

Introduction to Digital Media

The Information Society

DGM 711

Lecture 3

Prepared by

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Reminder



- **Digital media** have common **characteristics** that distinguish them from Analog old media (**Convergent, Hypertextual, Distributed, Pervasive, Algorithmic, Asymmetric, Ephemeral & Permanent**) .
- The architecture of **the digital networks** is **not neutral but** rather has the power to shape the behaviors of their users.
- The **internet** is an **open system** , based upon a **global governance system**.
- **Digital media** and network technologies are composed of different “**layers**,” (physical, logical, content & Legal).
- There are **three generations** of the web (**Web 1.0 - Web 2.0 - Web 3.0**).



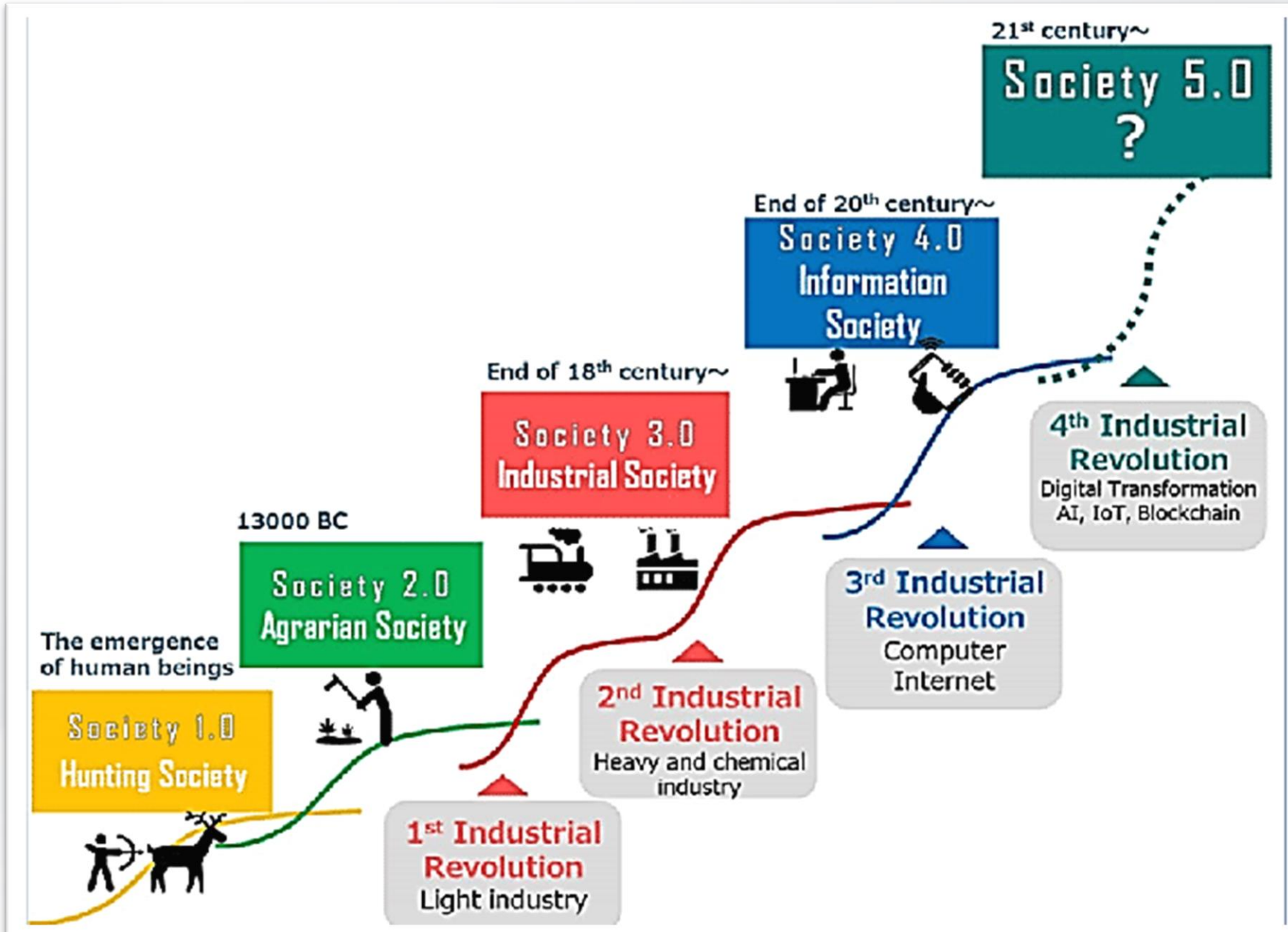
- I. The Information Society Definition.
- II. The Information Society Evolution.
- III. The Networked Economy and Globalization.
- VI. Conclusion.

- The production and management of **information** have assumed a key role in advanced societies and have led to the emergence of terms such as “**information society**.”
- The increasingly central position of **information** in social, political, and economic evolution has been made possible thanks to the evolution of **computers** and networks.
- **The information society** is not a given, but rather a project that continues to **grow** in new directions.

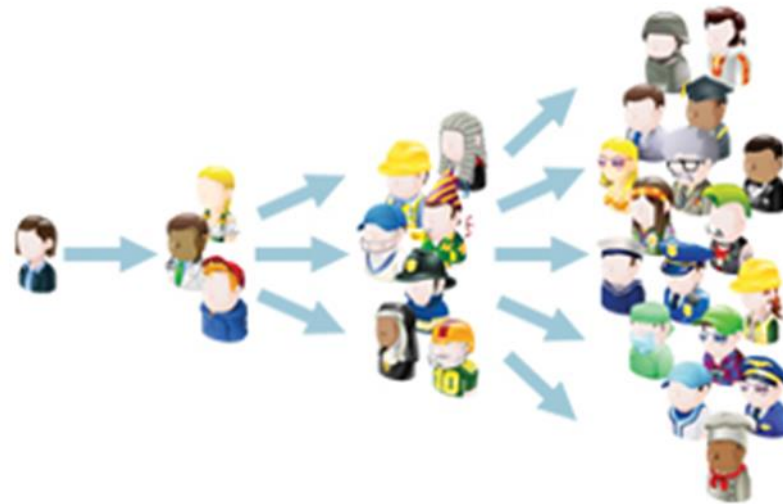


- The concept of **information society** refers to “a form of society characterized by the importance of the production and management of **information** and knowledge” (Webster 2014).





- In information societies, **technologies** for the production, manipulation, and communication of information are **pervasive** and **affect** social and productive processes, as well as personal and political identities.



- The ability to produce, manipulate, and distribute **information** becomes one of the main factors related to **wealth** and **power**, and therefore a battleground of economic, social, and political development for individuals, businesses, and governments.



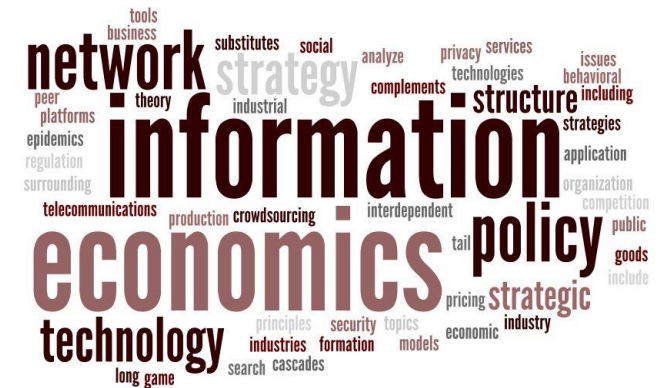
- The **birth** and affirmation of the **information society** are not only related to the spread of **digital information and communication technologies**, but also to **the economic and political upheavals** of the last few decades of the twentieth century, such as the end of the **bipolar world**, as well as the emergence of **globalization** processes and new production paradigms.



- These changes have been described with **definitions** that, while adopting different vantage points, tend to refer to the same set of phenomena.
- For example, the second half of the twentieth century saw the emergence of concepts such as “**post-industrial society,**” “**post-modern society,**” “**post-Fordism,**” “**knowledge society,**” “**network society,**” and “**cognitive capitalism**” .



- Under this new paradigm, **information** and knowledge became key **inputs** in the **economy** and organization of contemporary societies.
- The **technologies** which are used to produce, manage, and distribute **information** are widespread and characterized by **decreasing costs**, at least in rich countries where increasingly large sections of the population have access to a computer connected to digital networks and companies can organize their production processes and business through information technologies.



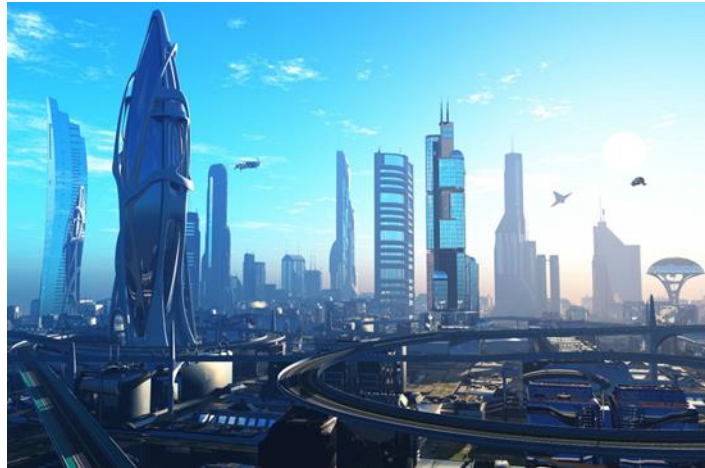
- In addition, **information technologies** make **social and productive structures** more **flexible**, as they allow actors to organize and carry out **networked processes** that would have been too **costly** and **inefficient** under traditional forms of organization.



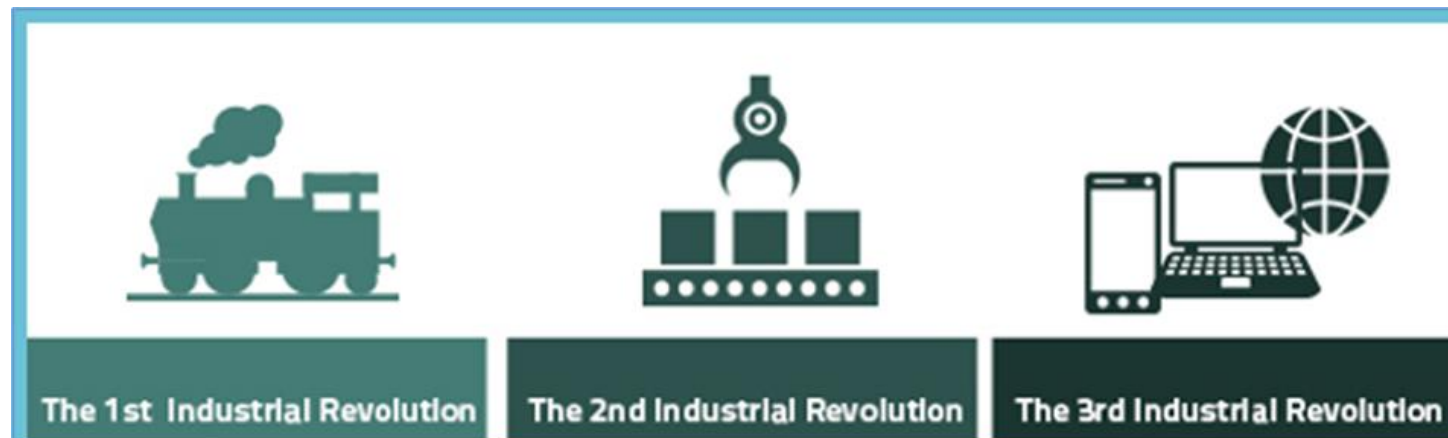
- The concept of “**information society**” began to spread in the **1990s**, both in the public debate and within academia.
- The spread of the **internet**, which accelerated in the second half of the decade, created a feeling of **radical change**.
- Visions of **economic transformation** were boosted by hopes about the **democratic** and **transparent** nature of new **technologies**, as well as their wide social effects.



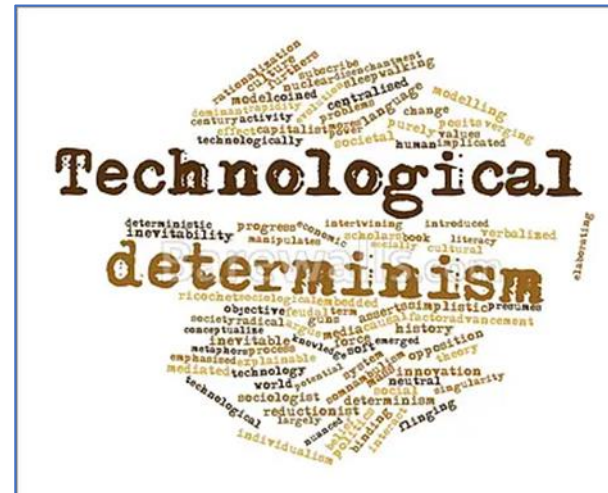
- According to “**cyber-utopian**” view (**Morozov** 2011), **digital networks** would lead to widespread access to knowledge and a radical political democratization, as well as to a **new economy** based on communication and flexibility.



- In the economic realm, the birth of the **information society** was described as a **third industrial revolution**.
- If the **first** was that of the **steam engine** and the **second** that of **electricity** and the internal combustion engine, the **third** would be based on **technologies** for the production, management, and transmission of information.



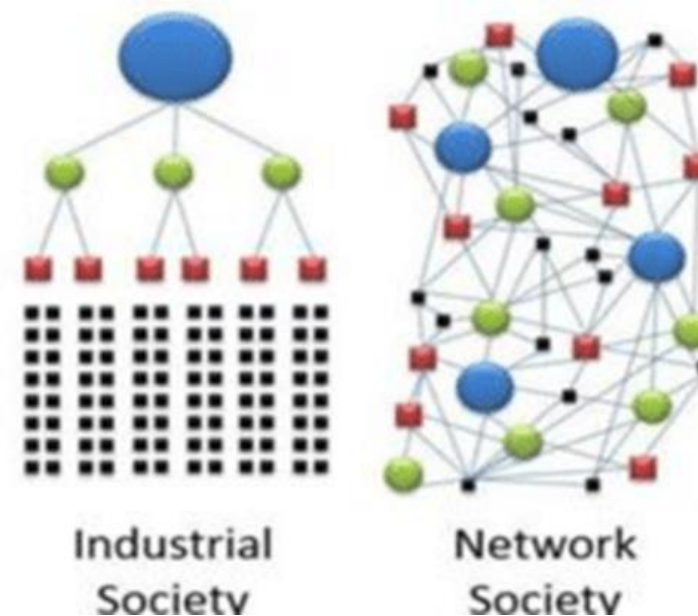
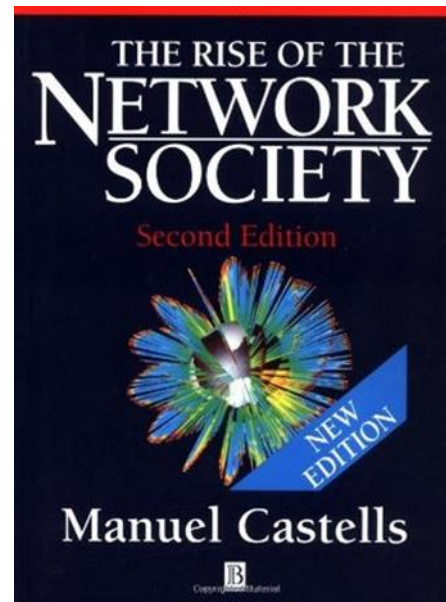
- The debate on **the rise of the information society** has been dominated by the figure of the Catalan sociologist **Manuel Castells**, who in the **1990s** articulated a detailed account of what he saw as a new era in the evolution of contemporary society, with effects in economy and politics.
- **Castells's** thesis contains a certain amount of **technological determinism**.



- In fact, he formalized the economic, social, and political role of **information** in a changing society.
- In **industrial societies**, economic and political **power** was linked to the production of **material** objects.
- In **information societies**, **informational** or intangible assets such as brands, innovation, and knowledge determine **economic success**.
- The era of **informational capitalism** begins.



- **Castells** described **networks** as the core organizational structures.
- In fact, he tended to use the term “**network society**,” as in the title of the first volume of his book: **The Rise of the Network Society (1996)**.



- The **economic system** that has emerged from this transformation is characterized by being, in **Castells's** definition, **informational, global, and networked**.
- In **the informational economy**, productivity, competitiveness, and profitability depend on the ability to generate and manipulate **information** and knowledge.
- **Research and development**, and thus **innovation**, become crucial for the **enterprise**.
- Indeed, the money spent by the private sector in **scientific and technological research** exceeded public investment for the first time since World War II, a trend that continues today.



- The main **resources** of the informational economy are not factories and machinery, but rather those related to **information, brands, patents**, the ability to manage **networks** of **suppliers**, subcontractors, and **distributors**, as well as design and **marketing** operations.
- **Companies** like **Nike** or **Apple** do not own the factories that produce their shoes or smartphones: the production of material goods is subcontracted to external **producers**, often in **Asia**.



- **Western companies** own **the intellectual property** (patents on product innovation and trademark rights), conduct research and development, organize networks of suppliers and sales operations, and manage marketing and communication.
- Controlling these **informational goods** is more **profitable**, given that the capital invested in information provides a higher return than that invested in **material** production.



- **Information** and knowledge are both the **raw material** and the **output** of the production processes these companies's control.
- Further, **information** is an **intangible good** that is crucially different from **material goods** and needs to be regulated by specific forms of **property**.
- Thus, in an **information society** **intellectual property rights** acquire unprecedented importance .



- For **companies** that produce goods with a high **information content**, such as in hi-tech or the cultural industry, owning **patents** or **copyrights** becomes crucial.
- In fact, since the early **1980s** **intellectual property rights** have been expanded to the results of **scientific research** conducted in **public universities**, as well as to new types of informational goods.
- **Intellectual property rights** have become longer and are more closely integrated at the **national** and **global** level .



- Intellectual Property Rights
- **Intellectual property rights** are “an array of **legal principles** that enable creators and inventors to exercise **ownership rights** over the fruits of inventiveness and ingenuity”.



- Intellectual property rights are divided in three main types:

1- Copyright protects artistic, literary, and scientific work.

- for example, a **song**, a **book**, or a newspaper **article**.

Copyright Protects:

Literary



Dramatic



Musical



Artistic



Architectural



2- Patents protect industrial **inventions**:

- **Innovations** that in addition to being new and original are reproducible and applicable to **industrial** activities.
- For example, a new **microchip** or **touchscreen** technology.



3- Trademarks distinguish a **product** or a **company**, making them recognizable by the consumer.



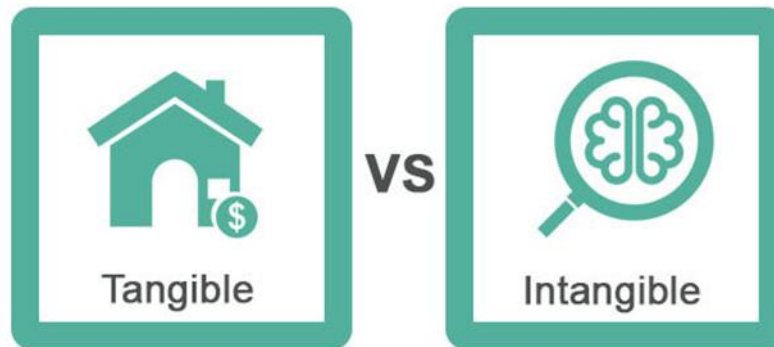
- **Intellectual property** is a **temporary** concession that was originally meant to boost creative and inventive activities.
- After a certain period of **time**, works or inventions enter the **public domain**, so that all of society can benefit from them.



- This is based on the premise that **information** is different from **material goods**.
- Although both can be traded on the market, from an **economic** point of view a **car** is quite different from a **song**.
- First, a **car** is a **material** and **tangible good** that, if possessed by an individual, cannot be **owned** by another.
- The **cost** of producing a material good never reaches zero.

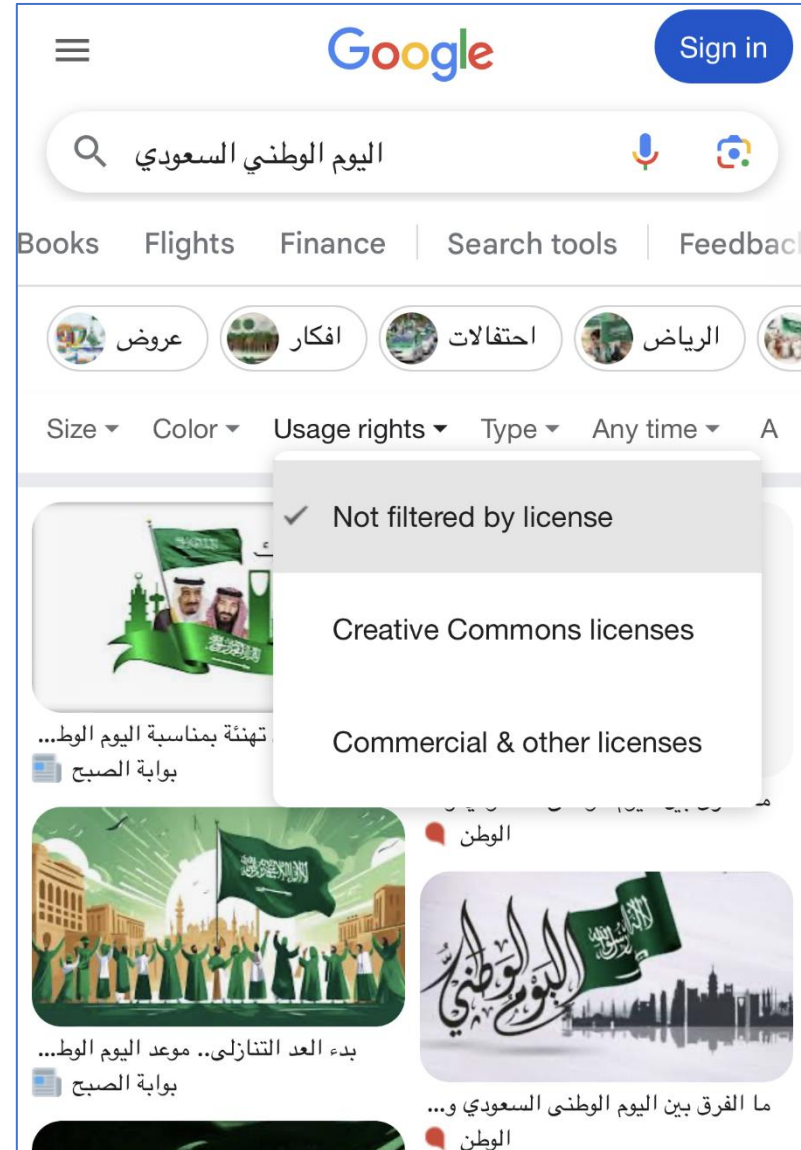
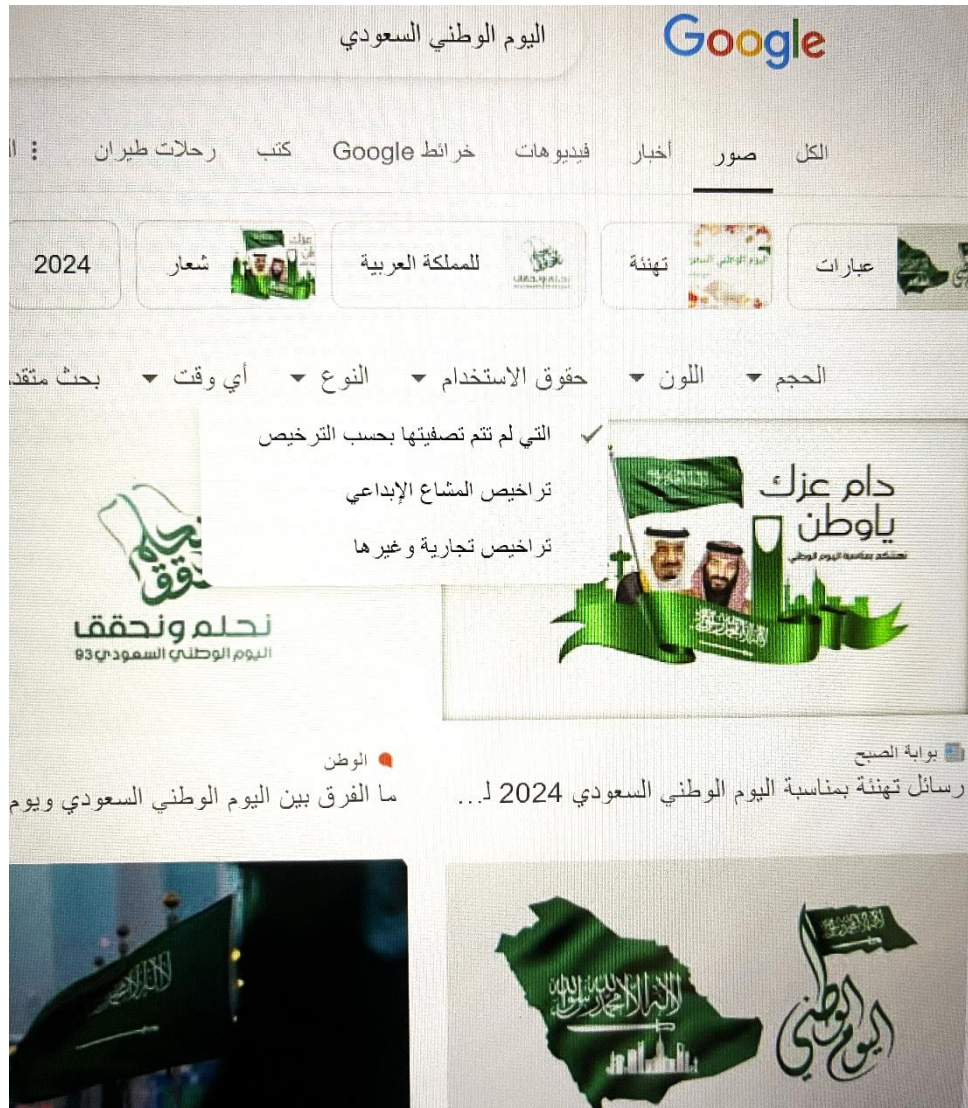


- Instead, an **intangible good** such as a **song** behaves differently.
- Economists say that **information** is a **non-rival good** and has a marginal cost of zero.
- **Non-rival** means that the fact that a person sings a **song** does not prevent others from doing the same at the same time, unlike in the case of **cars**, which cannot be used by two people at the same time, there is no rivalry among the users of a song.



- The marginal **cost** of **reproducing information** tends to be **zero**: recording a **song** has an initial cost, but the cost of producing copies is negligible.
- **Digital technologies** have accentuated this feature: today, producing a new **copy** of a **movie** in a computer is simple, fast, and virtually without **costs**.
- **Intellectual property rights** establish artificial marginal costs in the form of **licensing fees** to be paid to produce a **copy** of an intangible asset such as a copyrighted **song** or to build a patented **machinery**.





إنشاء موقع من الصفر

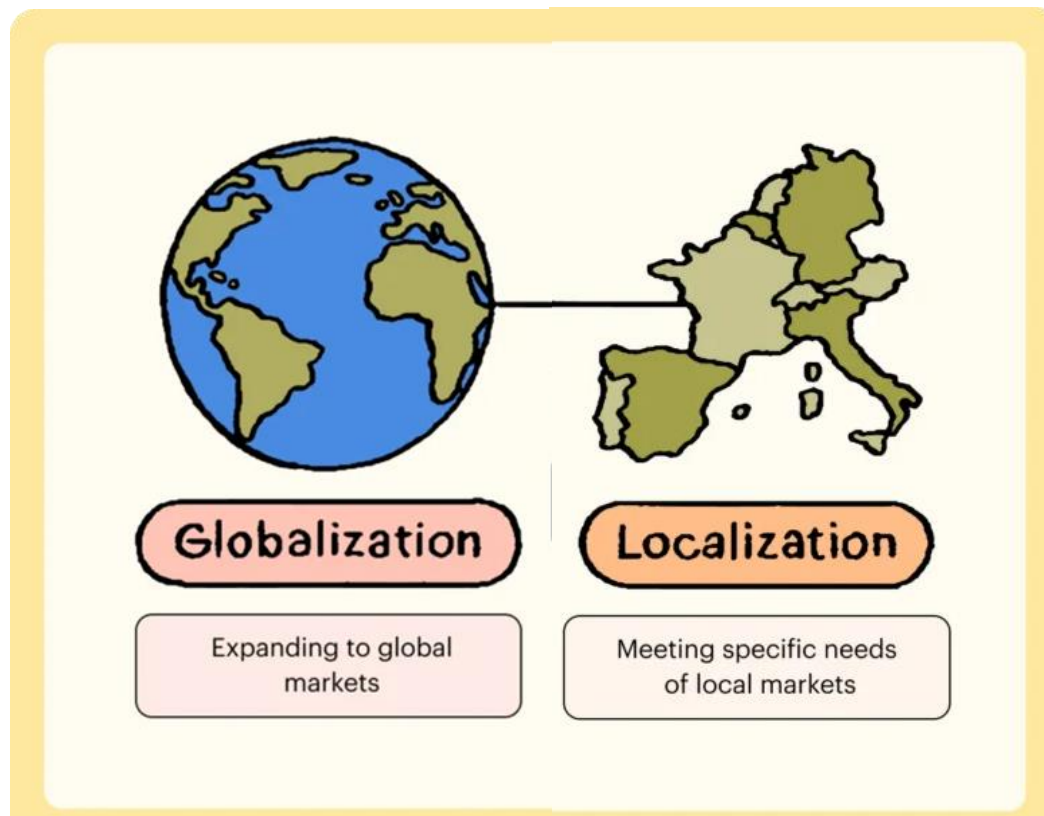
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1 فترة

التاريخ التحميل	النوع	المدة	الميزات	الترتيب حسب
آخر ساعة	فيديو	قصير (أقل من 4 دقائق)	مباشر	مدى الصلة
اليوم	قناة	طويل (أكثر من 20 دقيقة)	4K	تاريخ التحميل
هذا الأسبوع	قائمة تشغيل		دقة عالية	عدد المشاهدات
هذا الشهر	فيلم		ترجمة وشرح	التقييم
هذا العام	عرض		ترخيص Creative Commons	
			360°	
			VR180	
			ثلاثي الأبعاد	
			نطاق عالي الديناميكية	
			الموقع	

2

- A **globalized economy** is characterized by economic institutions that have the organizational and technological capacity to operate on a global scale in real time.



- However, in today's information society **globalization** has become a major **economic** phenomenon underpinned by the emergence of **new actors**.
- Among the most important are **organizations** such as **multinational companies**, which use **digital media** and networks to control complex and transnational processes.



- **Production, consumption, and movement of goods** are thus organized on a **global** scale.
- This fosters the emergence of a **global consumer culture** in which goods, lifestyles, and forms of consumption spread around the world and are adapted in different local contexts.



- **Global financial markets**, which are managed through **digital media** and network technologies, are another feature of the **globalized economy**.



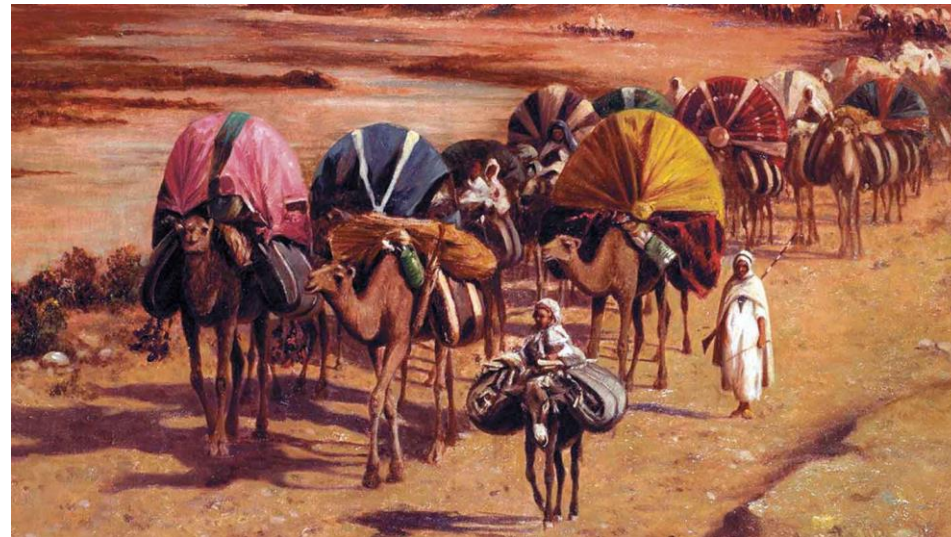
- Finally, the importance of **supranational entities** and **treaties** that include sets of countries or entire regions of the globe increases.
- This is the case of **free trade agreements** such as **NAFTA** (North American Free Trade Agreement), a treaty between Mexico, the United States, and Canada that has been in place since the 1990s, the **European Union**, the **World Trade Organization**, or the **World Bank**.



- Castell's **networked economy** is characterized by **flexible** forms of production.
- The rigid hierarchies of factory work and the bureaucratic organizations of industrial society are transformed toward a new paradigm of the **organization** of production.
- The processes that underpin production in such a paradigm have been described as based on **network structures and** thus organized around **decentralized** and autonomous **production units**.



- **Networks of companies** formed by suppliers, subcontractors, manufacturers, distribution companies, and commercial operations thrive in contemporary **economies**.
- **Networks** were not born with these changes of new information and communications technologies but rather are an **old form** of social organization: kinship networks are the fundamental form of **tribal societies**, and **networks of business** contacts **by land and sea** have been structuring globalization processes for centuries.



Conclusion



- The concept of **information society** refers to a form of society characterized by the importance of the production and management of **information** and knowledge.
- The ability to produce, manipulate, and distribute **information** becomes one of the main factors related to **wealth** and **power**.
- The birth of the **information society** was described as a **third industrial revolution**.
- The **economic system** of the information society is characterized by being **informational, global, and networked**.
- In an information society, **intellectual property rights** are divided in three main types: **(copyright, trademarks , patents)**.
- A **globalized economy** is characterized by **multinational companies**, which own **digital media**, and foster the emergence of a **global consumer culture**.



Thank You