

The Art of Innovation

What is innovation, creativity?-

People say:

- mysterious process
- Only gifted people have talent
- Discoveries result of luck
- Inventors must have scientific training
- Have to work in laboratory

Definition of Innovation

- There is big difference innovation and patent
- Innovative thoughts come once you have developed skill innovation
- To prepared mind innovation and imagination are spontaneous
- You need to learn process of inventorship

Case studies

- An apple falls on Isaac's Newton head, he discovers Law of Gravity
- Our every day experiences contain secrets
- Secrets reveal themselves to prepared mind
- Example of day dreaming

Inventureship

- Two kinds:
- Research & Eureka
- Eureka is based on informal thinking, seemingly random
- Archimedes example calculated value of Pi

Features of Eureka inventuresship

- Extend boundaries of learning
 - Can see relationship between ideas and problems others do not see
- Extend thinking beyond their own field
 - great innovations in history came from people not specialists in particular area of innovation
- Free thinking: outsiders see solutions those closer to problem miss

Examples

- Percy L. Spencerinventor of first Microwave Oven
- As an Electronics genius walking around laboratory discovered something funny
- Tried experiment popcorn to verify theory

Asking why not as form of innovation

- Eureka thinking opens flood gates of innovation
- Sprinkling water on clothes before ironing helps, Why not?
- Writing notes on paper and loosing them, why not making notepads?
- If caffeine is harmful, why not?
- To ensure safety of children riding in back seat Why not?

- No one can be available for phone calls at all times, Why not build machine can act as personal assistant, answering phone, record and deliver later
- Serving water in drinking glasses raises the risk of transmitting germs +potential danger from breaking why not?

Adapting a solution as a form of Inventureship

- Dr Bird discovery of oxygen mask for private business jet aircraft.
- Bird expanded possibilities of his innovations beyond his own field
- What he learned contributed to his design of a small portable respiratory machine helping premature infants to breathe
- Adapted original system to work closed incubator rather than plane cabin

