
LET'S TALK ABOUT INNOVATION

HOW IT CHANGED THE WORLD

INTRODUCTION

A highly experienced Interaction and UX designer with broad range of professional and technical background. Holds a Masters degree in Integrated Digital Media from Polytechnic School of Engineering, New York University.

Having diverse working background and expertise that spans over technology design, user experience, communication strategies, and corporate business campaigns. Had the chance to work in New York city as an Interaction Designer on multiple projects, such as the award winning EMKI (Edward Kennedy Interactive Educational Museum) and MTA transit way-finding Interactive Kiosks. I have also enjoyed participating in digital media educational events and professional training activities as a principal speaker.



NYU
WAYFARER NAV APP

INTERSECTION
MTA NYC SUBWAY

KA.CARE
INTERACTIVE CENTER

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**“ WE CANNOT SOLVE A
PROBLEM BY USING THE
SAME KIND OF THINKING
WE USED WHEN WE
CREATED THEM.**

- ALBERT EINSTEIN



A.

INNOVATION



WHAT IS INNOVATION ?

EXPERTS DEFINITION OF INNOVATION



Creativity is thinking of something new.
Innovation is the implementation of something new.

Paul Sloane

Anything that is new, useful, and surprising. For me, a great innovation are the simple ones that make you slap your forehead and say, **"Wow, why didn't I think of that?"**.

Drew Boyd

Something new or different that delivers value to the world, with the key criteria that I'm not innovating if I'm not bettering people's lives. **Simply, it is the future delivered.**

Jorge Barba

SCIENCE INNOVATION

Investment in science, technology and innovation is **essential for economic development and social progress.**

Research and development can foster sustainable development by building greener, more inclusive societies.

WHY MUST WE INNOVATE?

SCIENCE UNDERPINS **IMPROVEMENTS IN HUMAN WELFARE**, THROUGH **TECHNOLOGIES** WHICH IT DEVELOPS FOR HEALTH, FOOD PRODUCTION, ENGINEERING AND COMMUNICATION.



WHY MUST WE INNOVATE?



1

REDUCES WASTE AND ENVIROMENTAL DAMAGE.



2

CREATES GROWTH, INCREASES PRODUCTIVITY, AND ECONOMIC WEALTH .

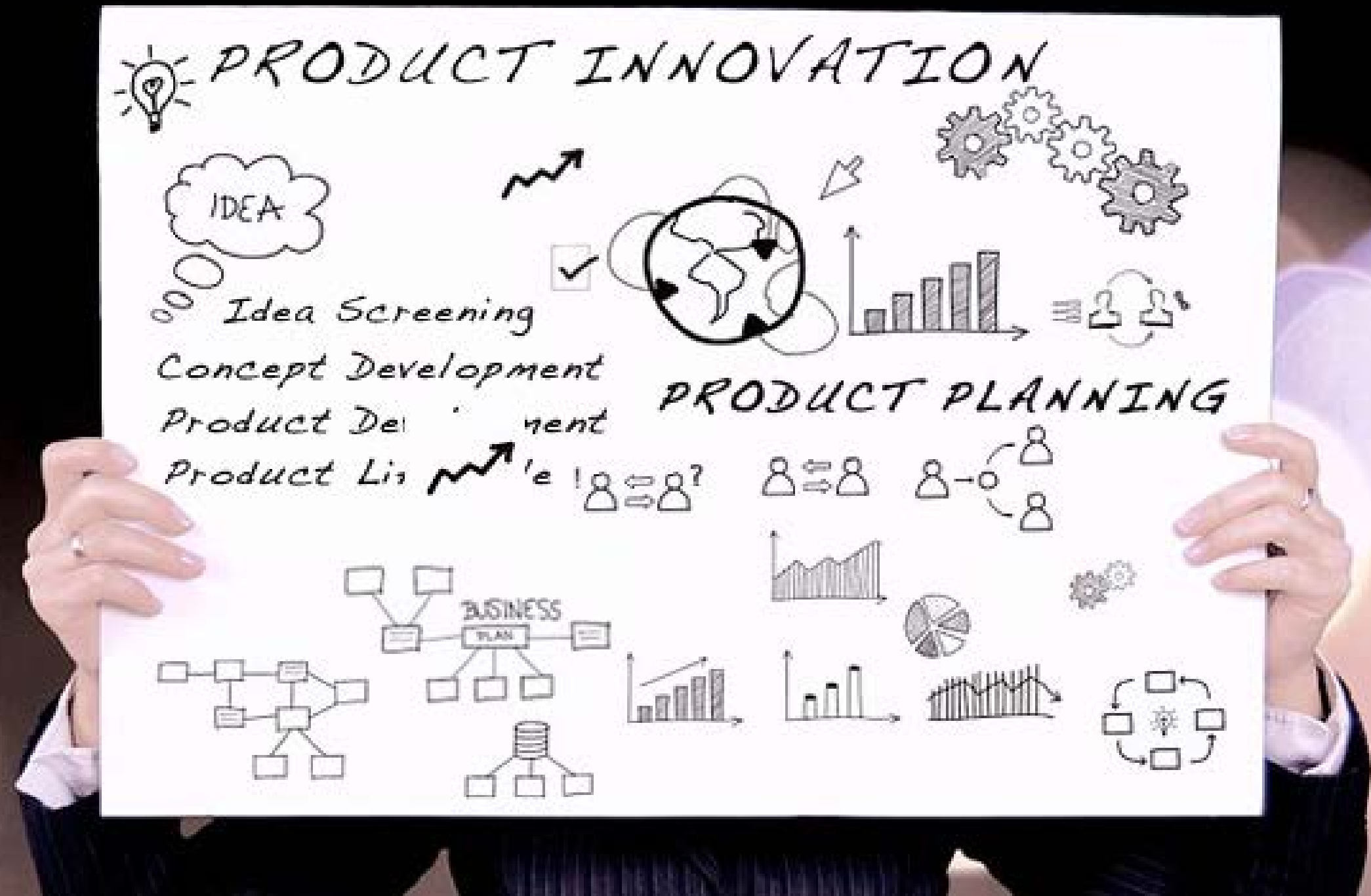


3

PROVIDES BETTER GOODS AND SERVICES AT A CHEAPER PRICE AND HIGHER STANDARD OF LIVING.

SURVIVE!

LET'S MEET SOME INNOVATORS



ISLAMIC SCOLARS CHANGED OUR WORLD!

Ibn al-Haytham
The foundations of optics



Sulaiman Almahri
Astronomical Navigation



INVENTIONS THAT CHANGED OUR WORLD!

THE INTERNET

1989: SIR TIM BERNERS-LEE INVENTS THE WORLD WIDE WEB

IN 1989 SIR TIM BERNERS LEE INVENTED AN INTERCONNECTED SYSTEM OF COMPUTER NETWORKS – AND CHANGED THE WORLD FOREVER.

WERE IT NOT FOR LEE AND THE WORLD WIDE WEB THERE WOULD BE NO FACEBOOK, GOOGLE, AND YOUTUBE.



INVENTIONS THAT CHANGED OUR WORLD!

THE WHEEL

THE WHEEL IS ANOTHER INVENTION SO ANCIENT THAT WE HAVE NO WAY OF KNOWING WHO FIRST DEVELOPED IT.

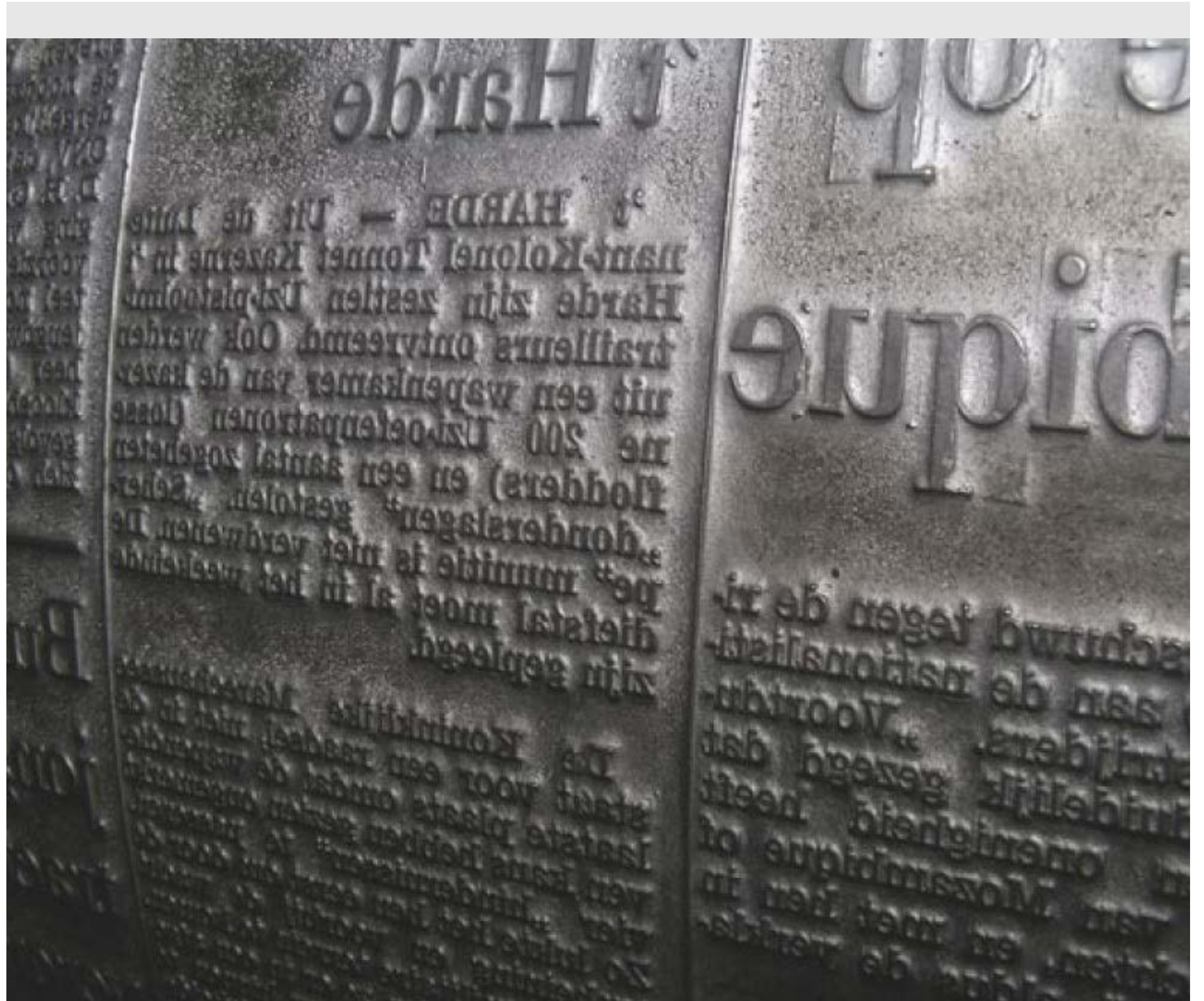
THE OLDEST WHEEL AND AXLE MECHANISM WE'VE FOUND WAS NEAR LJUBLJANA, SLOVENIA, AND DATES TO ROUGHLY 3100 B.C



INVENTIONS THAT CHANGED OUR WORLD!

PRINTING PRESS

THE PRINTING PRESS ALLOWED ENORMOUS QUANTITIES OF INFORMATION TO BE RECORDED AND SPREAD THROUGHOUT THE WORLD.





HASSAN ALBALAWI

EEG CAP ANALYZER - WAKECAP

The Kingdom of Saudi Arabia's Hassan Albalawi has remained true to his mantra throughout the season - **"when I face a problem, I don't sleep until I solve it."** Hassan has worked relentlessly to perfect his **'EEG Cap Analyzer'**, named **Wakecap**, a device worn on the head that detects and warns of drowsiness. As a competitor, he has used the knowledge gained through his PhD studies in Electrical Engineering as well as everyday experiences as a source for inspiration. Hassan is passionate and driven to prove that the Arab world can be a hub for innovation once more.



RAGHAD ALTHUBAITI

RECOGLASSES

A Saudi team of female Saudi students, "Team Extreme", and its 18 year-old mentor recently received top awards at the 20th For Inspiration and Recognition of Science and Technology (FIRST) Championship in St. Louis, Missouri in the United States. In a competition in which contestants were required to **produce a biomedical robotic project addressing severe injuries or genetic diseases**, the Saudi team produced **RecoGlasses**, designed **to enable Alzheimer's patients to better identify friends and relatives**.



SAJA ALMUZAINI

THE MAGNIFICENT ELEPHANT CLOCK

Coming across **AlJazri's Elephant clock** and exploring the Golden Age in the Muslim world. Saja founded Qirtas, to **shed light on the greatest inventions of this of the Golden Age**. We don't do this by telling you about them, but by allowing you to own and **tinker with them directly!** Islamic civilization was at its peak in progress and prosperity in the various fields of science, industry, arts and literature. **"There is so much that we can learn by reconnecting with that time."**

Qirtas Video
[https://www.youtube.](https://www.youtube.com/watch?v=...)



B.

WHERE? HOW?

5 STAGES OF THE INNOVATION PROCESS

1. IDEA GENERATION



Inspiration for a new idea can originate **from an improvement** of an existing idea, or something **from scratch**.

Apple waited three years after MP3 players were introduced to create the iPod, which was attractive, intuitive and offered capacity for up to 1,000 songs.

Conversely, the invention of Scotch tape was a brand new idea.

2. ADVOCACY AND SCREENING



Not all ideas are worth implementing. Advocacy and screening help **evaluate** an idea and **measure its potential benefits and problems**.

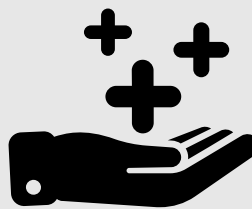
3. EXPERIMENTATION



The experimentation stage **tests an idea**, such as with a prototype or pilot test.

Sometimes, experimentation leads to new ideas due to information that is gathered on the results and the overall feasibility of the original idea.

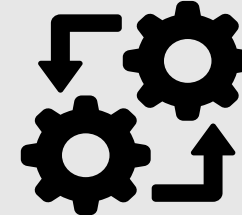
4. COMMERCIALIZATION



Commercialization aims to **create market value** for an idea by focusing on **its potential impact**.

Commercialization is the stage of the innovation process when the focus shifts from development to persuasion. After the idea is clarified and a business plan is created, it will be ready for diffusion and implementation.

5. DIFFUSION AND IMPLEMENTATION



Diffusion is the companywide **acceptance of an innovative idea**, and **implementation** sets up everything needed to **develop and utilize or produce the innovation**.

Cyclotron Road at Berkeley Lab Video
<https://www.youtube.com/>



THANK YOU

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