

CREATIVITY AND INNOVATION

Objectives of the Lesson

After the end of the Lesson, students should be able to;

- Define the clearly Creativity and Innovation (Draw a distinction between creativity/Innovation/invention)
- Describe the Creativity and Innovation process (in relation to Entrepreneurship)
- Explain the link between Innovation and Critical thinking (how entrepreneurs can enhance their own creativity).
- Discuss some of the sources of innovation for entrepreneurs, and identify some of the major myths and discuss the principles of innovation.
- Define and describe Intellectual Property (IP) in an entrepreneurship context.

Definitions; Creativity is the capability or act of conceiving something original or unusual. It is the ability to come up with new and original ideas, or new and unique solutions to problems.

Over the last decades, innovation and creativity have become critical skills for achieving success in developed economies. The need for creative problem solving has arisen as more and more management problems require creative insights in order to find suitable solutions.

Creativity goes hand in hand with innovation. And there is no innovation without creativity. While creativity is the ability to produce new and unique ideas, innovation is the implementation of that creativity - that's the introduction of a new idea, solution, process, or product. Creativity is the driving force behind innovation and the incorporation of looking at things from a different perspective and freedom of restrictions by rules and written or unwritten norms.

Creativity is important in today's business world, but it's really only the beginning. Organizations need to foster creativity. Driving business results by running ideas through an innovation process puts those ideas to work — for companies *and* their customers. Creativity is the price of admission, but it's innovation that pays the bills.

Creativity and Critical Thinking

Creative thinking is a way of looking at problems or situations from a fresh perspective that suggests unorthodox solutions. Creative thinking can be stimulated both by an unstructured process such as brainstorming, and by a structured process such as lateral thinking. **xxxx**

Creative ideas and innovative approaches can come from almost anywhere- from partners, customers, target groups, employees. These can bring the business fresh perspectives and ideas, so there is need for the business organization to listen and be open to their feedback. That's why it is important an open exchange of ideas to be supported and encouraged by the company.

Creativity Process; To understand the creativity process, it is important to grasp the three important levels of creativity, which are discovery, invention, and creation.

- **Discovery:** The lower level of creativity is discovery. Just as the name implies, it's when one becomes aware of or stumbles upon something-discover it. For example, there is art called "discovered art." It might be a rock with a unique shape or a piece of wood with an interesting pattern. As such if one ever purchased a piece of natural stone or wood art that art was discovered art. Many inventions start with a discovery.
- **Invention:** A higher level of creativity is invention. For example, Alexander Graham Bell invented the telephone. But one has to ask him/herself, "Would the telephone have been invented without Bell?" The answer is yes. Eventually the telephone would have been

invented because the science was there. It might have taken longer, but it would have happened. So while invention is higher than discovery, it's something that is going to happen. Thus, even if one does not invent it, someone else will.

Creation: Creation is the highest level of creativity. Creativity refers to generating new and novel ideas .“Creativity is a bio-electrical thunderstorm that precipitates an in-escapable notion.”

- **Innovation** refers to the application of an idea and, in many cases, is a collaborative enterprise. So in other words, innovation is applied creativity. The very term “innovation” thus connotes something new and different. Paying attention to companies that are consistently innovative in *their* industries is always a good practice. Consider these companies that use the principles of design thinking to achieve their strategic goals:
- Proctor & Gamble embraced innovation under former CEO A.G. Lafley. During his tenure, P&G's value increased by more than \$100 billion. In 2000, it had 10 billion-dollar consumer brands; today, it has 22.
- Kaiser Permanente is the largest not-for-profit health provider in the USA. Kaiser's National Facilities Services group has, for over five years, been working on the Total Health Environment, a program applying design thinking to every aspect of Kaiser's operations, from medical records to color palettes. The results speak for themselves: improved patient health, satisfaction, soundness of sleep, speed of healing, and cost control.
- Square is particularly associated with innovation since its plugin device helps millions of mobile vendors and small business owners. No longer are they confined to cash payments

or expensive credit card machines. Square noticed that the economy was quickly becoming paperless and provided customers a way to keep up.

STEPS IN THE CREATIVE PROCESS

1. Opportunity or Problem Recognition: A person discovers that a new opportunity exists or a problem needs resolution.

2. Preparation: The individual concentrates on the problem and becomes immersed in it. There is a conscious search for knowledge. He or she will recall and collect information that seems relevant, dreaming up alternatives without refining or evaluating them.

3. Incubation: The person keeps the assembled information in mind for a while. He or she does not appear to be working on the problem actively; however, the subconscious mind is still engaged. While the information is simmering it is being arranged into meaningful new patterns.

4. Illumination: The problem-conquering solution flashes into the person's mind at an unexpected time, such as on the verge of sleep, during a shower, or while running. Insight is also called the Aha! Or Eureka! Experience. The recognition of ideas as being feasible.

5. Verification and Application: The individual sets out to prove that the creative solution has merit. Verification procedures include gathering supporting evidence, using logical persuasion, and experimenting / applying in a normal working or business environment with new ideas to prove they have value.

6). Implementation: Produce or refine the product or service for the market.

BARRIERS TO CREATIVITY

Individual creativity: Searching for the one “right” answer.

Focusing on “being logical”

Blindly following rules

Constantly being practical

Becoming overly specialized

Avoiding ambiguity

Fearing mistakes and failure

ENHANCING ORGANIZATIONAL CREATIVITY

Expecting and tolerating failure

Encouraging curiosity

Viewing problems as challenges

Providing creativity training

Rewarding creativity

Innovation

Innovation is associated with the development of a new process or idea. It is an extreme example of creativity, a break from established patterns involving a better way of doing things.

Sources of innovation are broadly categorized as those emanating from;

- Within the firms; this includes the unexpected success or failure; Incongruity between what actually happens and what is expected to happen; the inadequacy of underlying processes that are taken for granted when they can be improved or changed; and changes in industry or market structure which take the business by surprise.
- Outside the firm; This comprises of demographic changes due to birth rates, wars, medical improvements or fatal epidemics; Changes in perception, mood and meaning; Knew

Knowledge (Scientific/Non-scientific); Neglect; New resources; and Diversification of skills or/and perspectives from another industry.

The Importance of Innovation

Innovation enables business enterprises to attain a range of specific business outcomes including:

- Engaging and inspiring people to tap into the power of the internal crowd, and empower people to create, invent and innovate new products, processes, and services.
- Increasing their ROI to shareholders,
- Achieving business growth goals and improving bottom-line results,
- Increasing business value making the business attractive to shareholders, mergers and acquisitions,
- Making productivity and efficiency gains to increase profitability,
- Increasing market share, and extending product lifecycles.

Innovation Process

The following are critical steps in the innovation process:

Phase 1: Idea Generation and Mobilization- An **innovation process** always starts with the search for and finding innovative potentials which are subsequently evaluated. This can be An unfulfilled customer requirement, a problem with the customer, a possible new market, or a new technical solution.

Phase 2: Advocacy & screening.

This is likened to a concept stage. An intensive analysis follows and gathers as much information as possible about the idea and its further processing: Market and customer requirements, market potential, e.g. market size, market attractiveness, chances, etc.

Phase 3: Experimentation /Solution

The aim is to develop a ready-to-use solution that can be brought to the market. Solutions are being developed, prototypes built and tests carried out. In addition to concept and lab tests, the tests also include market tests under real conditions to gain comprehensive feedback.

Phase 4: Commercialization/Market

It is about taking the product to potential customers. On the one hand, this requires the physical availability of the product. These include procurement, production, and logistics based on defined concepts.

Phase 5: Diffusion and implementation

It is the company-wide acceptance of an innovative idea .it sets up everything needed to develop the innovation.

TYPICAL REASONS FOR INNOVATING.

The following are some of the reasons why a business should innovate:

- Responding to customers' needs.
- Increase market share.
- Being at the forefront of the industry.
- Establish a new market.
- Improve the quality and speed of service delivery.
- Expand the product range.
- Meet Government standards/regulations.
- Reducing costs of operation.
- Increasing revenues

WHAT HAPPENS IF BUSINESSES DON'T INNOVATE?

The following are some of the effects of a failure to innovate as far as the business is concerned.

- Customers stop buying your products, processes, and services in favor of more innovative business.
- Sales volume drop.
- Shareholder returns drop.
- Stock price drops.
- Key employees leave in anticipation of the business winding up.

REASONS FOR BUSINESS FAILURE TO INNOVATE.

The following are some of the reasons why businesses fail to innovate:

- Most businesses fail to maintain interest to innovate because it's a long-term activity.
- Innovation is expensive and has a long payback period.
- Innovation is too complex to manage and most businesses do not have the management skills to handle innovation.
- Competing priorities. Everyone's overloaded with everyday problems.
- Innovation costs are too hard to control.

TRADITIONAL APPROACHES TO INNOVATION MANAGEMENT

- Necessity – the mother of invention
- Market pressure
- Brainstorming sessions
- Employee suggestion box
- Laboratory research
- Literature search
- Copy and improve competitors' products
- Copy the process used to develop past innovations

NEW APPROACHES TO INNOVATION MANAGEMENT

- Virtual prototyping
- Implement a knowledge management system
- Hire the finest
- Import external innovators
- Cultivate visionaries
- A distributed network of experts

Intellectual Property Rights

Definition; Intellectual property rights are like any other property rights – they allow the creator, or owner, of a patent, trademark, or copyright to benefit from his or her own work or investment. They have founded under Article 27 of the Universal Declaration of Human Rights (UDHR),

which sets forth the right to benefit from the protection of moral and material interests resulting from authorship of any scientific, literary, or artistic production.

Importance of IP Rights

There are several compelling reason for the promotion and upholding of IP Rights. It is important because;

- The progress and well-being of humanity rests on its capacity for new creations in the areas of technology and culture.
- The legal protection of these new creations encourages the expenditure of additional resources, which leads to further innovation, and;
- Third, the promotion and protection of intellectual property spurs economic growth, creates new jobs and industries, and enhances the quality and enjoyment of life

Forms of IP Rights

- A patent; is an exclusive right granted for an invention, which is a product or a process that provides a new way of doing something, or offers a new technical solution to a problem. A patent provides protection for the invention to the owner of the patent. Patent protection means that the invention cannot be commercially made, used, distributed or sold without the patent owner's consent. These patent rights are usually enforced in a court, which, in most systems, holds the authority to stop patent infringement. The protection is granted for a limited period, generally 20 years.
- A Trade Mark; is A trademark is a distinctive sign, which identifies certain goods or services as those produced or provided by a specific person or enterprise. It dates back to an ancient era when craftsmen reproduced their signatures, or "marks" on their artistic or

utilitarian products to today's Trade Mark system where it is subject to registration and protection. A trademark provides protection to the owner of the mark by ensuring the exclusive right to use it to identify goods or services, or to authorize another to use it in return for payment. The period of protection varies, but a trademark can be renewed indefinitely on payment of corresponding fees.

Reading;

Carayannis, Elias G. ed. (2013). Encyclopedia of Creativity, Invention, Innovation and Entrepreneurship

Babu et.al. (2013). Role of Creativity and Innovation in Entrepreneurship; Innovative Journal of Business and Management pp. 112 - 115.

BUSINESS START-UP

Forms of Business Organization

The term business is wide in meaning. It includes all human activities made for the sake of earning profit through the process of production of goods or buying and selling them. Various forms of business organization may be classified as under: private sector (sole proprietorship, partnership, companies, co-operatives) while public sector will include (Public corporations, parastatals, local authorities).

Sole Proprietorship

It is the oldest and simplest form of business. Sole proprietorship is a business owned and run by someone for their own benefit. The business' existence is entirely dependent on the owner's decisions, so when the owner dies, so does the business. The liability of the sole proprietor is unlimited. In event of insolvency of the business, he/ she will be responsible for making good the deficiency from personal wealth.

Advantages of sole proprietorship:

- Simplicity of formation
- All profits are subject to the owner
- There is very little regulation for proprietorships and minimum legal restrictions
- Owners have total flexibility when running the business
- Very few requirements for starting—often only a business license
- Contact with customers creating personal attention and cater for personal complaints
- Secrecy- Owner can maintain a high level of secrets- technique of production or special formula

Disadvantages:

- Unlimited liability-Owner is 100% liable for business debts
- Difficulties of expansion- Equity is limited to the owner's personal resources
- Ownership of proprietorship is difficult to transfer
- No distinction between personal and business income
- Limited managerial ability
- Lack of business continuity.
- Over- worked- The owner being the organizer performs a wide range of activities some of which have no experience.

Inability to carry out research – The fear of risks of loss may stop the owner from indulging in.

Partnership

These come in two types: general and limited. In general partnerships, both owners invest their money, property, labor, etc. to the business and are both 100% liable for business debts. In other words, even if you invest a little into a general partnership, you are still potentially responsible for all its debt. General partnerships do not require a formal agreement—partnerships can be verbal or even implied between the two business owners. Limited partnerships require a formal agreement between the partners. They must also file a certificate of partnership with the state. Limited partnerships allow partners to limit their own liability for business debts according to their portion of ownership or investment.

Advantages of partnerships:

- Relatively Simple of formation.
- Shared resources provides more capital for the business
- Combined judgment- Partners mutually consult each other about production, marketing etc
- Specialization- It is possible for each partner to take up those affairs for which he/ she is best suited.
- Even distribution of work
- Ease of dissolution- Mutual consent to dissolve can be easily agreed among partners

Disadvantages:

- Each partner is 100% responsible for debts and losses
- Selling the business is difficult—requires finding new partner
- Partnership ends when any partner decides to end
- Joint involvement- Any debts incurred by each partner or agreement entered into on behalf of the firm bind all partners.

FORMATION OF A LIMITED COMPANY

In order to form and register a company, there are certain procedures to follow.

- There must a “promoters”- people who come up with an idea of forming a company in setting it in operations.
- To form a private company, it requires minimum of two and a public company requires minimum of seven promoters.

Steps involved in registering a company

- i) Search for the name
 - A small fee to the registrar of companies is paid to search and approve the chosen name by the promoters.
 - This ensures no other company has already been registered with the same name.
 - In case of any then the promoters choose another name.
- ii) Once the name is approved, they go ahead and prepare certain legal documents.

There are as follows

 - Memorandum of association
 - Articles of association
 - Registered office
 - List of directors
 - Form of statutory declaration

1) Memorandum of association

- i) At first promoters have to make an application to the registrar of companies that they need to be formed into a company
- ii) The application must be signed by all of them and table the form of a document known as “memorandum of Association”.
- iii) The document states
 - The name of the company with the word “Limited” as the last word in the name e.g. XYZ stationary limited (or Ltd in short)
 - The city and the country in which the registered office is situated.
 - A statement that the liability of the members is limited.
 - The objective of the company. It outlines the aims and purpose for which the company is being formed.
 - The company cannot act beyond the objective stated in memorandum.
 - A statement of the nominal authorized capital with which the company was to be registered

- The registration fee is calculated according to this capital.
- Declaration
 - This confirms that the promoters want to form themselves into a limited company.
 - This declaration is signed by a minimum of seven persons in case of public company and at least two in case of private company.

The purpose of the memorandum of association is thus:

- To define the companies objectives
- Powers and serves as a guideline to the outside public

2) **Articles of association**

- The articles of association serve as a guideline to the internal management of the company
- The document is also signed by the promoter
- It is very essential in the case of a private company but a public company if it wishes adopts the standard set of articles known as TABLE.

3) **Registered office**

- Notice of the situation of the company's registered office.

4) **List of directors**

- A list of persons along with their particulars who have agreed to act as directors.
- They will only be called 'directors' once the company is incorporated and certificate issued.

5) **Statutory declaration**

- This is signed by the company secretary or a director whose name explicitly named in the articles of association or an advocate of the High Court of Kenya.
- The document states that all necessary requirements of the companies Act have been duly complied with and the directors agree to act as such.

Then all the documents are taken for stamp duty to the collector of stamp duties at the ministry of land office.

CO-OPERATIVE SOCIETIES

Co-operative

According to international labor organization, co-operative organization- is an association of persons, usually of limited means who have voluntarily joint together to achieve a common economic end through the formality of a democratically controlled business..

Common features to all co-operative

- All members can contribute to the running of the business, sharing the workload, responsibilities and decision making.
- One man, one vote
- Profits are shared equally among members

Advantages of co-operative

- Buying bulk
- Working together to solve problems

BUSINESS CYCLE

PRODUCT LIFE CYCLE

Product life cycle arises from market changes.

Market or demand changes due either of following reasons:

- Customers tastes and fashion change; people change their lifestyles, new technology means that some products become absolute
- Demographic changes- means that the structure of the population and needs of society change
- Businesses must respond to changes in the market for their products to maximize sale and profit.

The five phases of product life cycle are as follows:

i) The introduction phase

- Is when the new product is launched.
- Strong marketing stimulates demand for the product which generate income but profits are low because the cost of developing and launching the product must be recovered.

ii) Growth stage

- Demand for the product continues to strengthen during the growth phase is response to continued marketing.
- Sales increase giving rise to higher profits as initial development costs are covered.

iii) Maturity phase

- During this phase demand for and sales of the product are at their highest.

iv) Costs of production are low due to economies of scale

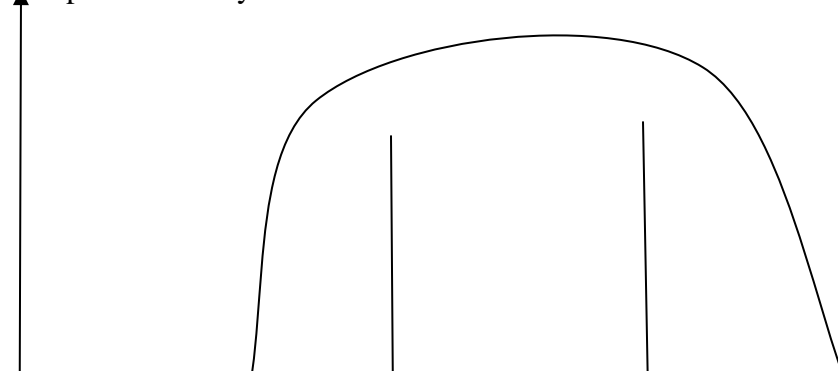
v) Saturation phase

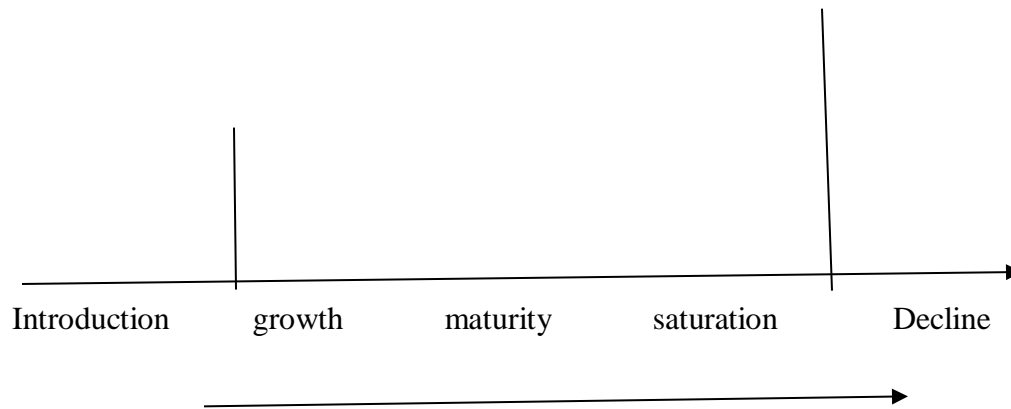
- The high profits attracts competitors which calls for aggressive marketing activities such as new pricing and other policies including branding product .
- Special sales promotion may be needed to maintain market share

vi) Decline phase

- Finally, a product will go into decline when demand falls
- Consumers taste change and alternative products becoming available and fashionable
- Policies aimed a extending the life of the product (extension policies) such as find a new USP for the product or selling it in a different market or market segment may be introduced.
- If the product life cannot be extended however, the business that produces it may prefer to develop a new product to take up its phase.

The product life cycle





BUSINESS CYCLE

- Also called trade cycle is defined “as the whole course of business activity which passes through all phases of prosperity and adversity”. The business fluctuation occurs in aggregate variables such as: National income, employment and price level.

PHASES OF THE BUSINESS CYCLE

- Depression
- Revival/recovery
- Peak/ boom
- Recession/downswing

Depression stage (also called slump) is characterized by:

- Rapid decline in general output and employment

- Production activities declines, prices tumbles and high rate of unemployment.
- Expenditure on capital goods or its replacement greatly falls
- A number of firms face inordinate closure.
- In the economic life of the world, such acute crisis occurred in the years 1710, 1827, 1873, 1907, and 1929.

Revival/recovery

- During this period, rays of hope appear on the business horizon
- Pessimism gives place to optimism, profit – margins re-appears and production in several industries improves.
- There is then complete harmony between costs and price relationship and consumers generally spend more as they are more confident in the security of their employment.
- The capital goods industries resume activities gradual re-employment of labor is witnessed.
- Enhanced opportunities of employment..

Peak or Boom

- Overall business activity is rising at a more rapid rate.
- There is a rise in real output and incomes of the people
- There is rise in production prices, employment wages, interest rates, profits and volume of bank credit.
- Rise in fixed capital investment.
- The general mood of business community is that of optimism and confidence

Recession/ Downswing

- A slowdown of business activities causing un-employment .Recession is characterized by:
 - i) As prices of the commodities rise the wages of workers tend to lag behind and reduction in the purchasing power of the workers negatively affects demand for consumer goods.
 - ii) Due to shortages of some inputs, production of goods and services is affected.

- iii) The non-availability of credit limit of expansion in production hence poor performance of the economy.

CHALLENGES OF A NEW VENTURE

But running your own business is not easy. Working for yourself without the safety net of being an employee can be a lonely, frustrating and challenging experience. By understanding the challenges, an entrepreneur might face and how to deal with them, will be much better prepared for potential problems and give your business the best chance of success.

1. Failure to plan for the future of your business

With the excitement of a new business idea, it can be tempting to launch without much forward-thinking. Yet a lack of planning can mean your business runs out of cash or isn't prepared for vital activities such as marketing or dealing with suppliers.

2. Lack of demand for your products and services

Understanding the market need for your product or service is a crucial aspect of your business because without enough customer to buy the product or service, the business may fail.

3. Ineffective marketing of your business

It can be easy to get caught up in the latest marketing trends and spend lots of money on marketing techniques that end up costing you more than the sales they generate. Marketing should be effective.

4. Knowledge and skills gaps

As a first-time entrepreneur, it's unlikely you'll know everything about running a business. Absorb as much information you can, particularly about the industry that you're entering, the customers you're targeting, and the competitors you face.

5. Financial management of your start-up

Poor financial planning is one of the biggest reasons start-ups fail. If your costs are greater than the revenue coming in, your business won't succeed. The first thing an entrepreneur need to do is to create a cash flow forecast.

6. Securing funding for your start-up

One way to manage your cash flow is by securing funding, but raising finance can be challenging and it can be hard to know where to get cash for your business idea.

7. Hiring the right people for your start-up

The people you recruit as employees can greatly harm your start-up's success. A negative employee can quickly damage team morale and productivity. Hiring employees for your new business involves more than just picking the right candidate and getting them started. There's a whole set of legal duties and responsibilities you need to be aware of as an employer.

8. Time management and productivity

Managing your time effectively is crucial when launching a start-up. New business owners have to wear so many hats that it can be easy to get distracted and focus on the wrong areas.