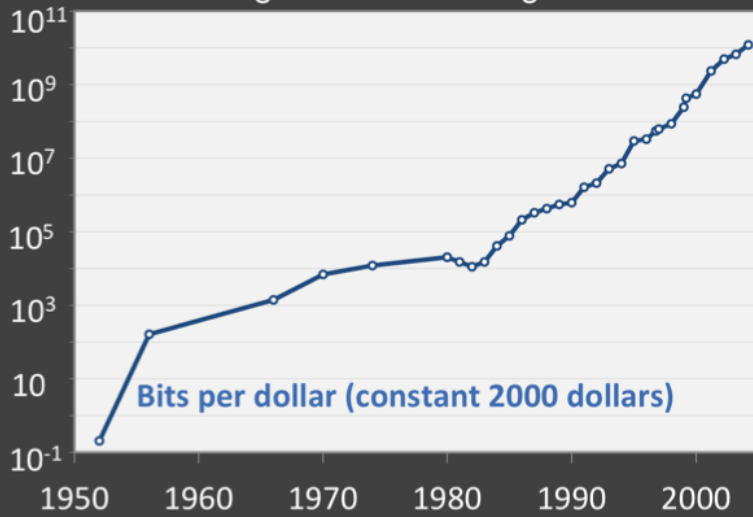


Convergence

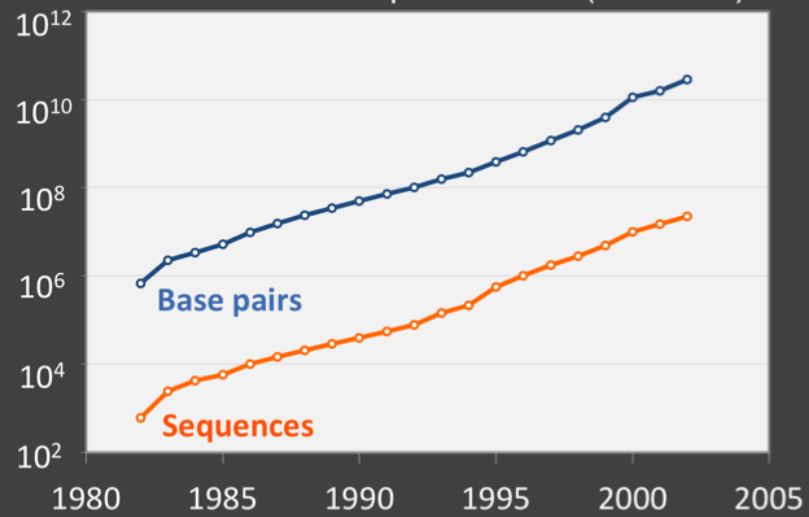


Scope

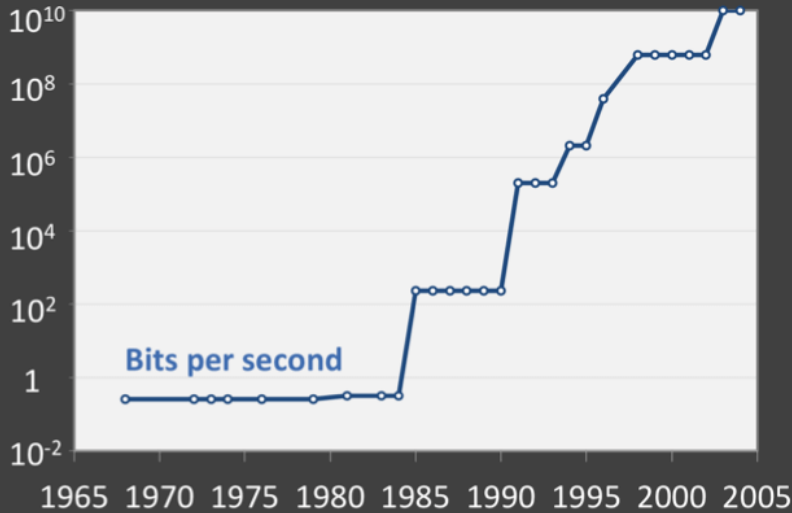
Magnetic Data Storage



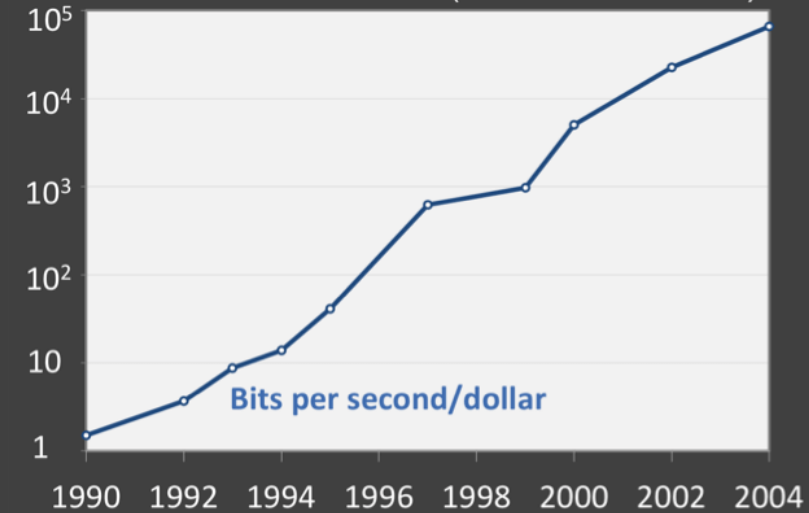
Growth in DNA Sequence Data (Genbank)



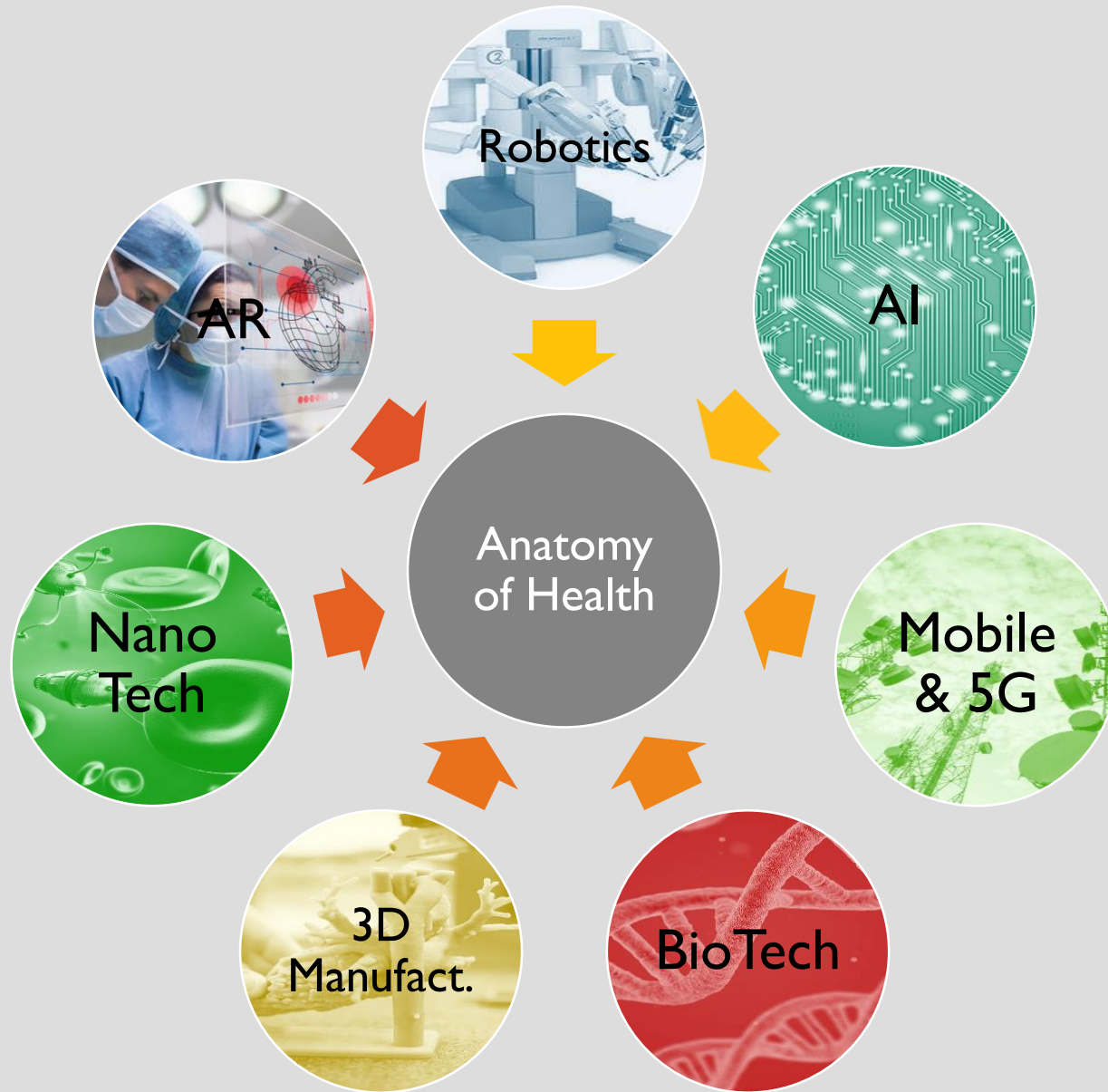
Internet Backbone Bandwidth

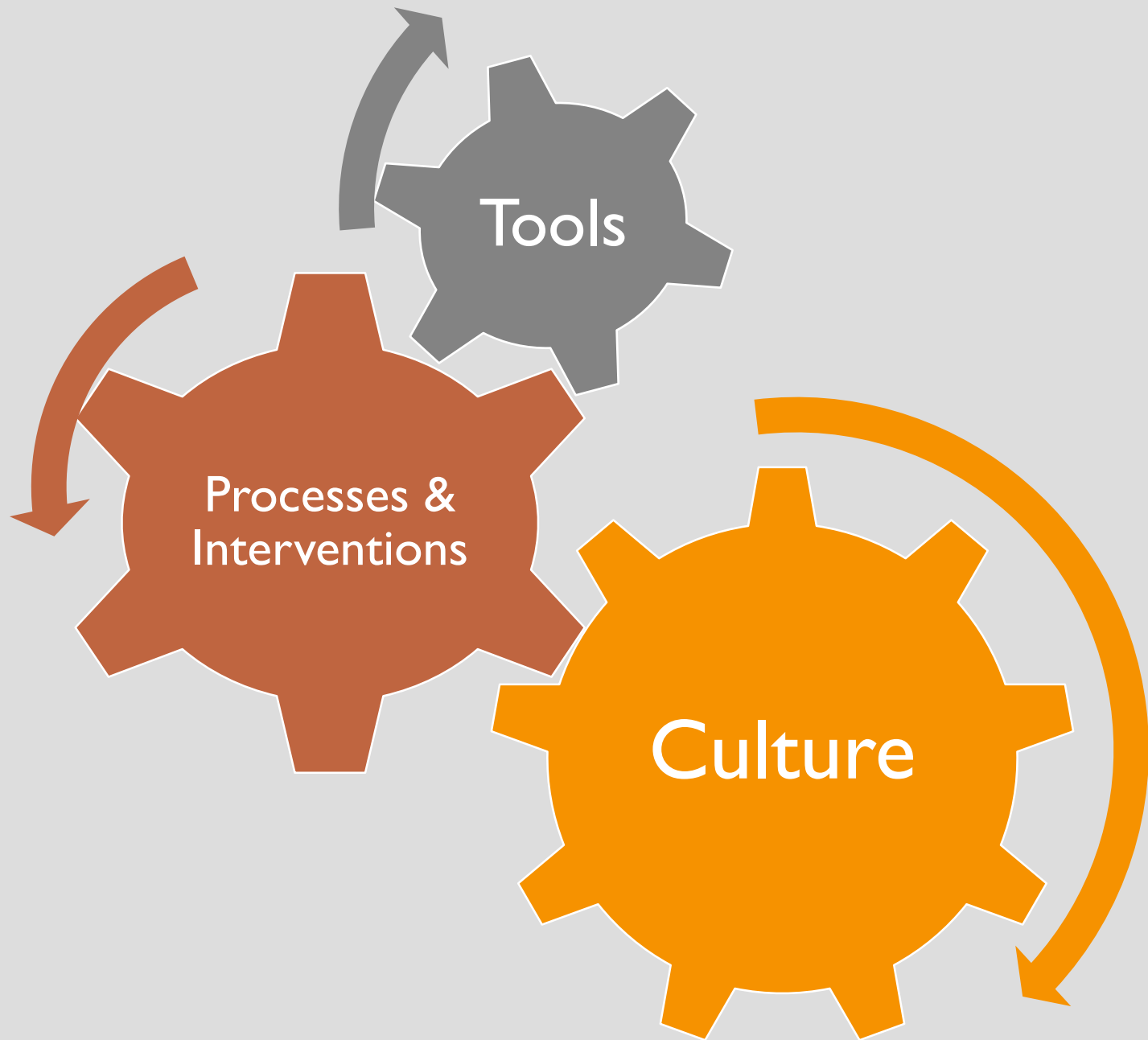


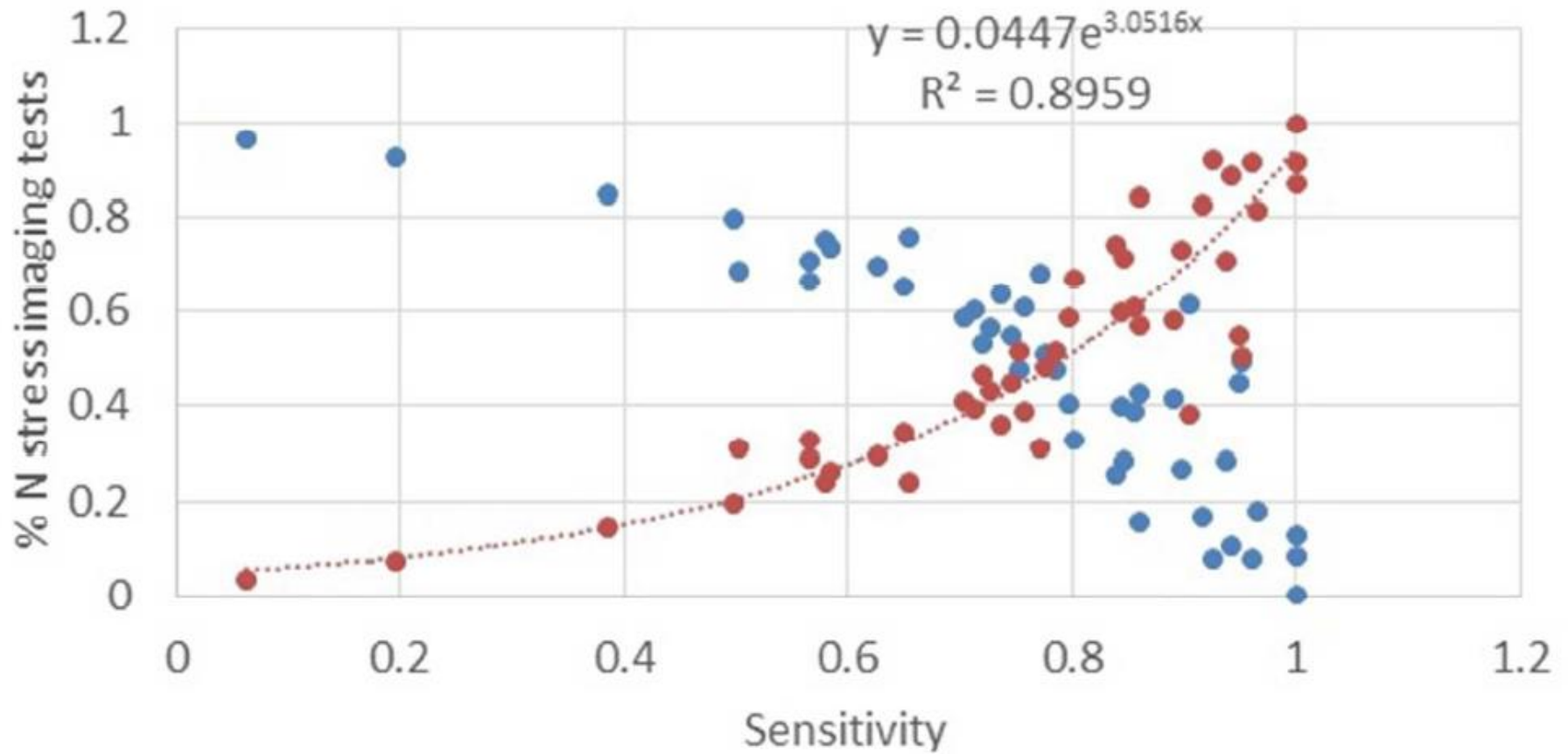
Wireless Data Devices (Price-Performance)



These logarithmic charts, from Ray Kurzweil's 2005 book *The Singularity Is Near*, show information technologies other than integrated circuits growing exponentially. Kurzweil says these trends reflect "completely different technical challenge(s) pursued by different engineers and different companies." Advances pictured above include DNA sequencing technology, magnetic storage, fiber optics, optical switching, electromagnetic technologies, and more. Source: *The Singularity Is Near*/Singularity.com







- Stress Imaging Avoided
- Stress Imaging Ordered
- Expon. (Stress Imaging Ordered)

Risk of Missing Obstructive CAD vs \$\$\$

Skills



Emerging Technology Literacy



Technology Strengths & Weaknesses



Handling Large Data



Empathy



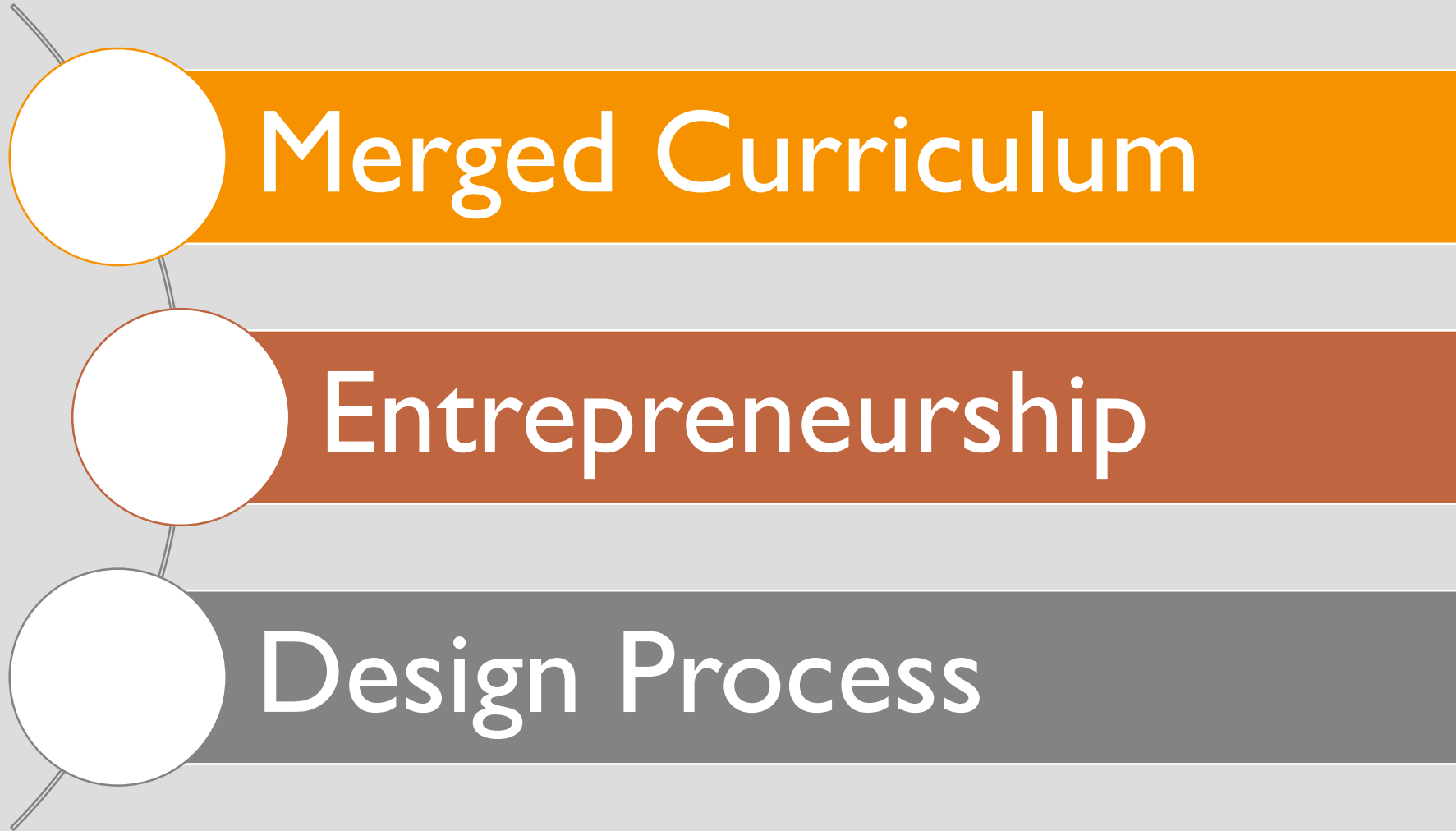
Change Management



Risk Assessment



Inter Disciplinary Team Work



Merged Curriculum

Entrepreneurship

Design Process

THANK YOU
IE05@AUB.EDU.LB
@IMADELHAJJ



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