Information and Society-E2

- Information Law 2-

Rafik Hadfi

Department of Social Informatics

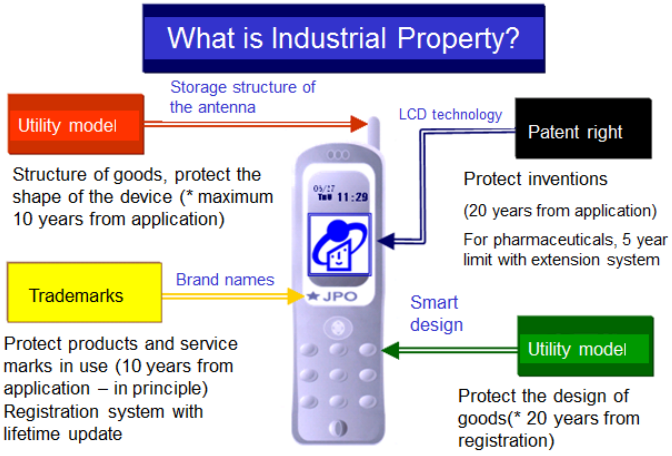
Kyoto University

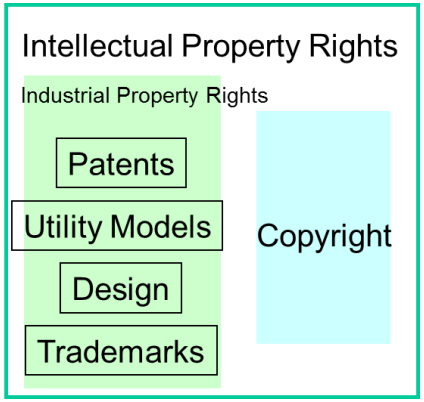
Email: rafik.hadfi@i.kyoto-u.ac.jp

Overview: Information Law

- Intellectual property rights and patents
- Copyrights, distribution of copyrighted work on the Internet
- Personal information protection, privacy

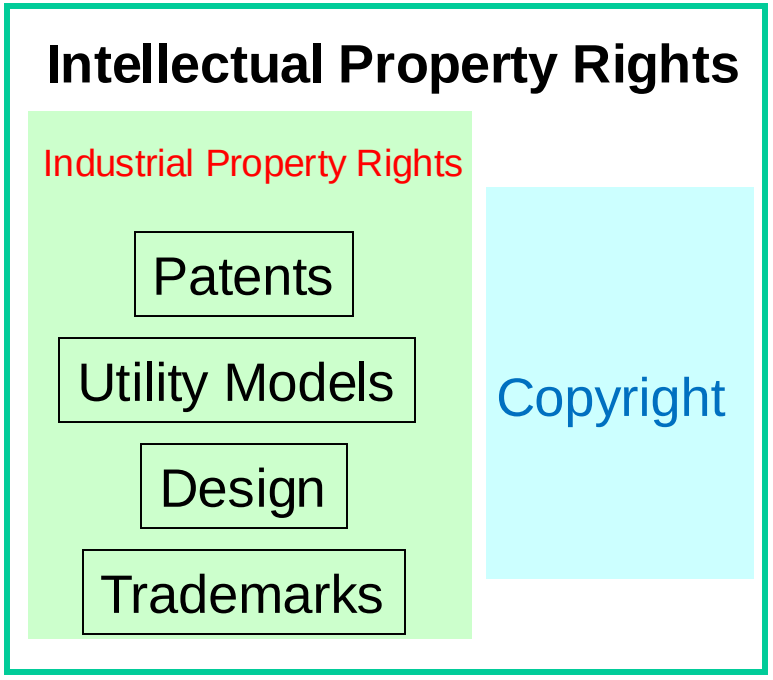
•Can be implemented industrially?	Industrial usability, usefulness
•Is it is new or not?	Novelty
•Could it have been thought of simply?	Non-obviousness, progressivity
•Has it been previously applied for?	Previously applied principle
•Is it not an anti-social invention?	Sociability ?
•Are the contents of the invention adequately explained in the specifications document?	Feasibility





Review
Intellectual Property Rights

Intangible Property Rights that occur through intellectual activities



Copyright: rights that automatically occur to protect cultural, artistic or academic works

Patents and utility models: protecting technological inventions and proposals

Design: protecting industrial designs

Trademarks: protecting the name and marks of products and services

Review

What is Industrial Property?

Utility model

Storage structure of the antenna

Structure of goods, protecting the shape of the device
(* maximum 10 years after application)

Patent right

LCD technology

For protecting inventions

(20 years from application, for pharmaceuticals 5 year limit with extension system)

Trademarks

Brand names

For protecting products and service marks in use (10 years from application – in principle)
Registration system with lifetime update

Design

Smart design

For protecting design of goods (* 20 years after registration)

(*) contains the period of rights for Industrial property in Japan

Review - Patents

Allowing the public presentation of a technology and giving a monopoly to the inventor for a fixed period as compensation and under fixed conditions

- Patent laws, first clause: “This law has the objective of promoting inventions and contributing to the development of industry, via the planning of use and protection of inventions”.

- Inventions that are regulated by the second clause of the Patents law: Advanced items constructed as a result of technological ideas that utilize laws of nature.

Review – Elements of Patents

Whether it is an invention as per the Patents Law

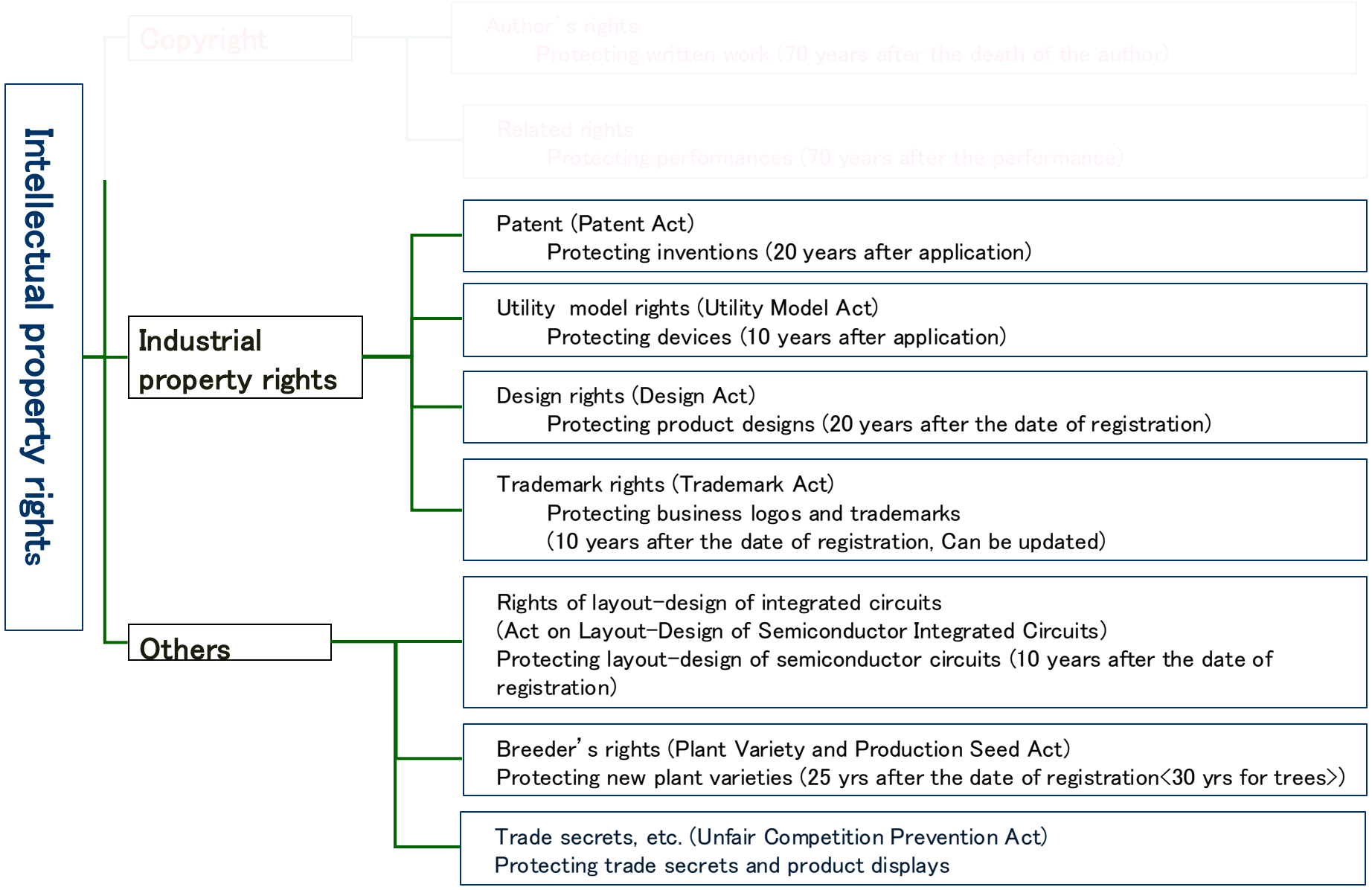
Advanced items within the construction of technological ideas that utilize laws of nature

Can be implemented industrially?	Industrial usability, usefulness
Is it new or not?	Novelty
Could it have been thought of simply?	Non-obviousness, progressivity
Has it been previously applied for?	Previously applied principle
Is it not an anti-social invention?	Sociability
Are the contents of the invention adequately explained in the specifications document?	Feasibility

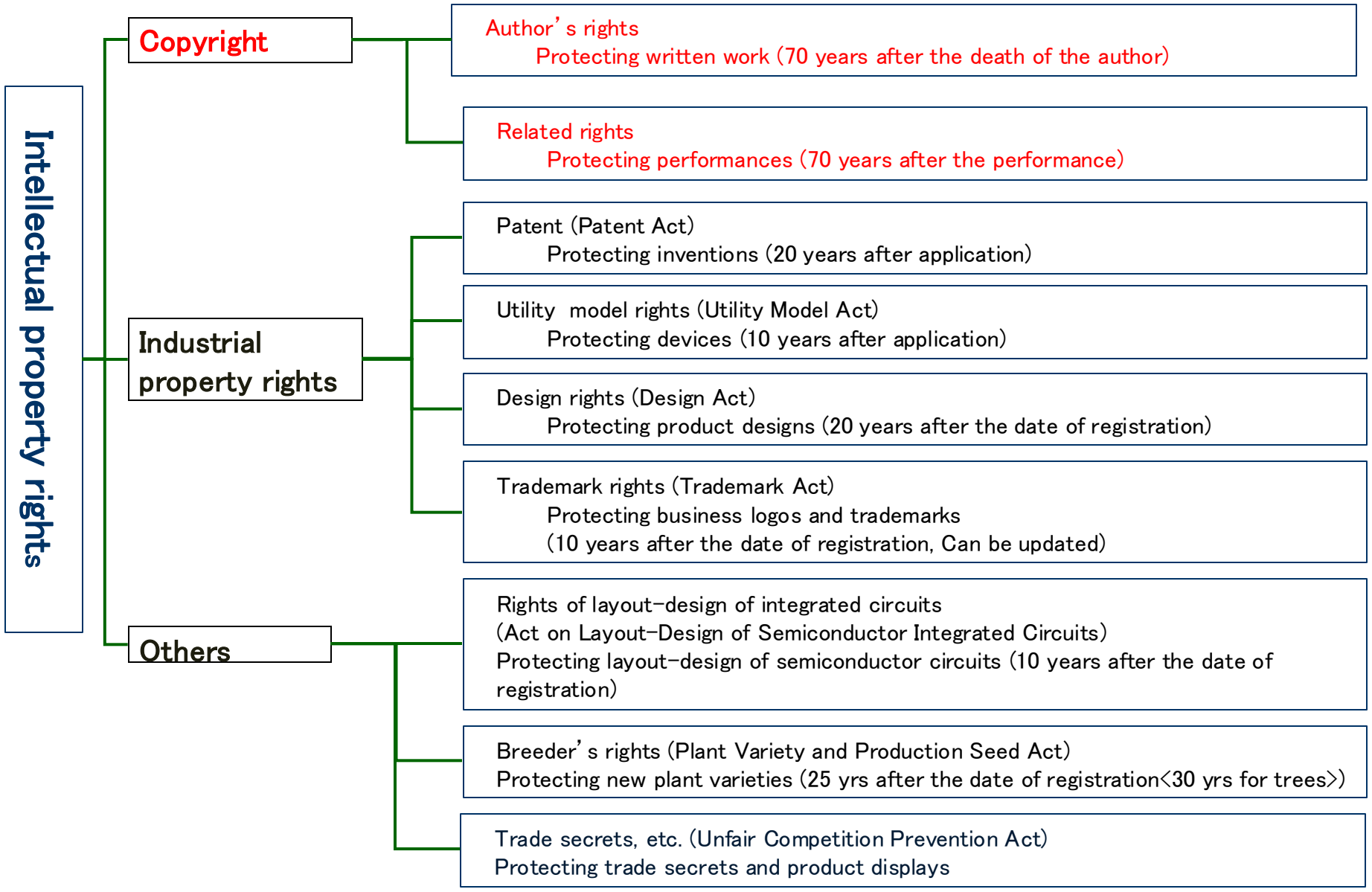
INFORMATION AND LAW: COPYRIGHTS

Kazuyuki Takahashi, Shigeki Matsui, Internet and Law, Yuhikaku, 2001.
Ministry of Economy, Trade and Industry Open Source Study Report

Intellectual Property Rights



Intellectual Property Rights



Difference between Patent and Copyright

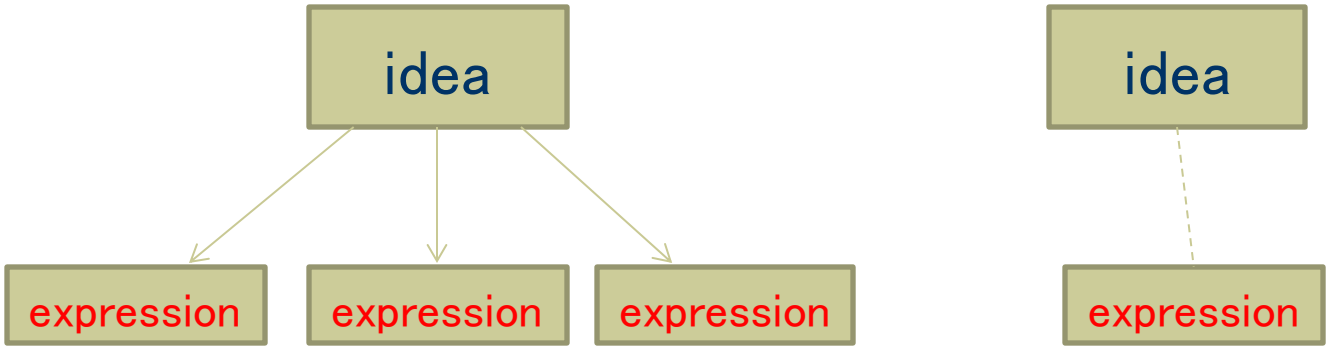
- **Patent**: protection of inventions that gives a monopoly right to exploit an idea
- Applied for in timely fashion, the new and useful parts to be patented need to be indicated in the application
  - The burden is on the inventor
  - The right time period is short to protect public interest

- **Copyright** law protects only the form of expression of ideas, not the ideas themselves
- Copyrighted work does not need to be entirely new
- Author has the copyright in a work by fixing it in tangible form
  - No need to register the work and no need to identify the copyrightable parts of the work
  - Longer period of validity

Idea–Expression Dichotomy

- Baker vs. Selden, 101 U.S. 99 (1879)ベーカー対セルデン裁判
- Exclusive rights to the "useful art" can be granted by patent
- The description of the art can be protected by the copyright

- Example: Adventure novel
  - Copyright of the novel as a whole (story or characters involved, or the particular description)
  - However, for example, the sole idea of a man venturing out on a quest or genre of the story cannot be copyrighted



Copyright Law of Japan

- Copyright Law of Japan
  - Protecting works and allowing their use contributes to cultural development
  - "Work" refers to "a production in which thoughts or sentiments are expressed in a creative way and which falls within the literary, scientific, artistic or musical domain" (Copyright Law of Japan, Article 2.1(i))
- Rights of the author
  - Moral rights for protecting moral interests
  - Copyrights for protecting proprietary interests

Copyright Law of Japan, Article 1 (Purpose)
The purpose of this Law is, by providing for the rights of authors with respect to works as well as performances, phonograms, broadcasts and wire diffusions, to secure the protection of the rights of authors, etc., having regard to a just and fair exploitation of these cultural products, and thereby to contribute to the development of culture.
Copyright Law of Japan, Article 2 (Definitions)
Work: a production in which thoughts or sentiments are expressed in a creative way and which falls within the literary, scientific, artistic or musical domain.

Definition of Works

Productions in which thoughts or sentiments are expressed in a creative way and which falls within the literary, scientific, artistic or musical domain. (Copyright Law of Japan, Article 2.1(i))

Language works	Lecture, thesis, novel, script, song, dramas, articles, and other literary works
Musical works	Music, accompanying lyrics
Choreographic works and pantomimes	Classical Japanese dance, dance, pantomime choreography
Art works	Paintings, prints, sculptures, comic books, calligraphy engravings and other artistic works
Architectural works	Artistic architecture
Map and figure work	Maps, artistic figures as well as figurative works of a scientific nature such as plans, charts, and models
Cinematographic works	Theatrical film, animation, video
Photographic works	Photography, gravure
Program works	Computer programs

Copyrightability

- Works creatively expressing thoughts or sentiments
  - Facts, data, and information are not considered works.
  - High level of creativity is not required (minimum creativity is required)
  - Work must be an expression. Ideas are not protected, while expressions *are* protected.
  - One idea – one expression: Expressions are not protected when there is only one expression to an idea
  - Sweat of the brow doctrine: data collected through labor is nonetheless only data, and is thus not protected.
- Examples
  - Maps are graphic works
    - Graphic works are objective expressions and include the creative act of selecting suitable entries
  - A simple house map is not a work
    - House maps comprising only house shape and nameplate information are not works. The doctrine of 1 expression to 1 idea can be applied in this case
  - News articles: Although facts are not protected, entire articles are considered works.

Copyrightability

- Origin of the work?

Non-Human Authorship: A Monkey Example

- In 2014, the photographer David Slater was making a series of snapshots. In an oversight, a monkey stole his camera and took several pictures, some of which were at least curious to see.

- The legal dispute was whether these pictures are protected by copyright or not?

Judge says monkey cannot own copyright to famous selfies

"This is an issue for Congress and the president," judge says from the bench.

DAVID KRAVETS - 1/7/2016, 8:32 AM

159

SAN FRANCISCO—A federal judge on Wednesday said that a monkey that swiped a British nature photographer's camera during an Indonesian jungle shoot and snapped selfies cannot own the intellectual property rights to those handful of pictures.

https://ja.wikipedia.org/wiki/サルの自撮り

https://arstechnica.com/tech-policy/2016/01/judge-says-monkey-cannot-own-copyright-to-famous-selfies/

Non-Human Authorship: A Monkey Example

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- Legal dispute was whether these pictures are protected by copyright or not?

- After spending years to resolve the issue, the US copyrights office ruled that this type of works cannot be protected because it is not the direct result of the effort of a human being.

Digitalization

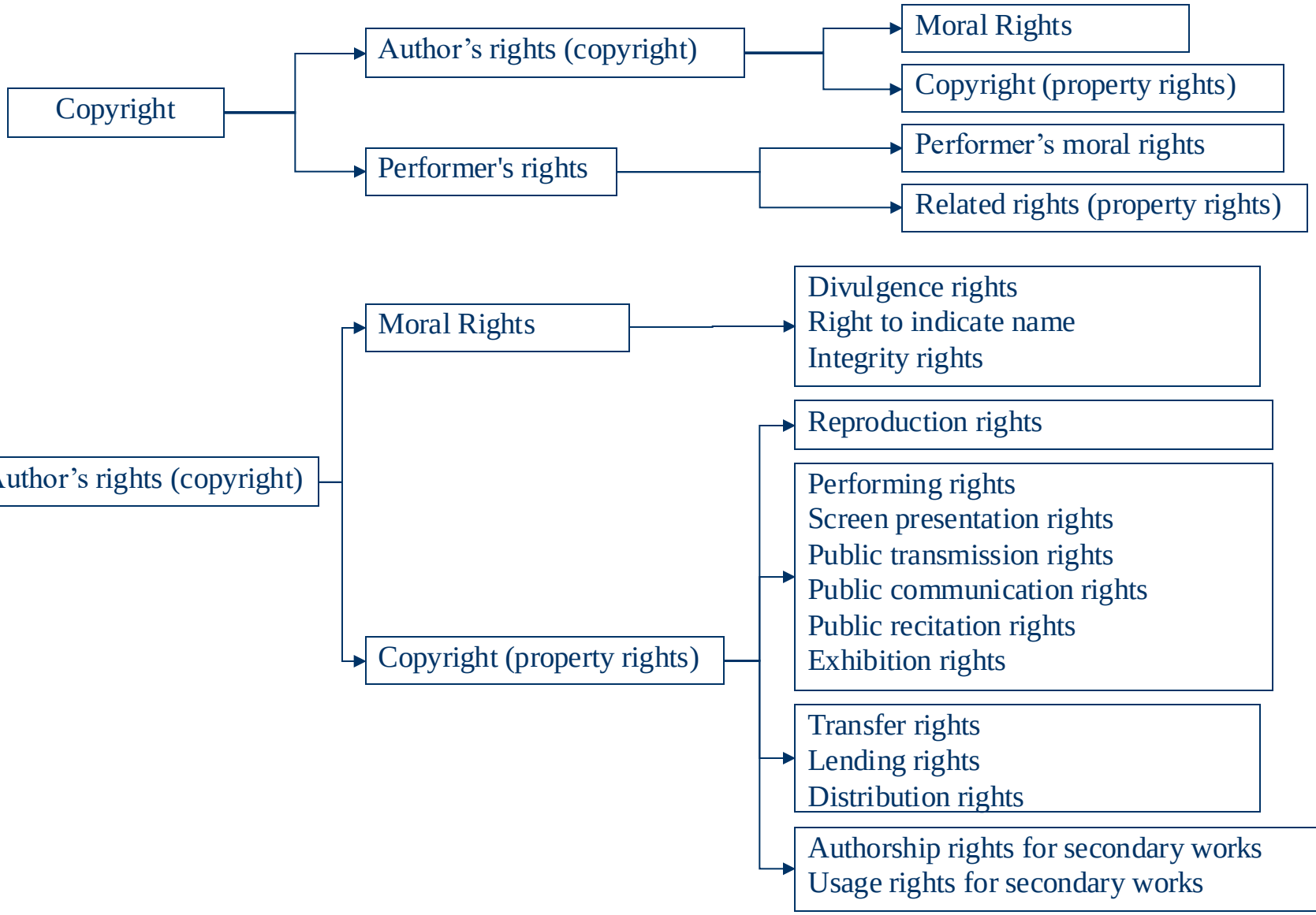
Digitalization

- Problem with digitalized works
  - **Digitalizing analog works is considered reproduction** under the Copyright Law of Japan. Then does the right of reproduction extend to the copyright holder?
- Problem with digitized works
  - There are regulations applying only to certain kinds of works
  - Difficulty to process digitalized products integrating varieties of works

Copyright Law of Japan, Article 10.1 (Classification of works)

1. Novels, dramas, articles, lectures and other literary works
2. Musical works
3. Choreographic works and pantomimes
4. Paintings, engravings, sculptures and other artistic works
5. Architectural works
6. Maps as well as figurative works of a scientific nature such as plans, charts, and models
7. Cinematographic works
8. Photographic works
9. Program works

Outline of Copyrights



Discussion:
Artificial Intelligence and Copyright

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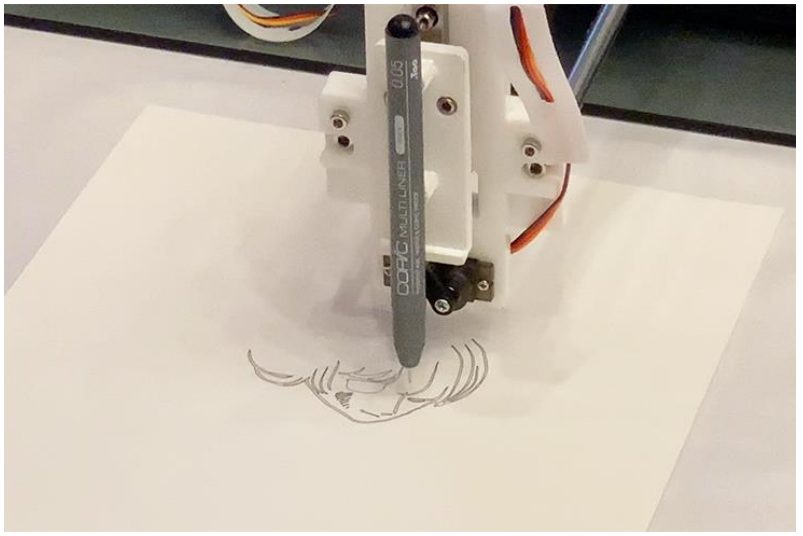
The Next Rembrandt is a computer-generated 3-D–printed painting developed by a facial-recognition algorithm that scanned data from 346 known paintings by the Dutch painter in a process lasting 18 months. The portrait consists of 148 million pixels and is based on 168,263 fragments from Rembrandt's works stored in a purpose-built database. The project was sponsored by the Dutch banking group ING, in collaboration with Microsoft, J.Walter Thompson marketing consultancy, and advisors from TU Delft, The Mauritshuis and the Rembrandt House Museum.

Read: http://www.wipo.int/wipo_magazine/en/2017/05/article_0003.html


ING PRESENTS
THE NEXT
REMBRANDT

TEZUKA2020



https://robotstart.info/2020/02/26/tezka2020-sokuho.html

AI美空ひばり in 2019 NHK 紅白

https://www.itmedia.co.jp/news/articles/1911/14/news139.html

U.S. Copyright Office Rules A.I. Art Can't Be Copyrighted

An image generated through artificial intelligence lacked the "human authorship" necessary for protection

Jane Recker

Daily Correspondent

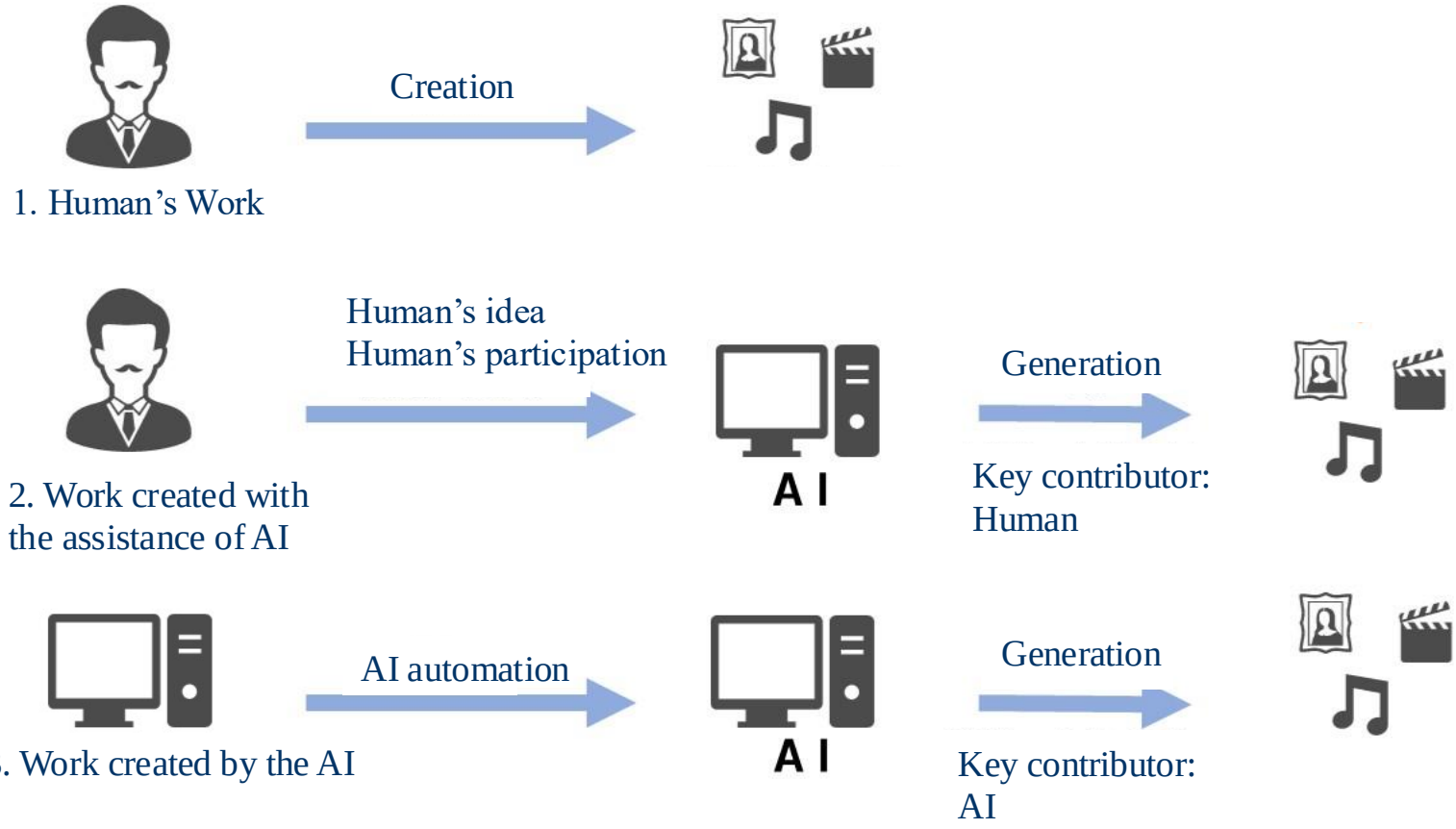
March 24, 2022

Stephen Thaler's AI creation, *A Recent Entrance to Paradise,* has been denied copyright protection by the US Copyright Office. Stephen Thaler

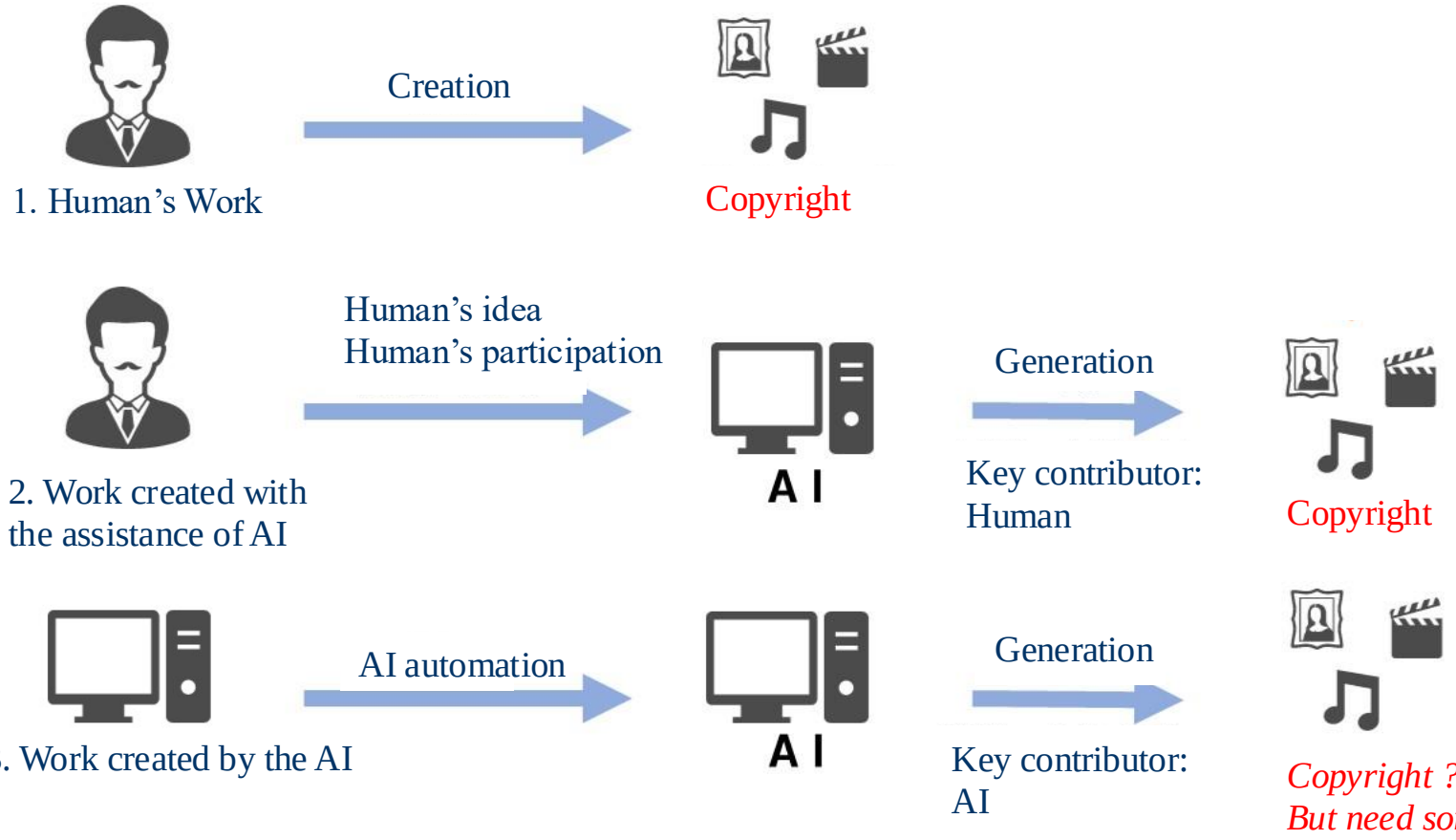
The U.S. Copyright Office (USCO) once again rejected a copyright request for an A.I.-generated work of art, the *Verge's* Adi Robertson reported last month. A three-person board reviewed a request from Stephen Thaler to reconsider the office's 2019 ruling, which found his A.I.-created image "lacks the human authorship necessary to support a copyright claim."

https://www.smithsonianmag.com/smart-news/us-copyright-office-rules-ai-art-cant-be-copyrighted-180979808/

General Considerations: Artificial Intelligence and Copyright



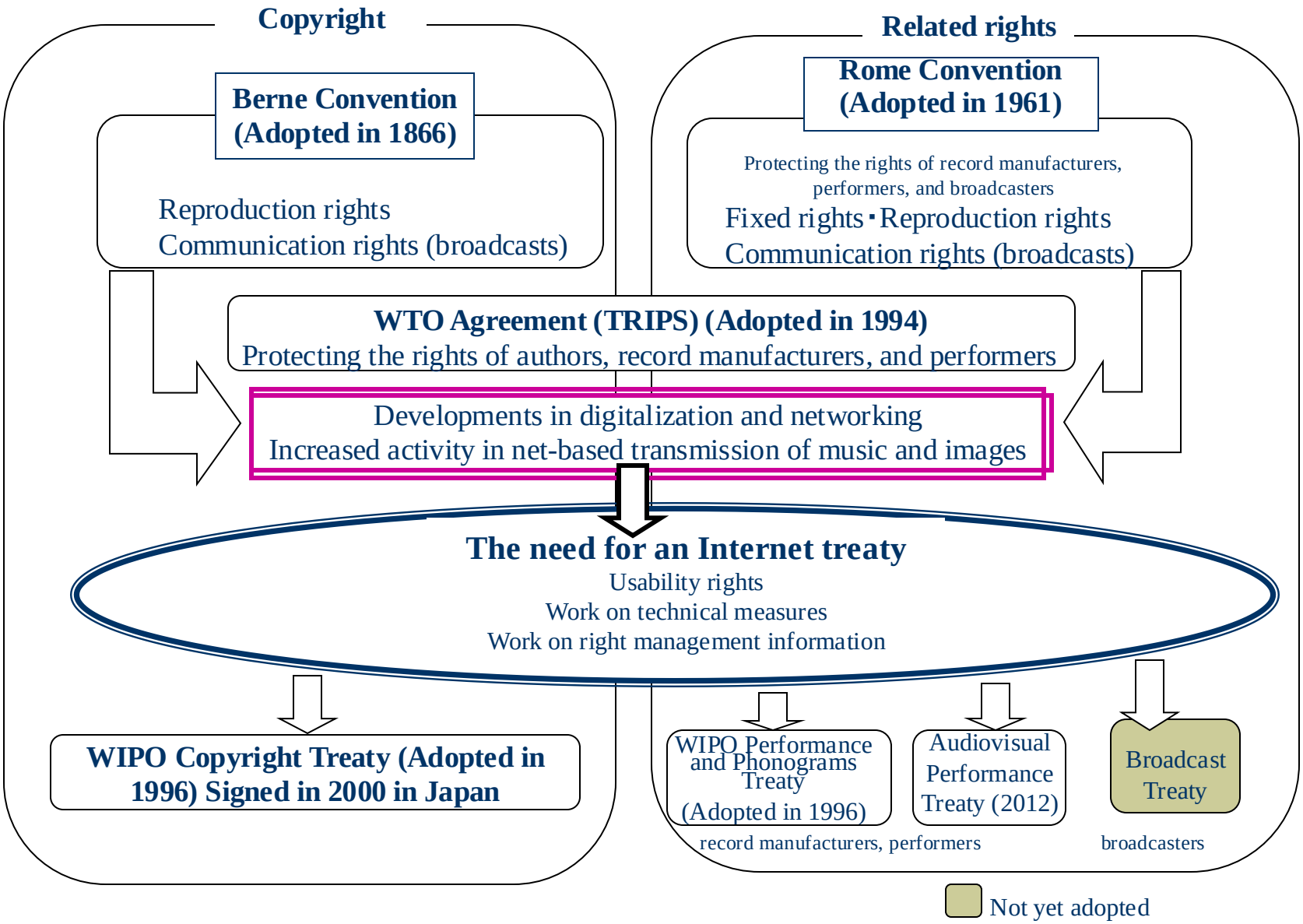
General Considerations: Artificial Intelligence and Copyright



Historical Development of the Copyright System

1886 Conclusion of the Berne Convention
1887 Copyright Ordinance enacted
1893 Copyright Act enacted
1899 Japan joined the Berne Convention
1899 **Copyright Law** enacted (old provisions such as the Copyright Act abolished)
1951 Wartime addition (for copyrights obtained under the Copyright Law) according to Article 15, Section C of the San Francisco Peace Treaty
1970 **New Copyright Law enacted**
1999 Copyright Law amended
2009 Copyright Law amended (by cabinet approval)

Major Treaties Related to Copyright



Links

- X posts a link to the Web page of Y
  - Transmission is performed not by X, but by Y
  - Simply posting a link is not a copyright infringement
  - In the case that the Web page of Y contains illegally copied works, and **unauthorized transmission to the public is increased due to the link, liability for illegal activity may result**
  - In cases of posting a link to just one portion of a page: if only a portion of the page to which a link leads has undesirable content, it is a problem of moral rights.
  - In cases where information from the Web page of Y is shown on the Web page of X, and a person receiving transmission is made to think that the information of Y is being originally transmitted by X, then the public transmission rights infringement occurs.

Problems Related to MP3s

- MP3(MPEG-1 Audio Layer3)
  - A technology to compress music data into approximately 1/12 of its usual size (no significant reduction in quality). Conversion to MP3 is considered copying, and to post MP3 file on one's Web page without the consent of the copyright holder is an infringement of copying rights and public transmission rights.
  - Napster distributed exclusive software for free and users used it to download copyrighted music for free. About 87% of the files were copyright protected, and about 70% were owned by the plaintiffs.
  - How would this case be judged under the Copyright Law of Japan?
    - Acts of converting the copyrighted works of others into MP3 and using a file sharing service are public transmission because the user receiving the transmission is unidentified, so taking such action without permission is infringement of public transmission rights.

P2P and Illegal File Sharing

- **Distribution of illegal copies**
  - File sender: Infringement of copying rights, rights to make transmittable, etc.
  - File recipient: (Under Japanese law) no copyright infringement
  - Providers of sharing services and software: Not always clear
- Napster style: Centrally managed file sharing service
  - Judgments lean toward the service provider infringing on copyrights
    - (Overseas) Napster judgment
    - (Japan) File Rogue judgment
- KaZaA, Gnutella style: Diffused file sharing tool (individuals with software installed on their computers operate as both a client and a server)
  - Judgments lean toward distribution of the tool being legal
  - (Overseas) KaZaA judgment (The Netherlands)
  - (Overseas) StreamCast, Grokster judgment (USA, still in appeal)
  - (Japan) Winny incident
    - Two users were arrested for sending data on Winny. Winny creator arrested for aiding and abetting copyright infringement.

https://en.wikipedia.org/wiki/Winny_copyright_infringement_case

Program Copyrights

- Programs are subject to copyright protection as copyrighted works (Article 2 Item 1 Number 10 of the Copyright Law)
- The protection perspective of copyrights and patents differs
  - If the contents of a program are an expression, protection is from a copyright perspective. If it is a systematic invention, protection is from a patent rights perspective (broader protection).
- Expressions that lack creativity can be unprotected.
  - There are cases where copyright claims have been rejected. For example, printer drivers have been found to lack creativity (System Science case) and hard disk files have been found not to have creativity (IBF incident judgment).
- Copying of others' work
  - There are cases where imitating program functions and screen interface of another work is copyright infringement. (USA: A spreadsheet software that came after and imitated the screen structure and operation feel of Lotus 1-2-3 was recognized as infringing on copyright.)
- Writing programs in different languages
  - Rewriting something that was in BASIC into C is a rights infringement (right of reproduction, right of adaptation, right of exploitation of derivative works) if unauthorized by the copyright holder.

PROTECTION OF PERSONAL INFORMATION

"The Right to Privacy"

Warren and Brandeis

Harvard Law Review.

Vol. IV December 15, 1890 No. 5

THE RIGHT TO PRIVACY[*] .

"It could be done only on principles of private justice, moral fitness, and public convenience, which, when applied to a new subject, make common law without a precedent; much more when received and approved by usage." — Willes, J., in Millar v. Taylor, 4 Burr. 2303, 2312

That the individual shall have full protection in person and in property is a principle as old as the common law; but it has been found necessary from time to time to define anew the exact nature and extent of such protection. Political, social, and economic changes entail the recognition of new rights, and the common law, in its eternal youth, grows to meet the new demands of society. Thus, in very early times, the law gave a remedy only for physical interference with life and property, for trespasses vi et armis. Then the "right to life" served only to protect the subject from battery in its various forms; liberty meant freedom from actual restraint; and the right to property secured to the individual his lands and his cattle. Later, there came a recognition of man's spiritual nature, of his feelings and his intellect. Gradually the scope of these legal rights broadened; and now the right to life has come to mean the right to enjoy life, -- the right to be let alone; the right to liberty secures the exercise of extensive civil privileges; and the term "property" has grown to comprise every form of possession -- intangible, as well as tangible.

Thus, with the recognition of the legal value of sensations, the protection against actual bodily injury was extended to prohibit mere attempts to do such injury; that is, the putting another in fear of such injury. From the action of battery grew that of assault.[1] Much later there came a qualified protection of the individual against offensive noises and odors, against dust and smoke, and excessive vibration. The law of nuisance was developed.[2] So regard for human emotions soon extended the scope of personal immunity beyond the body of the individual. His reputation, the standing among his fellow-men, was considered, and the law of slander and libel arose.[3] Man's family relations became a part of the legal conception of his life, and the alienation of a wife's affections was held remediable.[4] Occasionally the law halted, as in its

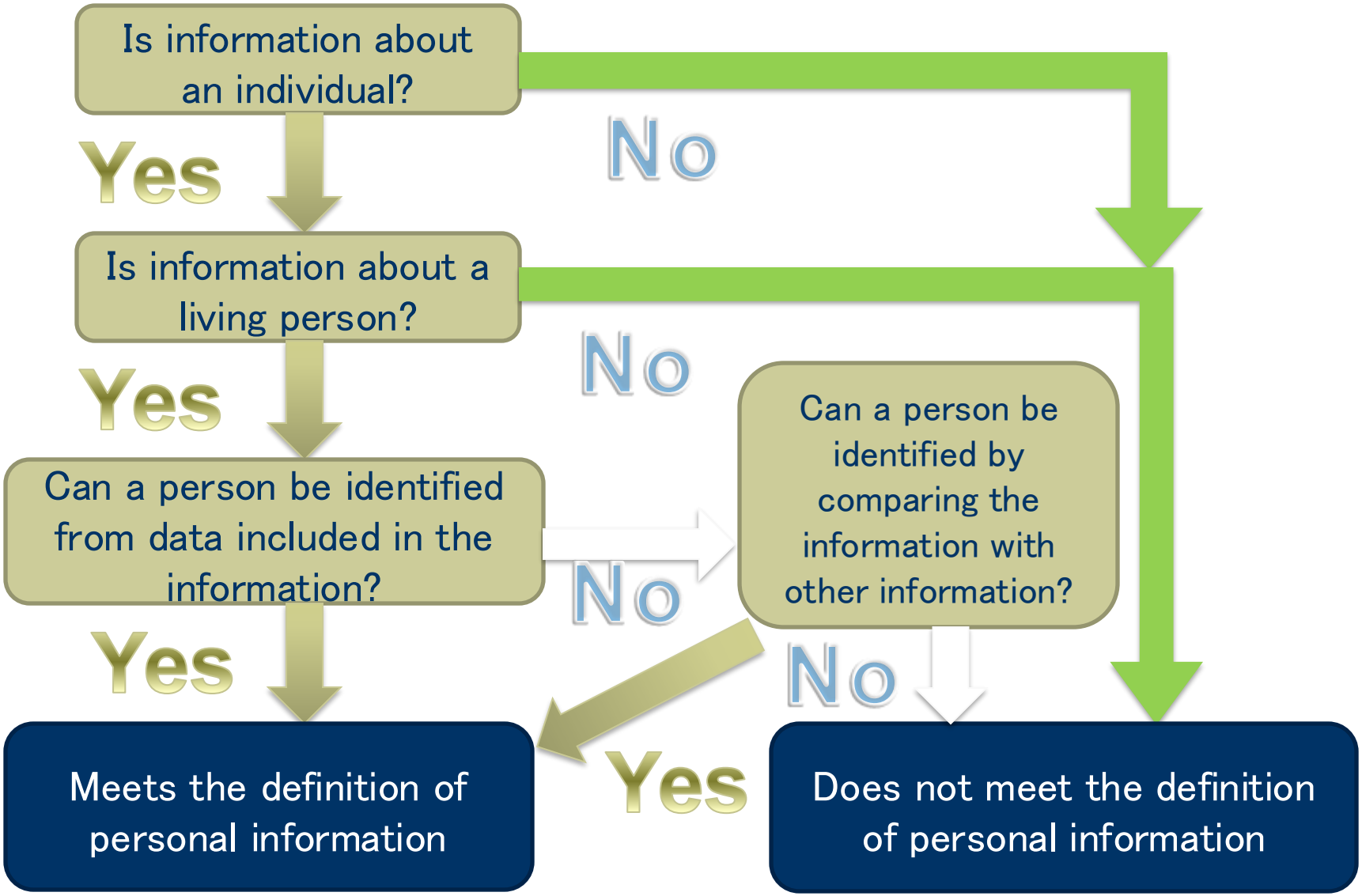
Article by Samuel Warren and Louis Brandeis published in Harvard Law Review (1890) - the first publication in USA advocating a right to privacy. Considered as "one of the most influential essays in the history of American law". Privacy defined as a "***right to be left alone***". More recent privacy definitions:

- *"the claim of individuals, groups, or institutions to determine for themselves when, how, and to what extent information about them is communicated to others*" [Alan Westin]
- "*the individual's right to control the circulation of information concerning him or her*" [Westin, 1967; Horibe, 1988]

What is Personal Information?

- **What is personal information? (excerpted summary)**
  - Refers to information about a living individual, which can identify the specific individual by name, date of birth or other description contained in such information (including information that can be readily compared with other information and thereby used to identify a specific individual)
- **What is personal information?** (excerpted summary from METI guidelines) http://www.meti.go.jp/policy/it_policy/privacy/0708english.pdf
  - Not restricted to information that can identify an individual as name and date of birth, but includes all information representing facts, judgments, and assessments of personal attributes such as body, assets, kind of occupation, title, etc.
- Privacy information
  - Privacy information is the "information you don't want others to know without good reason"
  - Personal information is more broadly defined as all information that can be designated as personal

Definition of Personal Information



Comprehension Check (I): True or not?

O (1) Video taken by a security camera of an unidentified person is personal information (if the video is sharp enough to identify the person in the video, it is personal information).

O (2) Audio data of a person identifying himself by name on the phone is personal information (if someone provides information that identifies him or herself, that counts as personal information).

X (3) Information about an executive or an employee is not personal information (information not related to work and related to personal life or situation is personal information).

X (4) Customer numbers in a customer database are a simple sequence of numbers, and therefore, not personal information (if one could match another data source to an in-house customer database, then it would be personal information).

O (5) Personal information is not the same as privacy information (privacy information is information you do not want others to know without good reason; an altogether different concept).

Comprehension Check (II): True or not?

× (6) Personal data is personal information that has been digitized, so a list or roster of names is not included (manually processed information can also be personal information).

○ (7) When using personal information in ways that exceed the scope of purpose of utilization, the data subject must give his or her consent. (The data subject's consent must be obtained in advance.)

× (8) When collecting personal information, the data subject must give his or her consent. (Obtaining consent is not obligatory. When obtaining consent in writing, the purpose of utilization must be clearly stated. Otherwise, the data subject may be notified or informed by public announcement on a webpage.)

○ (9) As a rule, if personal data is provided to third parties, the data subject must give his or her consent. (The data subject must give his or her consent in advance.)

× (10) If personal data is entrusted to another party, the data subject must give his or her consent. (The data subject's consent is not required. The trustee has a supervisory obligation.)

Comprehension Check (III): True or not?

○ (11) It is okay to provide personal information to other departments within the company. (It is okay to provide personal information within the same company, if the purpose of utilization is notified or announced in advance.)

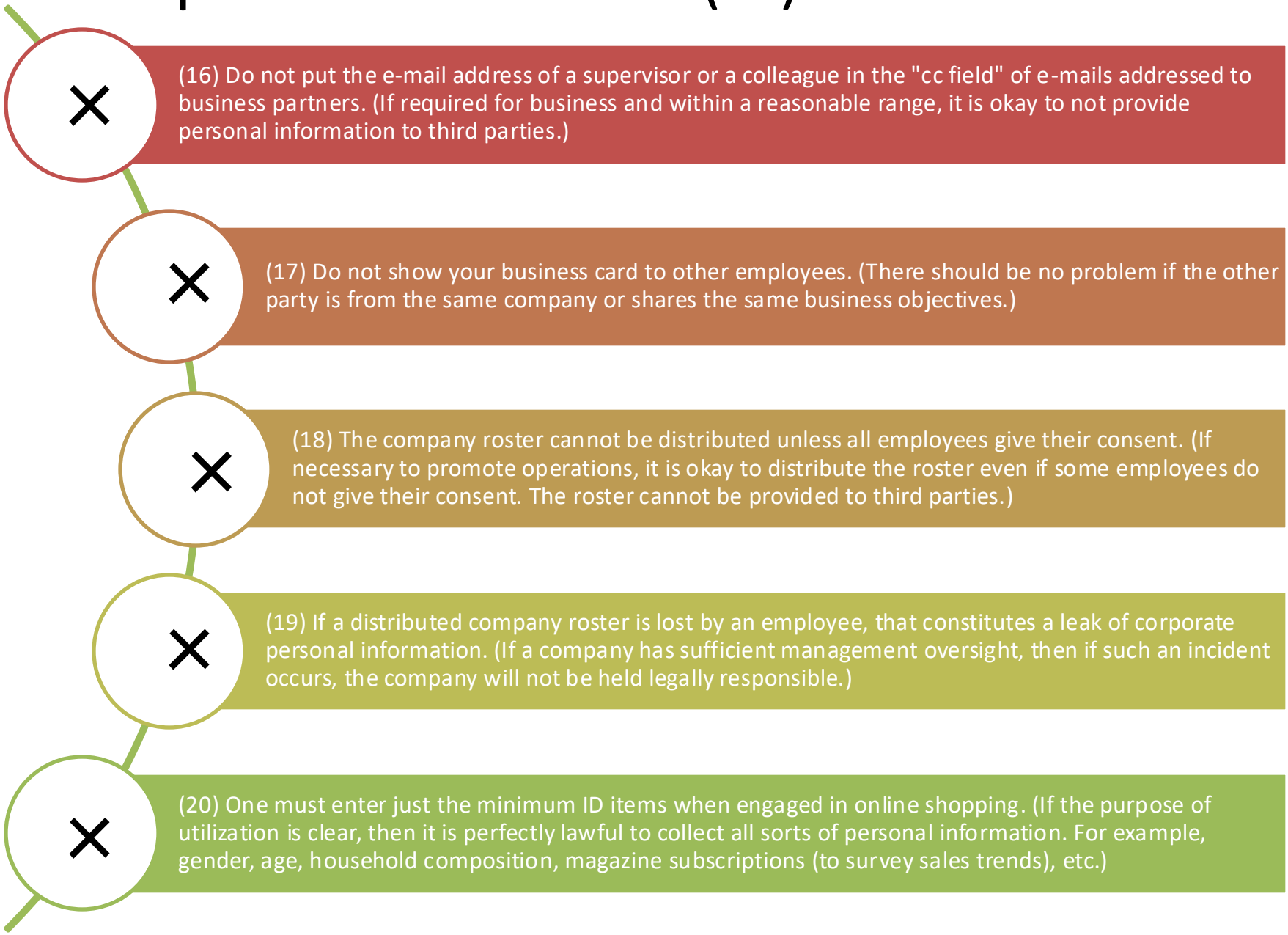
△ (12) Announcing a customer's name in a store is the same as providing to a third party. (It is okay if the requirements for personal data are met, and okay if one can assess that the data subject's consent was obtained in advance. Even if the data subject's consent was not obtained in advance, it is okay if the information is necessary to protect the subject's life, body, or property.)

○ (13) Personal information for employees of a company acquired through M&A can be be used without obtaining the data subject's consent. (When personal information is inherited along with a company, it is not necessary to obtain consent from data subjects again. That is, within the scope of the purpose of utilization prior to the transfer.)

× (14) It is prohibited by law from purchasing a list of individual names from a list broker. (Merely purchasing a list of names is not prohibited. Unlawful acquisition of such a list could be in violation of Article 17.)

○ (15) In cases where employee addresses can be matched against another source of information from outside, consent of the employees is required if a response is involved. (If the requirements for personal data are met, as a rule consent must be obtained. Consent is especially required in cases where inquiries are not related to the company.)

Comprehension Check (IV): True or not?



Comprehension Check (V): True or not?

× (21) Do not create a class roster in elementary school. (Information about students that you might convey about other students should not be provided to third parties.)

× (22) Do not show future course information of graduating students to currently enrolled students without getting their consent. (Currently enrolled students must not provide information about graduating students to third parties.)

× (23) Do not put student ID numbers or names on bulletin boards. (It is only natural that students on the same campus share information, but information used among students should not be provided to third parties.)

× (24) Do not provide a roster of student names to professors. (Instructors are also obligated to manage the personal information of the students under their charge.)

× (25) Do not fill in the name of patients on the doors of hospital rooms. (This is a gesture to prevent confusion and promote order within the facility, which is very different from providing information to third parties.) (From the standpoint of privacy protection, this display method calls for some consideration.)

Thank you

Rafik Hadfi

Department of Social Informatics

Kyoto University

Email: rafik.hadfi@i.kyoto-u.ac.jp