

Innovations

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What is innovation?

- ▶ **Innovation** is the process and outcome of creating something new, which is also of value.
- ▶ Innovation is production or adoption, assimilation, and exploitation of a value-added novelty in economic and social spheres; renewal and enlargement of products, services, and markets; development of new methods of production; and establishment of new management systems. It is both a process and an outcome. (Organization for Economic Co-operation and Development)

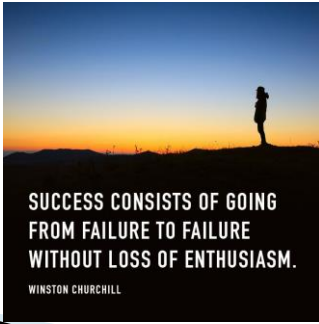


Steps for Innovation

- Motivation
- Creativity
- Entrepreneurship
- Innovation



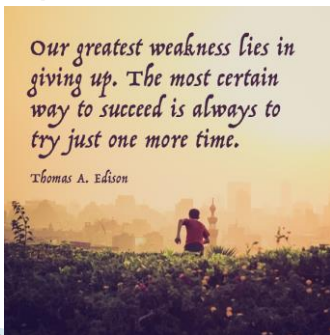
Motivate yourself




Motivate yourself



Motivate yourself



Motivate yourself

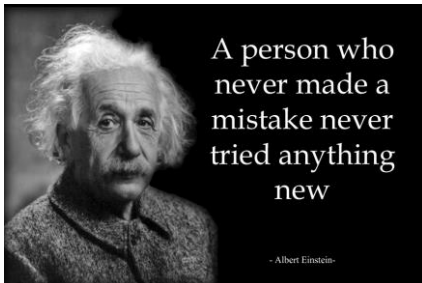


The expert in anything was once a beginner.

Creativity

- ▶ The ability to see a problem in several dimensions.
- ▶ The ability to truly understand the problem at hand.

Creativity



Creativity



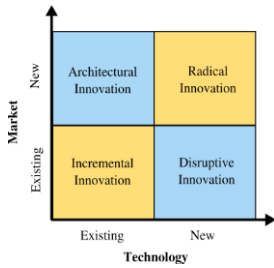
Entrepreneurship



Entrepreneurship



Types of Innovation



Jorge Lopez, Types of Innovation, <http://techblog.constantcontact.com/software-development/types-of-innovation/>

Types of Innovation

Incremental Innovation

- Most common type
- Utilizes existing technology and increases value to the customer
- Almost all companies engage in incremental innovation in one form or another

Example?

Types of Innovation

Radical Innovation

- This is what we think of mostly when considering innovation
- It gives birth to new industries (or swallows existing ones) and involves creating revolutionary technology.

- Airplanes
- Desktop compute

Example?

Types of Innovation

Disruptive Innovation

- Also known as stealth innovation
- Involves applying new technology or processes to company's current market

	Mobile Phones	Landline Phones
Traditional Performance	Worse sound quality	Better sound quality
New Performance	Portable	Not portable



Types of Innovation

Architectural Innovation

- Takes the lessons, skills and overall technology
- Apply them within a different market.
- In 1966, NASA's Ames Research Center attempted to improve the safety of aircraft cushions. They succeeded by creating a new type of foam, which reacts to the pressure applied to it, yet magically forms back to its original shape.
- Originally it was commercially marketed as medical equipment table pads and sports equipment.



So what is Innovation?

An innovation can be define as simply a better way of doing things or an improvement to an existing product or invention.



Telephone



Alexander
Graham Bell's
Phone
1876



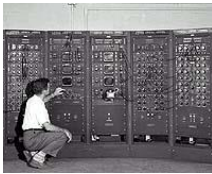
Old Phone



1st Cell Phone
March, 1983



Mobile phones, 2017



Old
Computers



New
Computers



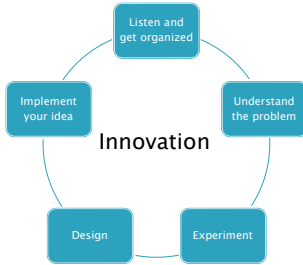
Innovation Rules

- ▶ Failure is frequent

I have not failed. I've just found 10,000 ways that won't work.

-Thomas Edison

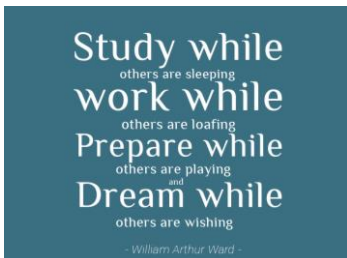
Innovation Rules



Innovation in daily life

- ▶ Find a new way to effectively manage your time
- ▶ Find a new way to study
- ▶ Find a more efficient process to complete your homework
- ▶ Discover something new to do something

Study Life



Study Life

OF COURSE IT'S
HARD. IT'S SUPPOSED
TO BE HARD. IF IT
WAS EASY, EVERYONE
WOULD DO IT.
HARD IS WHAT MAKES
IT GREAT.

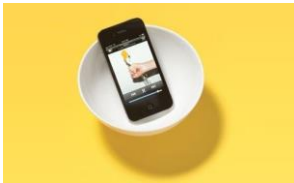
Innovation in daily life

To open a sealed-tight jar,
Use a spoon



Innovation in daily life

Amplify the volume of your phone speaker
by placing it in a bowl



Conclusion

- › Start being creative
- › Experiment your idea
- › Move to a better idea
- › Implement it
- › Be positive always

