

Computing Innovation for Technology Entrepreneurship Information and Communications Technology Entrepreneurship



Intellectual Property and Legal Framework

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Creative Economy

- Creative economy refers to the gathering of ideas from the business world and their transposition into products. According to the assessments of John Howkins - author of the famous book "The Creative Economy: How people make money from ideas" published in June 2001worldwide the creative economy was valued in January 2000 at \$ 2.2 trillion. Its evolution is rapid and is estimated at an average annual growth rate of 5%. In some countries, growth is even faster.
- "Intellectual property is the currency of our new era; the national copyright bureau is the central bank of the 21st century" interview with John Howkins.





Creative Economy

The creative economy captures the relationship between creativity and economics. The creativity equation shows that the creative economy (EC) is computed as the value of creative products (CP) multiplied with the number of transactions (T):





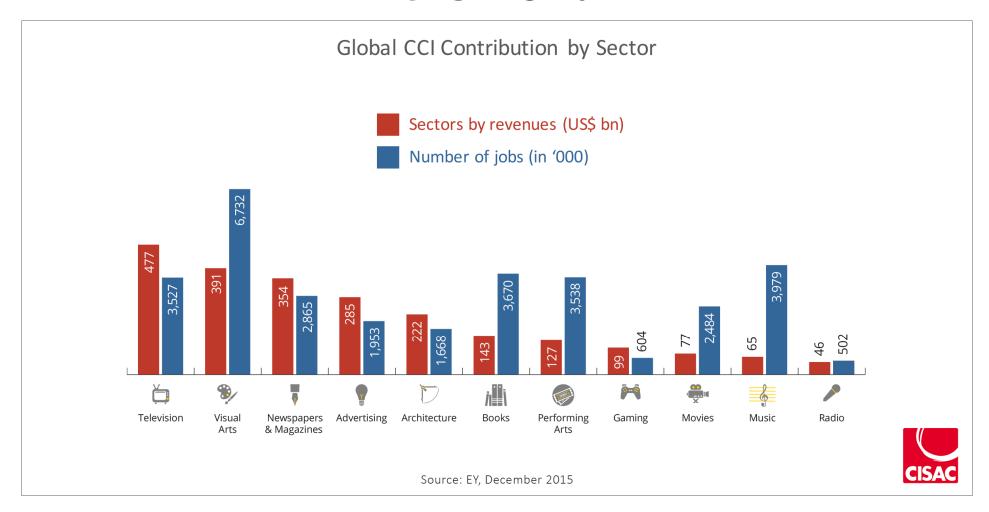
Creative Industries

- New economies are characterised by specific fields of activities - called creative industries - where creativity is considered to be the most important raw material and also the most valuable economic product.
- Such industries include: software, publishing, design, music, video and electronic games, etc.
- In the G-7 countries, more than 50% of consumer spending goes to products commimg from the creative industries. (Ryan 2003)





The economic and social contribution of cultural and creative industries (CCI) around the world.

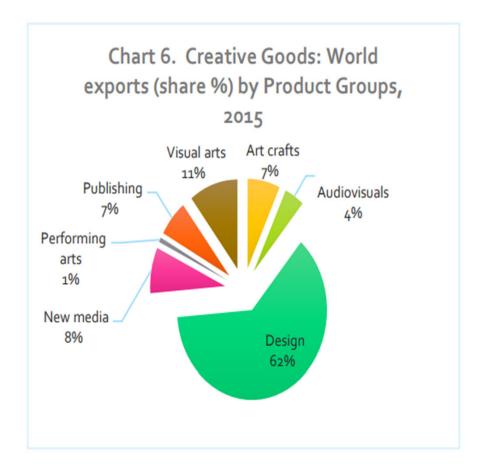






Creative Goods

- This tendency will become a reality for countries with high and medium income levels in East Asia. These creative industries are called by some authors main creative industries.
- IIPA1 defines the main copyright industries as those industries that create copyrighted products: films and video productions, publishing books, newspapers, software, theaters, advertising, television, radio, etc.



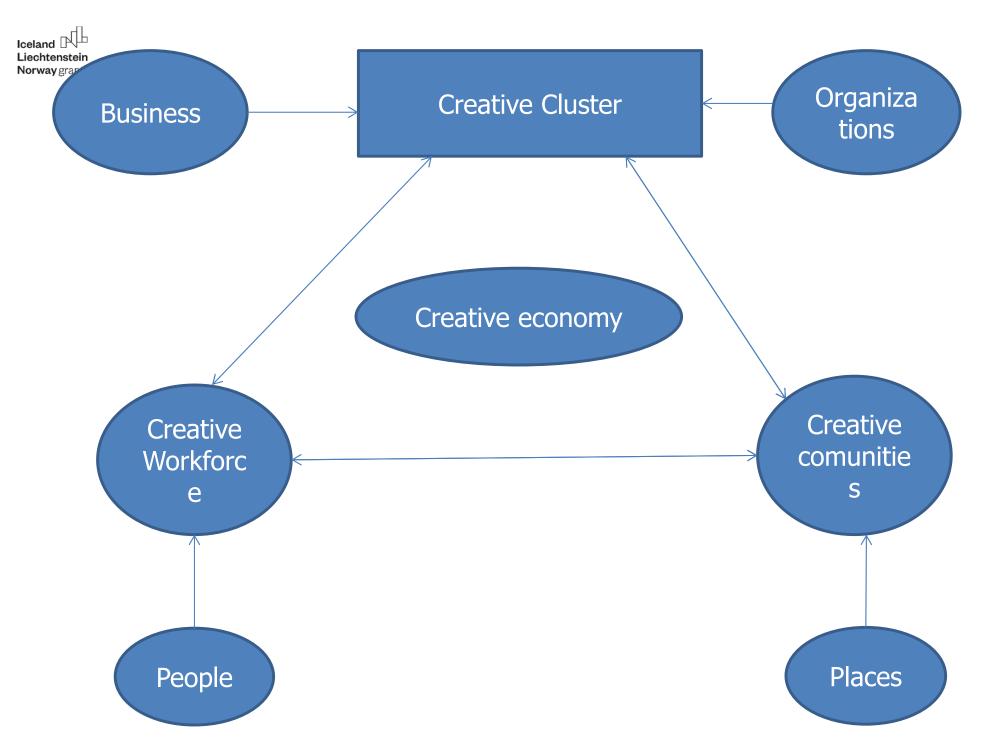
Source: UNCTAD, based on official data reported to UN COMTRADE Database





- The estimated size of the creative economy depends on creative and innovative management. The components of the creative economy are: creative communities, creative clusters and creative people. They not only shape the profile of the economy of the future, but of an economy that is already manifesting itself, offering opportunities for prosperity.
- The creative industries¹ are the most intensive in terms of the level of qualification and competence and, respectively, in relation to information technologies.







Source: The Creative Economy in Romania, a key factor of economic integration in the EU, S: G. Toma: Pepteanu, Andronache



Creative class present and future

- The new economic geography of creativity and its effects on economic development are captured by the "theory of the three T's": technologies, talent and tolerance that act synergistically, each in itself being a necessary but insufficient condition. The publication "Creative Intelligence" ¹offers new useful data for forecasting the future of regions.
- This publication is the result of a collaboration between Richard Florida Creativity Group¹ and Catalytix, Inc.² and provides data on regional indicators developed by Richard Florida and his team. It mainly provides data on the salaries of people employed in three sectors of the economy: the creative sector, the manufacturing industry and services. The creative class holds 30% of the workforce and half of the salaries (the following table).





Structure of the labor force and salaries distribution among three sectors

	% of workers	Salary weight
Creative class	30%	47%
Class of workers in the processing sector	26%	23%
Services class	44%	30%

Source: The Creative Intelligence Newsletter, a joint publication between the Richard Florida Creativity Group and Catalytix, Inc, Volume 1, Issue 1 December 2002, p. 2





The creative management

- The creative management starts from the imperatives of understanding the creative economy. It considers two value systems: tangible capital and intangible capital and intellectual property.
- The traditional economy has focused on tangible capital ,on goods and services conventionally resulting from processing processes.
- The new economy focuses on intangible capital:ideas
- Ideas manifest the quality of "non-rivalry" in the sense that if I have an idea it does not affect me if a person or a million people have this idea.





This non-rivalry nature encourages the "free-riding" hypothesis that makes it possible for someone to benefit from someone else's ideas without paying. Situation that produces negative effects in idea generation and discurages innovation.

- But when an intangible idea is incorporated into a tangible product then a high level of rivalry manifests itself.
- This is a very controversial topic and has long been debated in economics. Another economic feature of ideas is that the cost of copying or reproducing an idea is often negligible.
- Intellectual property is highly important in the creative economy (Howkins, 2001). Imagine with a personal example!





Five main types of IP protection

 Intellectual property protection takes different forms (patents, trademarks, copyrights, trade secrets). (Tabel 2)

Type of IP	What is Protectable	Examples
Trademark	Branding (Nike swoosh)	marks and logos, slogans
Copyright Creative	authored works	expressions (not ideas) software songs, movies web site and its content
Trade Secrets	Secrets with economic value (Coke recipe)	non-public technology product roadmap customer lists formula
Contract NDA (Non- Disclosure Agreement)	As defined in the contract	technology business information
Patent	Inventions	new technology





- Nowadays intellectual property has become an important factor in the global battle for competitiveness and competitive advantage. Companies search to maximize revenues from ideas.
- However, this theory needs to be reformulated. For example, current copyright law needs to be reinterpreted as a result of the impact of the Internet. Intellectual property is a highly specialized area of law dedicated to encouraging creativity. It protects the rights of individuals and businesses that managed to turn ideas into property by guaranteeing the rights of owners.
- When considering products and services beyond the geopolitical boundaries of companies or beyond the real boundaries of cyberspace, intellectual property becomes even more important.





- Companies that manage to make money by turning innovations into profits are known as knowledge-based companies.
- These companies can protect their innovations by using intellectual property. Intellectual property is associated with intellectual capital.¹
- Copyright protects the original works of authors, while patents protect inventions and discoveries.
- Ideas and discoveries are not protected by copyright law, but the way they are expressed can be protected by copyright.





 A trademark protects words, phrases, symbols or designs that identify the source of a party's products or services and individualizes them as distinct from another party's products or services.





Trademark protects branding and marks

- Trademark gives you the right to prevent others from using "confusingly similar" marks and logos.
- A trademark protects words, phrases, symbols or designs that identify the source of a party's products or services and individualizes them as distinct from another party's products or services.(McDonald's logo, McDonald's song, https://www.youtube.com/watch?v=GApPXZAvkRI)
- Trademark is used to identify source of goods! Trademark protection lasts as long as you are using the mark, the more you use the mark, the stronger your protection The most common way to lose the rights to a trademark is to stop using it and without intending to use again.





- This is called "drop-out."
- trademark rights may be lost unintentionally.
- For example, in some countries, you may lose the rights to a licensing mark without controlling the nature and the quality of the licensee's goods or services offered under the trademark. This concept is often mentioned as "empty licensing."
- rights can be lost through improper use of the trademark or by not acted against the misuse of the mark by others, so that the mark ceases to indicate the source of goods or services and becomes a generic word (such as escalator and cellophane, "adidas", which were originally trademarks, but have come to be understood by the public as generic product names for which were used as trademarks).1





a brand loses its brand significance when significance may vary from country to country, as is the case with aspirin, which is a generic term in United States, but a protected brand in Canada and Germany.

- To prevent loss of rights in a trademark, follow these standard trademark usage rules:
 - Use an adjective with the generic name of the branded product (for example, KLEENEX napkins)
 - Do not put plural terms in the plural. (For example, Oreo cookies, not OREOS)
 - Do not change a trademark by formulating it using the possessive pronoun (for example, Levi's jeans, not LEVI jeans)
 - Do not use signs as verbs or nouns. (For example, do not write "xeroxand" but photocopy or photocopying on an XEROX machine.)¹





Advices in selecting a trademark

- Temptation to use word's "easy to remember," and describes a feature or characteristic of goods or services. (sometimes is a good ideea)
 - terms that are simply descriptive of products and services can be difficult to protect as trademarks.
- The more descriptive your sign is, with particular details than the more difficult it can be to forger or to be "borrowed" by cometitors. The more distinct a brand is and the better known it becomes, the greater the scope of trademark protection will be.
- stronger brands usually have no meaning in relation to the products or services for which they are used, although signs that suggest positive qualities of products or services are present.





 It could be something pleasant for the eye, something obvious and easy to remember. (Samsung)





Copyright protects creative works of authorship

- Copyright gives right to prevent others from copying, distributing or making derivatives of your work.
- Protection of original artistic and literary works.
- very diverse and include all kinds of content from advertisements, books, magazines, newspapers, paintings, photographs, as well as digital content of all kind including musical creations, movies, and computer programs/software.
- The copyright allows the author/creator to benefit commercially from his/her work.
- In addition to granting economic rights, copyright also bestows "moral" rights, which allow the author/creator to claim authorship (the right to display/affix his/her name as the author/creator)
 name as the author/creator)





- and prevent mutilation or deformation of his/her work that might harm his/her reputation.
- Protects "expressions" of ideas but does not protect the underlying ideas
- Copyright protection lasts practically forever
- Copyright does not prevent independent development
- work protected by copyright may be exploited directly by the author/creator or
- may be licensed or assigned (often, in the case of a book, to a publisher or, for music, to a collective management society or a record producer)





Contract

- Protection agreed to by contract
- What is in the contract stays in the contract and between parties (NDA, Non-Disclosure Agreement)
- No registration process, just legal commitement among parteners
- In case of conflict –International arbitration, penalities can be applied.
- Be careful with such contracts they usualy imply compensations in case of breaking the clause.
- You have whatever protection is defined in the contract (e.g., NDA gives you certain rights to protection of your confidential information)
- The protection lasts for the time period defined in the contract
- Contractual clauses are crafted to meet the specific circumstances of each relationship and are needed to prevent, limit or deal with unwanted leaks and disclosure/use of valuable business information.



Patents What Can be Patented?

- Just about anything . . .
 - Circuits, hardware
 - Software, applied algorithms
 - Formulas, designs
 - User interfaces
 - Applications, systems
 - Business processes (sometimes)!
- But not these . . .
 - Scientific principles
 - Pure mathematical algorithms



- The patent gives the owner the right, for a limited duration, to prevent others from making, using, selling, offering for sale, or importing his invention without his authorization.
- The inventor must provide some details of his invention in a patent document that is made publicly available — by an increasing number patent offices — 18 months after the filing of the patent application, and in any case after the patent is granted.
- patent protection lasts for a maximum of 20 years (majority of countries) counted from the filing date and is issued by national or regional government patent offices
- Conditions to fulfill:
- It must be new it should never have been published or publicly used before;
- It must have an "inventive step" or it should be "non-obvious" to a person who is skilled in the relevant field;





- It should be capable of industrial application it must be something that can be industrially manufactured or used.
- Institutions & legislation:
- https://osim.ro/
- Paris Convention for the Protection of Industrial Property (1883) and the WTO Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS) (1994), while the main patent treaties for procedural issues are the Patent Cooperation Treaty (1970) and the Patent Law Treaty (2000).
- When a number of countries are members of a regional patent system, protection can be obtained with effect in the territories of all or some of these, by filing an application at the relevant regional office. The regional patent offices are: the African Intellectual Property Organization (OAPI); African Regional Intellectual Property Organization (ARIPO), Eurasian Patent Organization (EAPO), European Patent Office (EPO) and Patent Office of the Gulf





Idea #1 – IP Creates Value (The incentive principle)

- IP can create company value!
- How carefully you have:
- Acquired your IP
- Protected your IP
- Exploited your IP
- Will be crucial to your ability to realize on value, whether from investors, customers or acquirer





Idea #2 - IP Needs Company Dependent

- What type of IP matters to a venture, and what it should do to protect IP, is highly company/industry dependent!
- Every company has unique business and IP needs some examples depending on the industry:
- Medical device company -- patents
- Web 2.0/social network start up trademark, copyright
- Enterprise software company copyright, trade secret
- Vaccine patent https://www.nature.com/articles/d41586-021-01242-1





The assessment of intellectual property rights is usually carried out in the following order:

- Every property needs protection. Intellectual property is no different. However, the methods of intellectual property protection are significantly different from those for tangible goods.
- Identification of the object of evaluation;
- Definition of objective evaluation;
- Choice of value;
- The choice of evaluation approach;
- Choosing the evaluation method;
- intellectual property rights;
- Evaluation registration report (act).





- The first step is to determine what is the object of evaluation: invention, utility model, industrial design, brand, etc., or a technology that involves two or more objects of intellectual property. You also need to make sure what your rights are.
- In terms of the type of value, it can be a market or a non-market value, such as: investment cost, cost net replacement and so on.
- The evaluation ends with a written evaluation report.





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