

D.N.R.COLLEGE(AUTONOMOUS)::BHIMAVARAM

MCA DEPARTMENT



E-CONTENT

II – MCA(3rd Semester)

INNOVATION, ENTREPRENEURSHIP AND INTELLECTUAL PROPERTY

RIGHTS

**Presented by
A.NAGA RAJU**

D.N.R COLLEGE,(AUTONOMOUS)::BHIMAVARAM

(Affiliated to Adikavi Nannaya University Rajamahendravaram A.P)

MCA-Second Year MCA-20309 Semester: III

INNOVATION, ENTREPRENEURSHIP AND INTELLECTUAL PROPERTY RIGHTS

(Effective from the admitted batch of 2020-21)

UNIT-I

Introduction - Role and importance - Technology developments - TLC - Diffusion and Growth of Technologies. Innovation and Creativity: An Introduction, Innovation in Current Environment, Types of Innovation, Idea Management System, Divergent Vs Convergent Thinking, Levers of Idea Management. Experimentation in Innovation Management: Idea Championship, Participation for Innovation, Co-creation for Innovation, Prototyping to Incubation.

UNIT-II

Introduction to Entrepreneurship and its Evolution - Roles of an Entrepreneur - Idea Generation, Screening, Selection and Managing Resources - Leading and Building the team in an enterprise

- Forms of Ownership - Entrepreneurship in the era of Globalization - Entrepreneurship, Creativity and Innovation - Social entrepreneurship - Start-ups, early venture issues - Family business and entrepreneurship - Women entrepreneurship: issues, challenges - Financing the entrepreneurial business - Entrepreneurship Institutions in India.

UNIT-III

Introduction to Intellectual Property Law - Evolutionary past - Intellectual Property Law Basics - Types of Intellectual Property - Innovations and Inventions of Trade related Intellectual Property

Rights - Agencies Responsible for Intellectual Property Registration - Infringement - Regulatory - Over use or Misuse of Intellectual Property Rights - Compliance and Liability Issues.

UNIT-IV

Introduction to Patent Law - Rights and Limitations - Rights under Patent Law - Patent Requirements

- Ownership and Transfer - Patent Application Process and Granting of Patent

Introduction to Trade Mark - Trade Mark Registration Process - Post registration procedures

- Trade Mark maintenance - Transfer of rights - Inter parties Proceedings - Valuation of

Intellectual Property: Need for IP Valuation - Approaches of IP Valuation **Text Books**

1. Sunita K. Sreedharan, An Introduction to Intellectual Asset Management.
2. Patrick H. Sullivan, Profiting from Intellectual Capital: Extracting Value from Innovation Tulika Rastogi, IP Audit: Your Way to Healthy Organisation.
3. Gordon V. Smith and Russell L. Parr, Valuation of Intellectual Property and Intangible Assets, 3rd Edition.
4. Bruce Berman, From Assets to Profits: Competing for IP Value and Return (Intellectual Property- General, Law, Accounting & Finance, Management, Licensing, Special Topics).

References

3. Loganathan, E.T. "IPR" (IPRS), TPIPS Agreement and Indian Laws.
4. Ceserani. J & Greatwood. P: Innovation & Creativity, Kogan Page, London, 1995.

UNIT-I

Role and Importance of Technology Development in Education:

Technology (which is basically derived from the Greek word 'technologic') is an art, skill or ability, which is used to create and develop products and acquire knowledge. Scientists used their knowledge to develop technology and then used technology to develop Science

The latest technology has created its space in our daily life. From mobile phones to smart watches, from smart homes to smart cars, we are living a robust life with the help of advanced technologies.

Scientists have developed technologies to add quality and facilitate our lives.

Technology plays a great role when it comes to education. Especially after the outbreak of covid-19, the latest technology has enabled students and teachers to stay connected through e-classrooms.

Ex: Google Meet, Zoom, Skype, Whats app Videos etc.

Today the use of technology is not only limited to computer labs but has direct access to smart classrooms.

Smart classrooms are also an attraction to students. It enabled students to learn new things in a fun and interesting way. Evolving technology help students to keep their interest in subjects.

With the help of technology, now students can experience one on one equation even when they are sitting in a classroom with other classmates.

With the introduction of eBooks, it becomes easier for students to get access to numerous books over the internet with just a click. There is much scope to go beyond the syllabus and learn in-depth about any subject.

Students can also connect to several platforms to gain knowledge and share their experiences with similar interest groups. This increases their visibility and interest in developing their knowledge.

However, technology can be equally harmful as its benefits. Parental control and guidance are a must to make the best use of technology.

There are various e-learning platforms, eBooks and learning apps available to help students to study. Be it a primary grade student or a post-graduate student, technology is equally important for both.

The pandemic has taught how technology can provide us a virtual learning space for students and teachers. It goes without saying that technology facilitates human life but it cannot replace human efforts

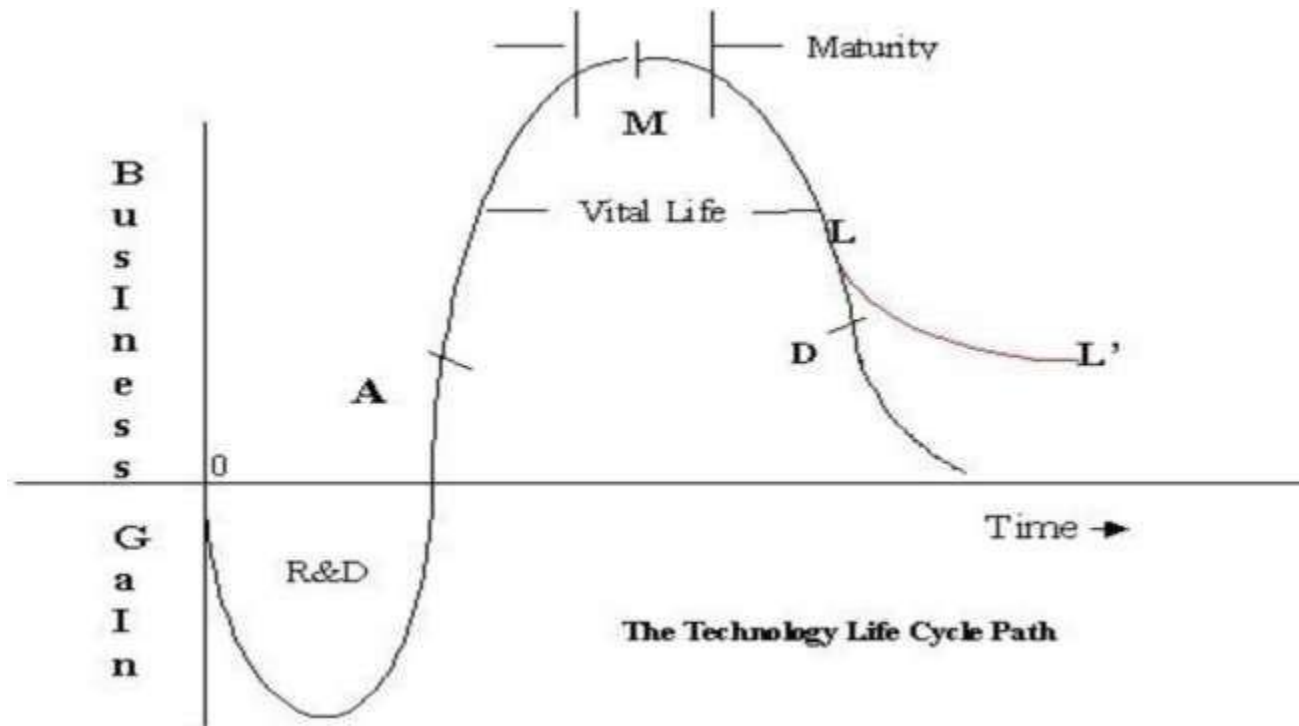
Technology Life Cycle (TLC):

The Biological concept of life Cycle (i.e. Birth, Growth, Maturity & Death) can also be applied to a technology and the product, service or process associated with it.

The technology life cycle (TLC) describes the commercial gain of a product through the expense of research and development phase, and the financial return during its "Vital Life".

The technology life cycle is concerned with the time and cost of developing the technology, the timeline of recovering cost and modes of making the technology yield a profit proportionate to the costs and risks involved.

The 4 phases of the Technology Life Cycle :



1) Research and Development Phase

The research and development are also called as the bleeding edge as the income from the inputs being put in making the technology are negative in nature and the chances of

2) Ascent Phase

The ascent phase of the Technology Life Cycle is also called as the leading edge as the company starts to recover the costs and expenses that have been incurred and plus the technology developed begins to gather strength and goes beyond the initial point of development to get accepted in [the market](#). The company creates all the hype and promotion of the innovation and newness of the technology grabbing the attention from all the quarters.

3) Maturity Phase

The maturity stage arrives when the gains from the technology are high and stable but there is also a point of saturation. The technology developed is well accepted by the public but as the competitors are well aware and have caught with the realms of the technology developed, the market has reached the point of saturation. The revenues start to get slow down as the technology developed starts to become yet another commodity in the market. In order to stay relevant in the market, it is very important to make the incremental and innovative changes in the technology considering the changing dynamics of [the markets](#) and the evolving tastes of the customers. Keeping an eye on the competition is also very important at this stage.

4) Decline Phase

The decline phase is inevitable in nature most of the times and here is when the companies witness the decrease in sales of its products and there is a need or an emergence of the new and replacement of the technology. Many a time, the companies reach the point where there are no returns at all and further developments are not profitable at all. The best possible step that the company can initiate is to move out of the current technology and plant its resources on the new project that is sure to yield more profits.

Growth and Diffusion of Technologies:

Growth of Technologies:

Technological progress refers to the discovery of new and improved methods of producing goods. Changes in technology lead to an increase in productivity of labor, [capital](#), and other factors of production. Technology refers to the process through which inputs are transformed into outputs.

A technological change involves the invention of technologies and their release as open source via [research and development](#), the continual improvement of the technologies, and the diffusion of the technologies throughout the industry or society. Phases of Technological Progress

1. Invention

Invention is the act of creating new technology. It involves a new scientific or technical idea, and the means of its embodiment or accomplishment. To be patentable, an invention must be novel and have utility.

2. Innovation

Innovation may be used synonymously with “invention” or may refer to discovering a new way in which to use or apply existing technology. Everett Rogers thought of innovation as an idea, behavior, or product that appears new to its potential adopter. There are five main attributes of innovative technology: Relative Advantage, Compatibility, Complexity, Trialability, and Observability.

Relative advantage means the product or behavior is perceived as being better than the alternatives by the person adopting the innovation. Better can mean a lot of different things. It can be a device that can peel a potato faster so it saves time or a seat belt that offers the advantage of greater safety.

Compatibility refers to how the innovation aligns with the adopter’s lifestyle.

Complexity is how easy or difficult innovation is to understand. The easier an innovation is to understand and use, the more likely it is to be adopted. Complex innovations face an additional challenge to mainstream adoption.

Trialability refers to the process of testing the innovation to see if, or how well, it works. Extensive testing usually occurs before an innovation is adopted or taken to market.

Observability involves seeing the product or behavior in action. It can demonstrate how it can be used. It is easier to get potential adopters to simply observe an expensive product like a car than it is to get all of them in one for a test drive. Also, the more people around you that you see using a product, the more likely you feel like buying that product too.

Diffusion of Technologies:

4. Diffusion is the process by which a new idea or new product is accepted by the market.
4. Technology Diffusion Means the spread of applications/usage of a new technology and its related products, services or processes from one nation to another; from one entity to another; from one industry to another; from the owner entity to user or supplier; and from current user to the prospective user.
4. Technology Diffusion means the study of why, what and at how rate new ideas and technology spread across the economy.

Creativity:

Creativity is where you are able to come up with and generate your own ideas.

It is an Imaginative Process

It is Not Quantifier It is

thinking something new It

is No Money is needed It is

Not Risk is involved

Innovation:

Innovation is where you implement those creative ideas and put them into action.

It is a Productive

Process It is Quantifier

It is introducing something new.

It is Money is

required It is Risk is

involved

For without creativity we would be unable to innovate and without innovation, creativity would just be an idea that never leaves our minds.

The four different types of innovation mentioned here - **Incremental, Architectural Disruptive and Radical** - help illustrate the various ways that companies can innovate.

Incremental Innovation:

Incremental Innovation is the continuous improvement of existing products or services to provide more value to your existing market.

This type of innovation occurs in the short term. It has low technological advancement, and low market impact.

Incremental innovation



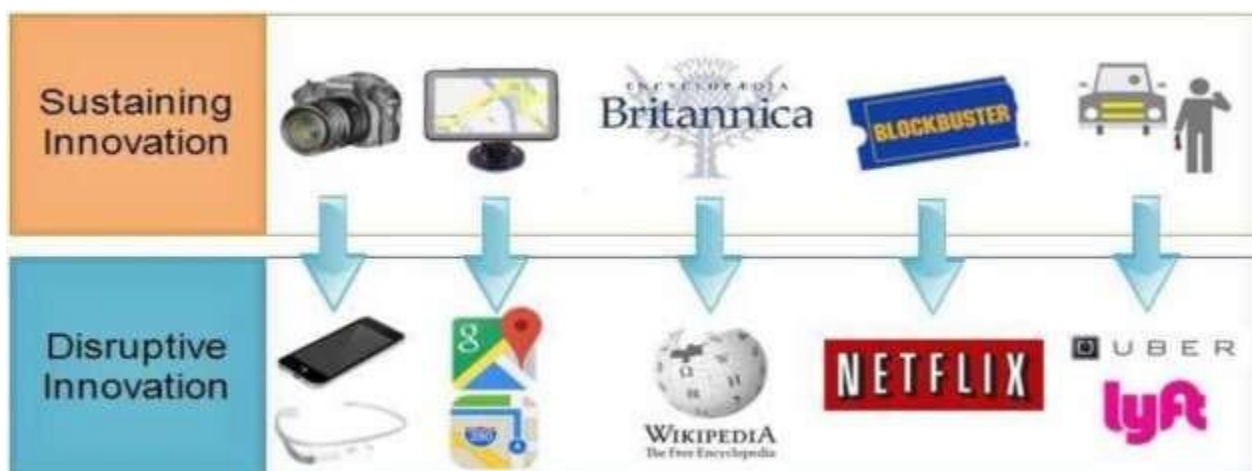
Architectural Innovation:

Architectural Innovation is the modification of existing solutions for entirely new markets. Architectural Innovation refers to changing the design of a product, and this innovation occurs into the short or midterm.



Disruptive Innovation:

Disruptive Innovation is when new technology and products are created to serve an existing market. This type of innovation is enabled by a new technology that provides a more efficient and accessible alternative to what already exists in the market.



Radical Innovation:

Radical Innovation is when an organization applies new technology to a new market. This type of innovation is when a new product, process or service with high technological advancement has a high market impact and completely replaces an existing offering.



Idea Management System:

Our idea management system is ready to receive ideas to select those ideas and to sponsor those ideas

The collection of ideas is the most important, because that is the starting step in the process of innovation management and this idea management system.

Idea management system three important things are there:

Who submits the Idea?

Who Selects the Idea?

Who Funds the Idea?

Who submits the idea: I talk of a manufacturing organization is all employees it may be my customers, it may be my vendors, and they are possibly the prime sources for submitting the ideas.

Who Selects the Idea: You can always have internal, external experts and then a mix of internal and external experts. So, they may be involved in selecting the ideas, you may have depending upon your organizational capabilities. If you find that sufficient internal experts are available, you may have one internal committee to select the idea.

If you feel that internal members may be biased because of variety of reasons you may hire external experts for selection of ideas.

Sometimes which is normally more popular, you make a team of internal and external experts there is proper balance in selection process.

Who Funds the Idea: Who is funding this idea management system that is also a very Important question. Because if this funding is not appropriate it is very difficult to lubricate your system funding helps like lubrication and therefore proper lubrication is necessary for a smooth flow of this idea management system.

Sometimes funding may be available from the internal resources and sometimes funding is available from the external sources.

Ex: The Government of India is focusing a lot on innovation programs.

The Government of India is providing lot of funding for various higher educational institutes IITs, NITs, Central Universities and IIMs various other research organizations for promotion of innovation in those organizations

Department of Science & Technology (DST), Department of Biotechnology (“DBT”) ministry of MSME these are some of the very common name we all know which are used as external source of funding in higher educational institutes.

Divergence Thinking:

It accepts one single problem and it will give us multiple solutions.

Open-ended questions Out-of-the-box Thinking Imagination Creativity Brainstorming

Ex: Why do you choose in MCA?-There are so many answers comes.

Convergence Thinking:

It is going to accept one single problem and it will contains one single solutions

Close-ended questions One stop solution Intelligence Logic

I have multiple choices questions, which choice would be best for me with respect to time or the cost.

Ex: What is the capital of India? A) Bangalore B) Delhi C) Hyderabad D) Chennai

Levers of idea management system:

1. Belief Systems: Core Values.
2. Boundary Systems: Risks to be avoided.
3. Diagnostic Control Systems: Critical Performance Variables.
4. Interactive Control Systems: Strategic Uncertainty.

1. Belief Systems:

Companies use belief systems in an effort to express the values and direction that senior managers want their employees to embrace.

They draw the employee's attention towards the value they create for the customer. The belief system's main purpose is to inspire and promote commitment to an organization's core values.

2. Boundary Systems:

Boundary Systems are stated rules, limits and defined sanctions for employees. The boundary systems give a limit to the employees that they should not cross.

Ex:

1. Breaking laws to make short term gains.
2. Indulgence in corruption.
3. Sexual harassment.

3. Diagnostic Control Systems:

The problem would occur then you can apply Diagnostic Control System then resolve that issue and clear the problem.

Diagnostic Control Systems are feedback systems that monitor organizational outcomes and correct deviations from present standards of performance.

4. Interactive Control Systems:

The interactive control systems assist departments in having better interaction, as interaction between different layers of management in an organization improves controls.

Ex:

At PepsiCo, the weekly release of market share rankings makes around 60-70 people to work on the data received in anticipation of queries from senior. Ex: Superior and subordinate Interaction

Experimentation in Innovation Management:

1. Idea championship:

What is the role of champion?

In this process of innovation management the role of champion is very important some time it happens that the person who is coming with new idea is not able to take idea forward because of some limitation.

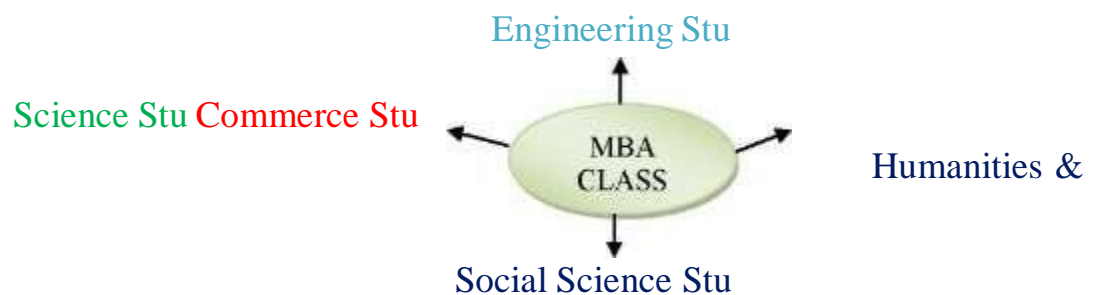
Idea properly in front of others and here other maybe the investors. The investor gives me required funds to experiment, to commercialize my idea. In India very recently we saw a very megha movement to have “Maken India Policy”.

2. **Participation for Innovation:**

Innovation is a team activity, participation of all members of your organization is very much necessary in the process of innovation.

Good team is that you need to have a team where the members are from different or diverse backgrounds.

In a team is consisting of homogeneous type of member's similar kind of member that is not good team for innovation.



You have people in your team from different backgrounds, and then the decision will be a very unique decision because they all will have different perspective of the solution for a particular problem.

3. Co-creation for Innovation:

The creation by working with one or more others, the creation of value is the core purpose and central process of economic exchange, economic process creation of value this is the central idea.

You create a value when a manufacturer uses some raw material and produces some finished goods.

For example: In produced goods, raw material, Machines, Skilled workers, quality checking units, transports_etc

In teaching profession, my lecture, my facial expressions, my hand movements and my eye movements all these are adding value to any lecture.

4. Prototyping to Incubation:

Prototyping is a very important thing, prototyping means developing a prototype based on your idea based on the outcome of your experiments.

1. Backup Plan
2. Rapid Prototyping

One thing is about the backup plan now this backup plan is related to the discussion of our experimentation.

If your present experiment fails you take backup plan and start working with your backup plan.

Ex: ISRO, DRDO, Military_etc.

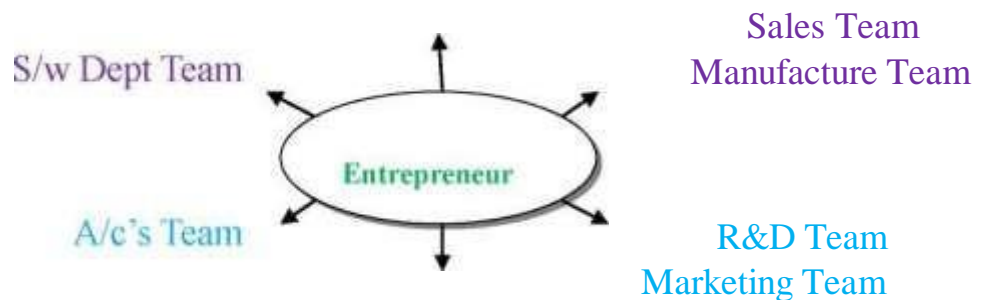
Electricity Power, Generators, Batteries, Power backup plans_etc.

Unit-II

Roles of an Entrepreneur:

Entrepreneurship plays an influential role in the economic growth and standard of living of the country. Startup Founder or business owner.

Ex: Fb, WP, Swig, Zomato, Ola Cabs__etc.



There are 7 important roles an entrepreneur plays in the economic development of a country.

- a. Wealth Creation and Sharing
- b. Create Jobs
- c. Balanced Regional Development
- d. GDP and per capita income
- e. Standard of living
- f. Exports
- g. Community Development

a. Wealth Creation and Sharing:

By establishing the business entity, entrepreneurs invest their own resources and attract capital from investors, lenders and the public.

b. Create Jobs:

Job creators, when you become an entrepreneur, you provide employment for multiple other jobseekers. This is one of the basic goals of economic development. Ex: Govt. of India lunched "Maken India Policy" and "Startups".

c. Balanced Regional Development:

Entrepreneurs setting up new businesses and industrial units help with regional development by locating in less development and backward areas.

The growth of industries and business in these areas leads to infrastructure improvements.

Ex: Better Roads, Railways, Airports, Cable-Electricity, Water Supplies, Schools, hospitals, College, Shopping Malls_etc.

d. GDP and per capita income:

MSME sector, comprised of 36 million units that provide employment for more than 80 million people, now accounts for over 37% of the country's GDP. This growth in GDP and per capita income is again one of the essential goals of economic development.

e. Standard of living:

Increase in the standard of living of people in a community is yet another key goal of economic development. Improvement of quality of life of their employee's to the customers and stakeholders in the community.

f. Exports:

Any growing business will eventually want to get started with exports to expand their business to foreign markets. Another key benefit is that this expansion that leads to more stable business revenue during economic downturns in the local economy.

g. Community Development:

Economic development doesn't always translate into community development. Community development requires infrastructure for education and training, healthcare, and other public services.

Idea Generation, Screening, Selection and Managing Resources Idea Generation

Write a customer needs list based on the information you gather from the sources identified below. You should try to identify existing weaknesses in your products, gaps in your product range and areas for product improvement.

Source of new business idea

1. Consumers
2. Competitors
3. Distribution Channel (Wholesale, Retailer)
4. Government
5. R&D

Idea Screening

In idea generation phase of the project a large number of ideas are gathered by tapping all possible sources. Idea screening is the process of comparing and contrasting new ideas in order to select the most promising one for the business, in other words, idea

screening is a process of narrowing down the ideas generated by eliminating those ideas which are not feasible.

Idea screening is done by

- a) Market assessment of the ideas-which idea is most attractive for the market or customer.
- b) Financial assessment of the ideas-which idea can generate good profit margins and rate of return.
- c) Strategic assessment of the ideas-which idea can be strategically fit in current mission of the organization.

Introduction to Entrepreneurship and its Evolution

Definition and Scope of Entrepreneurship

- Entrepreneurship is the act of creating, managing, and running a new business.
- It involves innovation and risk-taking.
- The goal is to generate profit and growth.

Historical Evolution of Entrepreneurship

- The concept has evolved from small trading to complex global businesses.
- Notable eras include the Industrial Revolution and the Digital Age.

Roles of an Entrepreneur

Innovator

- Entrepreneurs introduce new products and services.

Risk-taker -They invest resources with no guarantee of returns.

Resource Manager

- Efficiently manage financial, human, and material resources.

Leader and Motivator

- Guide and inspire their teams.

Decision-maker

- Make strategic choices to drive the business.

Idea Generation, Screening, Selection and Managing Resources

Techniques for Generating Business Ideas -

Brainstorming, market research, SWOT analysis.

Criteria for Screening and Evaluating Ideas - Feasibility, market demand, profitability.

Steps in the Selection Process

- Idea validation, prototyping, market testing.

Resource Management

- Effective allocation of financial, human, and material

resources. **Leading and Building the Team in an Enterprise**

Leadership Styles in Entrepreneurship -

Autocratic, democratic, transformational.

Team Building Strategies

- Recruiting skilled members, fostering collaboration.

Conflict Resolution

- Addressing disputes promptly and fairly.

Motivating and Retaining Team Members

- Providing incentives, career growth

opportunities. **Forms of Ownership**

Sole Proprietorship

- Single owner, full control, personal liability.

Partnership

- Two or more owners, shared responsibilities and profits.

Corporation

- Separate legal entity, limited liability, complex

regulations. Limited Liability Company (LLC)

Combines benefits of partnership and corporation.

Cooperative

- Owned and operated by a group of

members. Franchising

- Licensing business model and brand.

Entrepreneurship in the Era of Globalization

Impact of Globalization on Entrepreneurship

- Expanded markets, increased competition, cross-border

opportunities. Opportunities and Challenges

- Access to global markets, cultural differences, regulatory issues.

Strategies for Global Market Entry

- Joint ventures, partnerships, direct investment.

Cross-cultural Management

- Navigating diverse cultural and business

practices. **Entrepreneurship, Creativity and**

Innovation

The Relationship between Entrepreneurship, Creativity, and

Innovation - Creativity fuels innovation, essential for entrepreneurial success.

Techniques to Foster Creativity

- Brainstorming, mind mapping, encouraging diversity.

Managing Innovation in Startups

- Continuous improvement, adapting to market changes.

Social Entrepreneurship

Definition and Significance

- Creating businesses to address social issues.

Differences between Social and Traditional

Entrepreneurship - Focus on social impact versus profit.

Case Studies of Successful Social Enterprises

- Examples include TOMS Shoes, Grameen Bank.

Challenges Faced by Social Entrepreneurs - Balancing mission and sustainability.

Start-ups, Early Venture Issues

Stages of a Startup Lifecycle

- Ideation, validation, scaling, maturity.

Common Challenges in the Early Stages - Funding, market entry, team building.

Funding Options for Startups

- Bootstrapping, venture capital, angel investors.

Legal and Regulatory Considerations

- Compliance, intellectual property, business registration. **Family Business and Entrepreneurship**

Characteristics of Family Businesses

- Family ownership, multi-generational involvement.

Succession Planning

- Preparing the next generation for leadership.

Balancing Family and Business Interests

- Aligning family values with business goals.

Governance in Family Enterprises

- Establishing clear policies and structures.

Women Entrepreneurship: Issues and Challenges

Role of Women in Entrepreneurship

- Increasing participation in various industries.

Unique Challenges Faced by Women Entrepreneurs

- Access to funding, societal norms, work-life balance.

Support Systems and Networks for Women

Entrepreneurs - Mentorship programs, networking groups.

Success Stories and Case Studies - Examples of prominent women entrepreneurs. **Financing the**

Entrepreneurial Business

Sources of Financing

- Personal savings, loans, venture capital, crowdfunding.

Financial Planning and Management

- Budgeting, forecasting, cash flow management.

Investment Strategies

- Assessing risks, diversifying investments.

Exit Strategies

- Mergers, acquisitions, public offerings.

Entrepreneurship Institutions in India

Government Initiatives and Policies

- Start-up India, Make in India, Skill India.

Key Institutions Supporting Entrepreneurship

- NITI Aayog, SIDBI, NSIC.

Role of Incubators and Accelerators

- Providing mentorship, funding, and resources.

Training and Development Programs

- Entrepreneurial training, workshops, seminars.

UNIT III

INTRODUCTION TO INTELLECTUAL PROPERTY RIGHTS

Intellectual property rights are the legal rights that cover the privileges given to individuals who are the owners and inventors of a work, and have created something with their intellectual creativity. Individuals related to areas such as literature, music, invention, etc., can be granted such rights, which can then be used in the business practices by them.

The creator/inventor gets exclusive rights against any misuse or use of work without his/her prior information. However, the rights are granted for a limited period of time to maintain equilibrium.

Intellectual Property

Intellectual property is an intangible creation of the human mind, usually expressed or translated into a tangible form that is assigned certain rights of property. Examples of intellectual property include an author's copyright on a book or article, a distinctive logo design representing a soft drink company and its products, unique design elements of a web site, or a patent on the process to manufacture chewing gum.

Intellectual Property Rights

Intellectual property rights (IPR) can be defined as the rights given to people over the creation of their minds. They usually give the creator an exclusive right over the use of his/her creations for a certain period of time. Intellectual property (IP) refers to creations of the mind: inventions, literary and artistic works, and symbols, names, images, and designs used in commerce.

Categories of Intellectual Property

One can broadly classify the various forms of IPRs into two categories:

- IPRs that stimulate inventive and creative activities (patents, utility models, industrial designs, copyright, plant breeders' rights and layout designs for integrated circuits) and
- IPRs that offer information to consumers (trademarks and geographical indications)

IPRs in both categories seek to address certain failures of private markets to provide for an efficient allocation of resources IP is divided into two categories for ease of understanding:

1. Industrial Property 2. Copyright

Industrial property, which includes inventions (patents), trademarks, industrial designs, and geographic indications of source; and

Copyright, which includes literary and artistic works such as novels, poems and plays, films, musical works, artistic works such as drawings, paintings, photographs and sculptures, and architectural designs. Rights related to copyright include those of performing artists in their performances, producers of phonograms in their recordings, and those of broadcasters in their radio and television programs Intellectual property shall include the right relating to:

- Literary, artistic and scientific works;
- Performance of performing artists;
- Inventions in all fields of human Endeavour;
- Scientific discoveries;
- Industrial designs;
- Trademarks, service marks and etc;
- Protection against unfair competition.

What is a property?

Property designates those things that are commonly recognized as being the possessions of an individual or a group. A right of ownership is associated with property that establishes the good as being "one's own thing" in relation to other individuals or groups, assuring the owner the right to dispense with the property in a manner he or she deems fit, whether to use or not use, exclude others from using, or to transfer ownership.

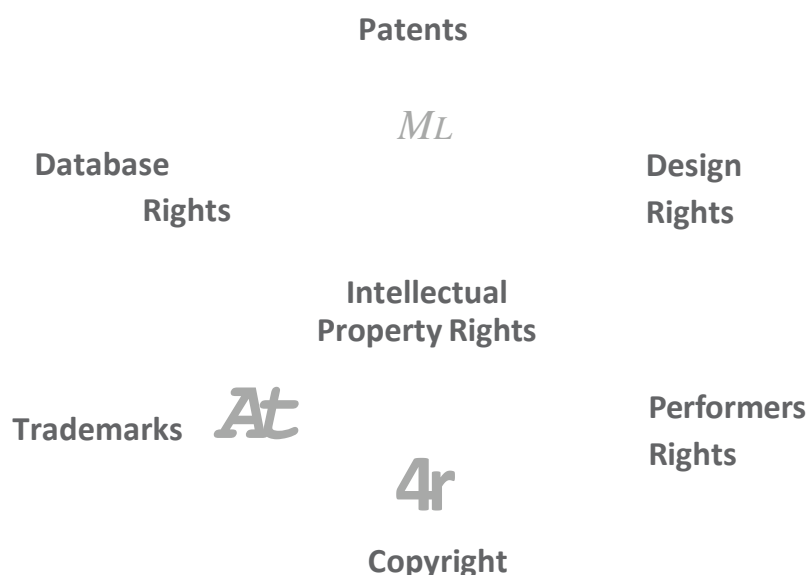
Properties are of two types - tangible property and intangible property i.e. one that is physically present and the other which is not in any physical form. Building, land, house, cash, jewellery are few examples of tangible properties which can be seen and felt physically. On the other hand there is a kind of valuable property that cannot be felt physically as it does not have a physical form. Intellectual

property is one of the forms of intangible property which commands a material value which can also be higher than the value of a tangible asset or property.

TYPES OF INTELLECTUAL PROPERTY

The different types of Intellectual Property Rights are:

- Patents
- Copyrights
- Trademarks
- Industrial designs
- Geographical indications of goods
- Trade Secrets



Important Species of IPR

Out of the different types of Intellectual Property Rights the following are the most important species of IPR

TRADEMARKS

According to section 2, sub-section (1) of the Trade Marks Act 1999, "Trade Mark" means a mark capable of being represented graphically and which is capable of distinguishing the goods or services of one person from those of others and may include shape of goods, their packaging and combination of colors.

Trade mark registration is an effective and economic way of ensuring your brand is protected. Registration provides a safeguard against third party infringement

and often acts as an effective deterrent against third parties considering or contemplating infringement. Failure to protect brand may reduce its value, and could damage your business' reputation. It is also important to be attentive to the activities of your competitors. If you suspect or witness your brand being infringed it is best to take action as soon as possible. The longer the infringing activity exists, the more difficult to maintain the registered trademark and chances of trademark becoming generic.

Genericide is the term used to describe the death of a trademark that results from the brand name becoming the name of the object itself.

COPYRIGHTS

1847 is the First Copyright law Enactment in India during British Regime. The term of copyright was for the lifetime of the author and 60 years counted from the year following the death of the author

Copyright law is designed to protect interests and balance the rights of the following stake holders

- Authors/ Creators
- Publishers/ Entrepreneurs Users /Audiences

Indian Copyright Act is the one of the best Copyright enactment in the world.

The Copyright Act 1911, while repealing earlier statues on the subject, was also made applicable to all the British colonies including India. In 1914, the Indian Copyright Act was enacted which modified some of the provisions of Copyright Act 1911 and added some new provisions to it to make it applicable in India. Copyright Act, 1911 was in existence in India till the new Copyright Act, 1957 was introduced in India Post Independence. In India, the Copyright Act, 1957 (as amended in 1999), the Rules made there under and the International Copyright Order, 1999 govern Copyright and neighboring rights. This Act has been amended five times i.e 1983,1984,1992,1999 and most recently in 2012.

What can be protected under Copyright?

Literary, Dramatic, Artistic, Musical, Cinematographic, Photographic and Sound Recording works.

Literary works such as novels, poems, plays, reference works, newspapers and computer programs; databases; films, musical compositions, and choreography; artistic works such as paintings, drawings, photographs and sculpture; architecture; and advertisements, maps and technical drawings.

PATENTS

Patent is a grant for an invention by the Government to the inventor in exchange for full disclosure of the invention. A patent is an exclusive right granted by law to applicants / assignees to make use of and exploit their inventions for a limited period of time (generally 20 years from filing). The patent holder has the legal right to exclude others from commercially exploiting his invention for the duration of this period. In return for exclusive rights, the applicant is obliged to disclose the invention to the public in a manner that enables others, skilled in the art, to replicate the invention. The patent system is designed to balance the interests of applicants / assignees (exclusive rights) and the interests of society (disclosure of invention).

Meaning of 'Invention' under Patent

Law Sec.2(1)(J) - Invention" means a new product or process involving an inventive step and capable of industrial application

There are three types of patents:

Utility patents may be granted to anyone who invents or discovers any new and useful process, machine, article of manufacture, or composition of matter, or any new and useful improvement thereof;

Design patents may be granted to anyone who invents a new, original, and ornamental design for an article of manufacture; and

Plant patents may be granted to anyone who invents or discovers and asexually reproduces any distinct and new variety of plant

TRADE SECRETS

A trade secret consists of any valuable business information. The business secrets are not to be known by the competitor. There is no limit to the type of information that can be protected as trade secrets; For Example: Recipes, Marketing plans, financial projections, and methods of conducting business can all constitute trade secrets.

There is no requirement that a trade secret be unique or complex; thus, even something as simple and nontechnical as a list of customers can qualify as a trade secret as long as it affords its owner a competitive advantage and is not common knowledge. If trade secrets were not protectable, companies would have no incentive to invest time, money and effort in research and development that ultimately benefits the public. Trade secret law thus promotes the development of new methods and processes for doing business in the marketplace.

Protection of Trade Secrets: Although trademarks, copyrights and patents are all subject to extensive statutory schemes for their protection, application and registration, there is no federal law relating to trade secrets and no formalities are required to obtain rights to trade secrets. Trade secrets are protectable under various state statutes and cases and by contractual agreements between parties.

GEOGRAPHICAL INDICATIONS

GI is an indication, originating from a definite geographical territory. It is used to identify agricultural, natural or manufactured goods produced, processed or prepared in that particular territory due to which the product has special quality, reputation and/or other characteristics.

IMPORTANCE OF INTELLECTUAL PROPERTY RIGHTS

IPR is a significant tool in today's era. The risk of an innovation getting infringed without the knowledge of the inventor stands very high. With the increase in the importance of IP, instances of IP crimes have become the part and parcel of the digitized era sometimes even leading to failure of businesses. Companies rely on adequate protection of their patents, trademarks, and copyrights, while customers make use of IP to ensure that they purchase secure, assured goods.

An IP asset is like any other physical property offering commercial benefits to businesses. In a web-based world, IP protection is much more relevant as it is comparatively simpler than ever to reproduce any specific template, logo, or functionality. Hence, strong IP laws give protection to IP and contribute to the economy of the respective state. IPR is one of the sources of security for intangible properties which are still open to the public and which can be quickly replicated by anyone.

Intellectual property rights are more important because today we are highly-connected to digital landscape. With all of the good the rise of the internet has done for the sharing of information and ideas, it has unfortunately become easier for ideas and works to be stolen, which can be damaging to both national economies and innovation.

Intellectual property protection varies from country to country, but countries that have strong IP laws recognize the important impact original works, designs, inventions, etc. have on the overall economy. Almost every country that has a dependence on international trade takes strong measures to protect their intellectual property rights.

With the rise of intangible assets that are shared across the internet, it is easy for people to unlawfully copy and share books, music, movies, and more.

Copyrights, patents, trademarks, and trade secrets and the laws around these protections are all intended to encourage innovation and creativity and are essential to the practice of IP law to help curb illegal activities.

Organizations like the World Intellectual Property Organization (WIPO) underscore the importance of fostering IP-driven innovation to incentivize and protect creativity. WIPO is a global forum for intellectual property services and is a self-funding agency of the United Nations, with 193 member states.

EVOLUTION OF IP ACTS AND TREATIES

The evolution of international IP acts through different treaties and the formation of World Intellectual Property Organization (WIPO) .

1883 - Paris Convention (France)

The Paris Convention for the Protection of Industrial Property is born. This international agreement is the first major step taken to help creators ensure that their intellectual works are protected in other countries. The need for international protection of intellectual property (IP) became evident when foreign exhibitors refused to attend the International Exhibition of Inventions in Vienna, Austria in 1873 because they were afraid their ideas would be stolen and exploited commercially in other countries. The Paris Convention covers:

- Inventions (patents)
- Trademarks
- Industrial designs

1886 - Berne Convention (Switzerland)

Following a campaign by French writer Victor Hugo the Berne Convention for the Protection of Literary and Artistic Works is agreed. The aim is to give creators the right to control and receive payment for their creative works on an international level. Works protected include: •

Novels, short stories, poems, plays;

- Songs, operas, musicals, sonatas; and
- Drawings, paintings, sculptures, architectural works.

1891 - Madrid Agreement (Spain)

With the adoption of the Madrid Agreement, the first international IP filing service is launched: the Madrid System for the international registration of marks. In the decades that follow, a full spectrum of international IP services will emerge under the auspices of what will later become WIPO.

1893 - BIRPI established

The two secretariats set up to administer the Paris and Berne Conventions combine to form WIPO's immediate predecessor, the United International Bureaux for the Protection of Intellectual Property - best known by its French acronym, BIRPI. The organization, with a staff of seven, is based in Berne, Switzerland.

1970 - BIRPI becomes WIPO

The Convention establishing the World Intellectual Property Organization (WIPO) comes into force and BIRPI is thus transformed to become WIPO. The newly established WIPO is a member state-led, intergovernmental organization, with its headquarters in Geneva, Switzerland.

1974 - WIPO joins the UN

WIPO joins the United Nations (UN) family of organizations, becoming a specialized agency of the UN. All member states of the UN are entitled, though not obliged, to become members of the specialized agencies.

1974 - WIPO joins the UN (193 Member Countries in UN)

WIPO joins the United Nations (UN) family of organizations, becoming a specialized agency of the UN. All member states of the UN are entitled, though not obliged, to become members of the specialized agencies.

1978 - PCT System launched

The PCT international patent system begins operation. The PCT expands rapidly to become WIPO's largest international IP filing system today.

The Patent Cooperation Treaty (PCT) makes it possible to seek patent protection for an invention simultaneously in each of a large number of countries by filing an "international" patent application.

TRIPS Agreement

India along with other emerging nations graced a signatory to the Treaty of TRIPS of the World Trade Organization (WTO) in 1995 with a matter that agreement will allow free flow of trade, investment and eliminate the restrictions enduring in the norm of Intellectual Property.

The Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS) is an international agreement administered by the World Trade Organization (WTO) that sets down minimum standards for many forms of intellectual property (IP) regulation as applied to nationals of other WTO Members. The Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) is an international legal agreement between all the member nations of the World Trade Organization (WTO).

The TRIPS Agreement aims for the transfer of technology and requires developed country members to provide incentives for their companies to promote the transfer of technology to least-developed countries in order to enable them to create a sound and viable technological base

AGENCIES RESPONSIBLE FOR IPR REGISTRATIONS (a) National

IPR Agencies:

The office of the Controller General of Patents, Designs and trademarks (CGPDTM), a subordinate Office under **The Department for Promotion of Industry and Internal Trade (DPIIT)**, carries out statutory functions related to grant of Patents and registration of Trademarks, Designs and Geographical Indications. The registration of copyrights is administered by the Registrar of Copyright Office, working under the CGPDTM. It functions out of offices situated in Delhi, Kolkata, Mumbai, Chennai and Ahmadabad, while the Central IP Training Academy is at Nagpur.

The appropriate office of the patent office shall be the head office of the patent office or the branch office as the case may be within whose territorial limits.

Residence of applicant or Domicile; or their place of business; or the place where the invention actually originated.

The CGPDTM supervises the functioning of the following IP offices:

- i. The Patent Office's (including the Design Wing) at Chennai, Delhi, Kolkata & Mumbai.
- ii. The Patent Information System (PIS) and Rajiv Gandhi National Institute of Intellectual Property Management (RGNIIPM) at Nagpur.
- iii. The Trade marks Registry at Ahmadabad, Chennai, Delhi, Kolkata & Mumbai.
- iv. The Geographical Indications Registry (GIR) at Chennai.
- v. The Copyright Office at Delhi.
- vi. The Semiconductor Integrated Circuits Layout-Design Registry at Delhi.

Office	Territorial Jurisdiction
Patent Office Branch, Chennai	The States of Telangana, Andhra Pradesh, Karnataka, Kerala, Tamil Nadu and the Union Territories of Pondicherry and Lakshadweep
Patent Office Branch, Mumbai	The States of Maharashtra, Gujarat, Madhya Pradesh, Goa and Chhattisgarh and the Union Territories of Daman and Diu & Dadra and Nagar Haveli.
Patent Office Branch, New Delhi	The States of Haryana, Himachal Pradesh, Jammu and Kashmir, Punjab, Rajasthan, Uttar Pradesh, Uttaraanchal, Delhi and the Union Territory of Chandigarh.
Patent Office, Kolkata	The rest of India

Intellectual Property Appellate Board (IPAB):

Intellectual Property Appellate Board (IPAB) has been established in the year 2003, under Section 84 of the Trade Marks Act, 1999. The Board hears appeals against the decision of Controller of Patents (under the Patents Act, 1970), Registrar of Trade Marks (under the Trade Marks Act, 1999) and Geographical Indication cases (under the Geographical Indication & Protection Act, 1999). The Copyright Board and Plant Varieties Protection Appellate Tribunal function under the ambit of IPAB in accordance with their respective Acts and Rules. **(b) International IPR Agencies:**

There are a number of International organizations and agencies that promote the use and protection of intellectual property.

International Trademark Association (INTA)

INTA is a not-for-profit international association composed chiefly of trademark owners and practitioners. It is a global association. Trademark owners and professionals dedicated in supporting trademarks and related IP in order to protect consumers and to promote fair and effective commerce. More than 4000 (Present 6500 member) companies and law firms more than 150 (Present 190 countries) countries belong to INTA, together with others interested in promoting trademarks.

INTA members have collectively contributed almost US \$ 12 trillion to global GDP annually. INTA undertakes advocacy work throughout the world to advance trademarks and offers educational programs and informational and legal resources of global interest. Its head quarter in New York City, INTA also has offices in Brussels, Shanghai and Washington DC and representative in Geneva and Mumbai.

This association was founded in 1878 by 17 merchants and manufacturers who saw a need for an organization. The INTA is formed to protect and promote the rights of trademark owners, to secure useful legislation (the process of making laws), and to give aid and encouragement to all efforts for the advancement and observance of trademark rights.

World Intellectual Property Organization (WIPO)

WIPO was founded in 1883 and is specialized agency of the United Nations whose purposes are to promote intellectual property throughout the world and to administer 23 treaties (Present 26 treaties) dealing with intellectual property.

WIPO is one of the 17 specialized agencies of the United Nations. It was created in 1967, to encourage creative activity, to promote the protection of Intellectual Property throughout the world. Around 193 nations are members of WIPO.

THE ROLE AND VALUE OF IP IN INTERNATIONAL COMMERCE

Intellectual property rights (IP rights) are not inherently valuable. Their **value** is the strategic advantage gained by excluding others from using the **intellectual property**. To be valuable, your exclusionary rights should be strategically aligned with your business objectives.

The recognition of intellectual property rights is an important key to converting creativity into a marketable product with positive cash flow. Creativity is essential to economic growth.

Consumer sales depend on attractive, efficient, safe, innovative, and dependable products and services, and these qualities are built on intellectual property. The IP rights of a business are among its most valuable assets. The protection of those IP rights can promote creativity, distinguish a business and its products or services, and increase its profitability and endurance.

To understand the role of IP rights in practical terms, you must first appreciate the purpose of IP laws. Although IP laws will differ in detail from country to country, they have the same basic purpose, which is also reflected in international and regional agreements. In broad terms, exclusive rights in intellectual property are usually granted pursuant to laws that are intended to do the following:

- Define the monopolistic rights, namely, exclusive ownership rights that belong to the holder of the IP and are transferable to another holder in certain situations.⁰
- Define the limitations on the monopoly, such as by restricting the application of exclusive rights to an invention, presentation, or specific goods only, by making exceptions to exclusive use for permitted acts (e.g., authorizing single copies for educational purposes), and by setting terms of duration.⁰
- Define the remedies for violation of IP rights.⁰

In other words, IP laws create affirmative rights, but not an absolute defensive shield against infringement. They give the owner of the IP the right to stop other persons from using the IP in a manner that is not permitted by the law. Unless the IP owner takes affirmative action, an infringement of IP rights may continue unchecked by any other authority. This concept is extremely significant: mere registration of IP rights is not alone sufficient to protect those rights against unauthorized use. If you are going to spend the money and labor to register your IP claim, you must be also willing to spend the money and labor to enforce your claim.

Your IP can be one of your most useful and most used business tools. If you own patents, copyrights, designs, or similar IP, you will realize value from utilizing them in your own exclusive manufacture or production. If you own marks, you will use them to distinguish your business and your products or services, to grow its customer base, and to promote its goodwill and reputation. If you own trade secrets, specialized mailing lists, secret recipes or processes, and similar IP, your business can provide distinctively unique services in contrast to your competition.

The cost of launching a new product or developing a new invention can sometimes be so costly that licensing or merging with another company is less expensive. When selling a business, the valuation of assets should always include the value of all IP rights held by the business. There are no limits on how valuable IP rights may become. The value of your IP could double your company's value. Your IP may become the most valuable asset in your business. Your business may even be or become the exploitation of your IP rights through licensing or other similar arrangements. For example, copyrights generate lucrative license fees and royalties.

Publishers, authors, music makers, record companies, entertainers, sports figures, television and movie studios make millions from IP protected by copyrights. A famous person can command millions for an appearance, and can sue for millions for unauthorized use of his or her famous name or likeness.

Companies holding patents can gain substantial market share while other companies are trying to find another way to replicate the same result. Small inventors and large companies alike often license patented technologies for substantial fees. It has been reported by the Asian Wall Street Journal that an inventor who has filed more than 500 patents in the United States in the last 35 years has made more than US\$500 million without directly engaging in any industrial application of the invention.

Intellectual property rights can become worth more than the physical assets of a company. For example, the IP produced and acquired by Microsoft Corporation is valued at more than the company's physical assets, and the company itself has been valued at more than the value of General Motors Corporation, despite the latter's significant physical assets. Similarly, the Internet Company Yahoo, Inc., has been valued at more than the value of New York Times, Inc., based on the IP rights developed and acquired by the former.

In addition to knowing the factors that complicate the value of your IP rights, you hold the key to identifying other intangible assets, which may be taken into account in combination with your IP rights or as separate assets

E-Commerce, more than other business systems, often involves selling products and services that are based on IP and its licensing. Music, pictures, photos, software, designs, training modules, systems, etc. can all be traded through E-Commerce, in which case, IP is the main component of value in the transaction. IP is important because the things of value that are traded on the Internet must be protected, using technological security systems and IP laws, or

else they can be stolen or pirated and whole businesses can be destroyed. The systems that allow the Internet to function - software, networks, designs, chips, routers and switches, the user interface, and so on - are forms of IP and often protected by IP rights. Trademarks are an essential part of E-Commerce business, as branding, customer recognition and good will, essential elements of Web-based business, are protected by trademarks and unfair competition law.

Finally, E-Commerce based businesses usually hold a great deal of their value in IP; so the valuation of your E-Commerce business will be affected by whether you have protected your IP. Many E-Commerce companies, like other technology companies, have patent portfolios and trademarks

ISSUES AFFECTING IP INTERNATIONALLY

The major IP Issue Areas to be considered in International Trade are as follows

IP Rights are Territorial⁰ Secure
Freedom to Operate⁰ Respect Deadlines⁰
Early Disclosure⁰ Working with Partners⁰
Choosing an Appropriate Trademark⁰ **IP**

Rights are Territorial

It is important to keep in mind that IP rights are only valid in the country or region in which they have been granted. Therefore, applying for such rights in other countries is important if there is an intention to go international.

However, note copyright is automatically available through the provisions of the Berne Convention, famous marks have automatic protection, trade secrets are by their nature confidential. IP Rights can be obtained internationally as follows

National Route

Apply in each country, pay fees, translation into national languages

International Route (PCT)

The Patent Cooperation Treaty (PCT) is an international patent law treaty, concluded in 1970. It provides a **unified procedure for filing patent applications** to protect inventions in each of its contracting states. A patent application filed under the PCT is called an international application, or PCT application. In this the filing of an international application is done from the applicant's national Office

Freedom to Operate (FTO)

Analyzing FTO is to evaluate whether you are in any way infringing the patents, designs or trademarks of others. Such a evaluation is usually done by conducting a search in patent, trademark and design databases for patent applications, granted patents, registered trademarks or designs As patents, trademarks and designs are granted to particular territories an FTO search may reveal that the particular IP in question is not protected in the territory of interest.

Reason for conducting searches: are

- Same or confusingly similar trademark may already exist in the export market⁰
- Technology not patented in one country may be patented elsewhere⁰

Respect Deadlines

Priority Period -Once an application for a patent or design right has been made domestically (priority date) an international application has to be made within the “priority period.” The international application will benefit from the priority date. A filing after the priority period has lapsed would mean you can’t benefit from the earlier priority date and novelty will be lost.

Patents: 12 months

Designs: 6 months **Risks of Early Disclosure**

Patents and designs are required to be novel to merit protection. If a product needs to be disclosed, it should be done in a Non-disclosure Agreement. If not, the novelty could be lost and an application for registration be rejected. This is particularly important in disclosing products that embody inventions and/or designs to potential partners before protection has been obtained. **Working with Partners**

Ownership of IP: Creation of new IP and who owns that
Assignments/licenses for ownership
Risk of unauthorized use or disclosure of trade secrets by partner
Risk that partner will use trade secrets of others and expose you to litigation. Insist on indemnification
Quality of product to be maintained so as to sustain brand image.
Trademarks: if registered in the partner's name in the country could create problems once the relationship ends.

Choosing an Appropriate Trademark

Check whether the mark has undesired connotations or is likely to be rejected in any country. For example, Mitsubishi was dismayed to find that PAJERO means 'wanker' in Spanish. Ford NOVA means no go in Spanish. But Coca-Cola was successful in finding a trademark in Chinese to say "happiness in the mouth".

UNIT-IV

Introduction to Patent Law

What is a Patent?

As defined under the Indian Patent Act 1970, the term 'patent' means a patent granted for a new process or product involving an inventive step and capable of industrial application.

Patents are exclusive statutory rights granted to the patentee by the government for a limited period in lieu of full disclosure of an invention. They provide a monopoly to the patentee to exclude others from using, making, offering for sale, selling, or importing the patented products.

1. **Patentable Subject Matter:** An essential consideration for an invention to be patentable is determining if it is related to a patentable subject matter. Sections 3 and 4 of the Patents Act, 1970 explain the nonpatentable subject matter. If the invention does not fall under the provisions of Sections 3 or 4, it means the invention has patentable subject matter (subject to the fulfilment of the other criteria).
2. **Novelty:** Novelty is the central theme in identifying the patent potential of an invention. In simple words, the novelty requirement emphasizes that an invention must never have been published in the public domain. In addition, it must be new with no identical or similar prior arts.
3. **Industrial Applicability:** The criterion of industrial applicability is defined in Section 2(1) (ac) of the Patents Act, 1970 as "the invention is capable of being made or used in an industry." It must have some industrial application, which means there has to be some practical utility to be patentable.
4. **Inventive Steps or Non-obviousness:** Inventive step is defined under Section 2(ja) of the Patents Act as "a feature of an invention that

involves technical advance as compared to the existing knowledge or having economic significance or both and that makes the invention not obvious to a person skilled in the art.” It means that the invention must not be apparent to a person skilled in the same field the invention relates to. It must be inventive and unclear to a person qualified in the same area.

5. **Specifications:** Apart from the criteria mentioned above, another important factor for getting a patent is patent’s disclosure. The disclosure of a patent means that the patent draft should reveal the invention sufficiently to help a person skilled in the same field as the invention relates to in executing the invention without extra effort. If the patent specification does not enable a person with reasonable skill and knowledge in the concerned field to apply the invention, then a patent will most definitely not be granted.

Patentability requirements can be understood as filters arranged in continuity to verify the registration scope of new inventions. Only inventions which pass through all the filters are eligible for a patent grant, and those that get filtered out are refused.

After understanding the fundamentals of patents, it is crucial to know the need for getting your invention patented.

What are the Rights of a Patent Holder?

The patent holder enjoys various privileges, including assigning licenses to other persons and authorizing them to sell and manufacture the patented item. However, it is important to note that these are not absolute rights and are subject to various constraints and limitations.

In the global context, Trade-Related Aspects of Intellectual Property Rights (TRIPS) agreement that came into effect on 1 January, 1995 is the most holistic multilateral agreement on intellectual property. The areas of intellectual property covered under it are:

- Copyright and related rights (i.e. the rights of producers of sound recordings, performers, and broadcasting organizations)
 - Trademarks, including service marks
 - Geographical indications, including appellations of origin
 - Industrial designs
 - Patents covering the protection of new types of plants
 - The layout designs of integrated circuits
 - Unrevealed information, including trade secrets and test data
- Article 28 of the TRIPS Agreement ensures the following for patent holders:
- Where the subject matter of a patent is a product, it prohibits third parties from the acts of using, making, offering for sale, selling, or importing that product without the patent holder's consent.
 - Where the subject matter of a patent is a process, it prohibits third parties from the act of using the process, offering for sale, selling, or importing without the owner's consent.

Patent owners shall also have the right to assign the patent, transfer by succession, and conclude licensing contracts.

1. Right to Exploit the Patent

In India, the patent holder is honored with the right to use, sell, manufacture and distribute the patented product. In case the invention is a production process, the owner of the patent reserves the right to share the procedure with another person. Moreover, the agent of the patent holder can also enforce this right.

If a new invention is a product, the patentee gets the exclusive right to produce, use, and distribute an invention in India for specific applications. On the other hand, if the invention covers the manufacturing process or process of some substance or article, the right to exploit includes the sole right to practice or utilize the manufacturing process or system in the territory of India. The Indian patent law also considers a patentee's exclusive right to seek market advantages from the invention. It encourages artists to invest in their creative actions, realizing that their inventions would be protected by statute and no one else can replicate their innovations within a certain amount of time (mostly 20 years).

2. Right to Grant or Assign Licenses

The patent holder enjoys the right to assign or grant licenses for manufacturing and distributing the patented products to other parties. In instances where there are co-owners of the patented product, all the patent owners must collectively grant the license to a third party. The license is considered to be granted only after the Controller has duly authorized the request. Therefore, to be legal and lawful, the assignment or license must be in writing and should be documented with the Patent Controller.

3. Right to Surrender the Patent

The patent owner possesses the right to surrender the patent after seeking due permission from the Controller. Then, the Controller advertises this surrender as per the rules laid down in the Indian Patent Act. The parties interested in getting the ownership of the patent can directly approach the Controller. Afterward, the Controller examines the party's claims and grants the ownership. The transfer happens only if the owner is willing to surrender the patent.

The patentee has the right to forfeit a patent at any point and their initiative by sending notice in a specified manner. This includes publishing ads in the journal with an offer to surrender the patent.

4. Right before Selling

As per Section 24 of the Indian Patents Act, a patent is sealed from the date of notification for acceptance to the date of acceptance of the notification. The patentee's right comes into play after the notification for acceptance is presented.

5. Right to Apply for the Patent of Addition

Section 54 to 56 of the Patents Act, 1970 provides for this provision. The provision allows for modifications in the existing invention. In such instances, the patent holder is granted the right to the modified invention once the notification of acceptance comes out. After the notification is presented, the owner is granted the same rights as the previous patent.

6. Right to Sue in Case of Infringement

When any patent holder's rights are violated, it is termed as patent infringement. A patentee can approach either a district court or a high court for the redressal of any grievance arising out of the violation of rights. If the defendant is found guilty of infringement, the courts will either grant a permanent injunction or award the plaintiff damages it sees fit.

Patentees are also responsible to fulfill certain obligations once the patent and the related rights are granted. In the next section, we will discuss the myriad obligations that every patentee in India must fulfill.

7. Limitations of Patent Rights

1. Limitations on Private and Non-Commercial Use

Under this limitation, the patentee is curtailed from utilizing the invention for private purposes or imposing a monopoly over commercial activity. If the government thinks that the patent holder is not leveraging the patented invention for commercial purposes, then it has the right to grant a compulsory license to a third party. Section 84 and Section 92 of the Patents Act, 1970 lay out the need for a mandatory license. It can be invoked if the patented item is not available to the general public for use at affordable prices. It is generally observed in cases of pharmaceutical drugs. Another provision in the patents act relates to the limitations on private and commercial use which is covered in Section 85 of the act. It talks about the revocation of patents by the Controller in case of non-use.

9. Exception for Experimental or Scientific use

This limitation is covered under sub-section 3 of Section 47 of the Indian Patent Act. The exception states that any individual can utilize the patented process or product to undertake any scientific experiment or conduct research. This exception to patent rights was introduced to protect those conducting bona fide research works and experiments. It allows the third parties to conduct research using the patented material without being accused of infringing on the patent holder's rights.

10. Regulatory-Use/Prior-Use Exemption

Although providing patent rights to the patentees encourages new inventions, it can also lead to monopolies and strictly private use of the patented products. Because of this fear, Section 107 A was added to the law through the Indian Patents Amendment Act, 2005. The provision provides an exemption to the manufacturers of generic drugs to use the patented product for research and development purposes, and therefore enables them to seek marketing approval beyond the country's boundaries. It is also known as the Bolar provision or Bolar exemption in India. However, the manufacturers can only manufacture, use, and sell the product in the market after the patented products' expiry date, i.e., 14 years from filing the patent application.

11. Exhaustion of Patent Rights

This provision states that the inventor's patent rights get exhausted once the patented product is sold in the market. As per this limitation, the patent holder loses control over the product once the first unrestricted sale of the invention is observed. The logic behind the formulation of this constraint was that once a patent holder sells the invention in the market, the objective behind granting a patent for the particular product is lost. It implies that the patent holder has provided the right to manufacture, use, and sell the patented product to another individual, losing the exclusive rights.

Notwithstanding its few limitations, enforcement of patent rights comes in extremely handy in cases related to patent infringement. The next section elaborates on the remedies available for patentee against patent infringement.

Remedies for Patent Infringement

Patent infringement is the illegal or unauthorized manufacture or use of an invention or improvement on another's invention or subject matter without taking the owner's consent either by waiver or license. Rights in the Indian Patents Act allow plaintiffs to recover fair compensation from the infringer. The various remedial options in patent infringement litigations include equal relief and costs, monetary relief, and attorney's fees.

Monetary Relief: Compensatory damages are made available to the plaintiffs to deter individuals and companies from infringing on someone's patent rights - thereby limiting the cases of patent infringement. Three types of compensation under monetary relief are listed below:

1. **Indemnity Compensation:** A patent owner incurs financial losses when the patent product or technology is infringed on. Indemnity compensation helps the patent owner recover these losses.
2. **Increased Damage:** In cases of willful violations, damages of up to three times the reasonable compensation arrived at after standard calculation may be awarded to the plaintiff.

Equitable Relief: A court of law issues an order to prohibit a person from doing anything or acting. There are two types of injunction listed below:

1. **Preliminary Injunction:** This order passed in the initial stages of lawsuits prevents parties from performing a disputable act, such as making a patented product.
2. **Permanent Injunction:** This is the court's final order that permanently stops specific activities or initiates other concrete actions.