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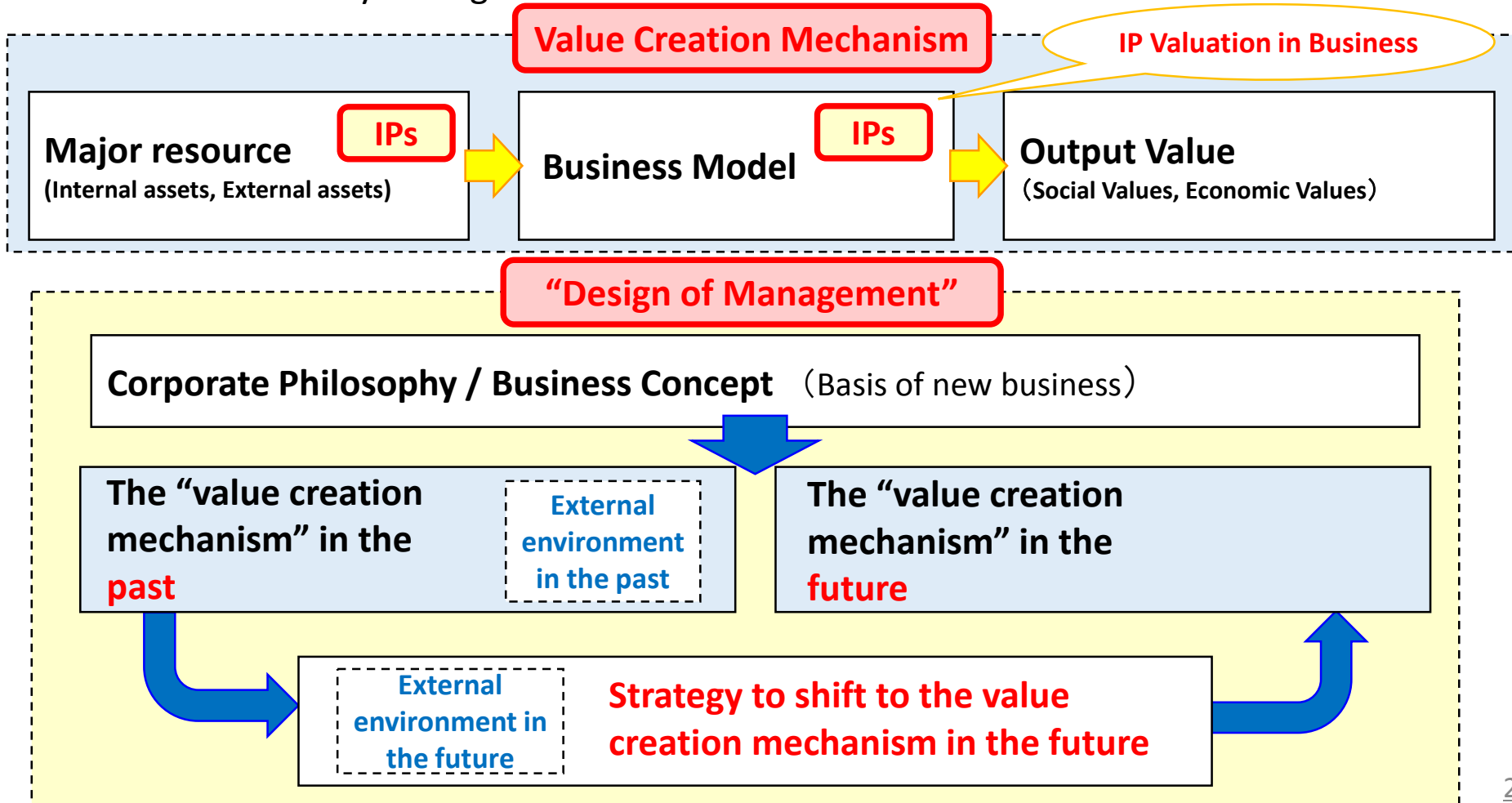
IP Valuation in Business Taskforce  
Report [Summary]

# Design of Management

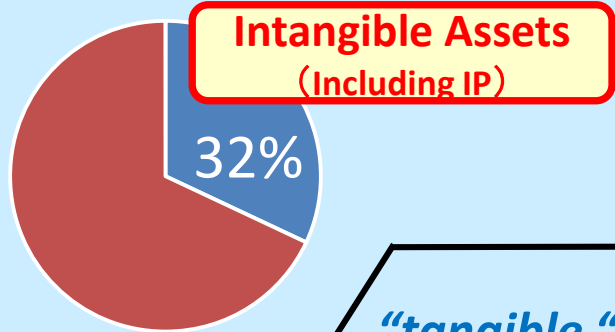
May 2018

# Main Point of the Report

- Capturing the value creation mechanism in the past and envisioning the mechanism in the future that enables to approach customer needs/wants, i.e. "design of management" is important.
- IPs should be evaluated in relation to the role they play in business, since IP contributes to the value creation by "being embedded into the value creation mechanism."

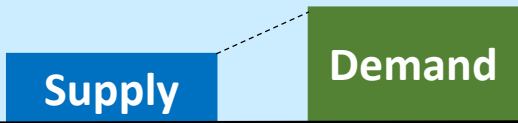


# Environmental Changes for Corporate Strategy and IP



When you make good products, you can sell them

**IP is one of the tools to protect business**



**Keywords**

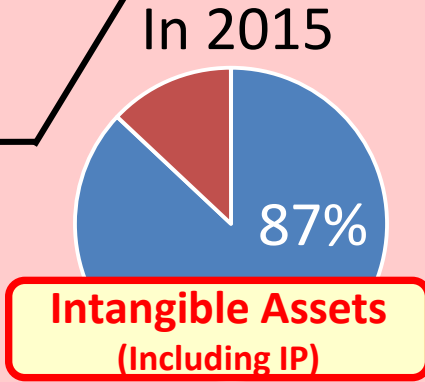
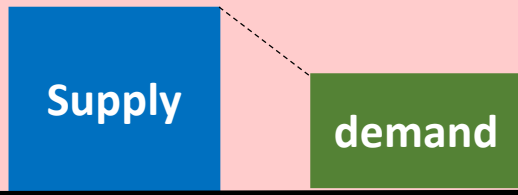
- Linear thinking
- In-house policy / Produce and sell good products at lower prices
- IP strategy for protecting rights
- Solo play by IP department

*“tangible “ assets like large production equipment were important to get/maintain market share*



**IP is also the tool for designing management and open innovation**

You can't sell products just because they are good.



**Keywords**

- Design thinking / Pro-innovation strategy
- Open innovation / from goods to services
- IP strategy for making business
- Cooperation between Management Dept. & IP Dept.

**Intangible Assets represented by IP, like business models and data to approach customer needs/wants, are important**

※Percentage of intangible assets is their values in the market cap of S&P 500

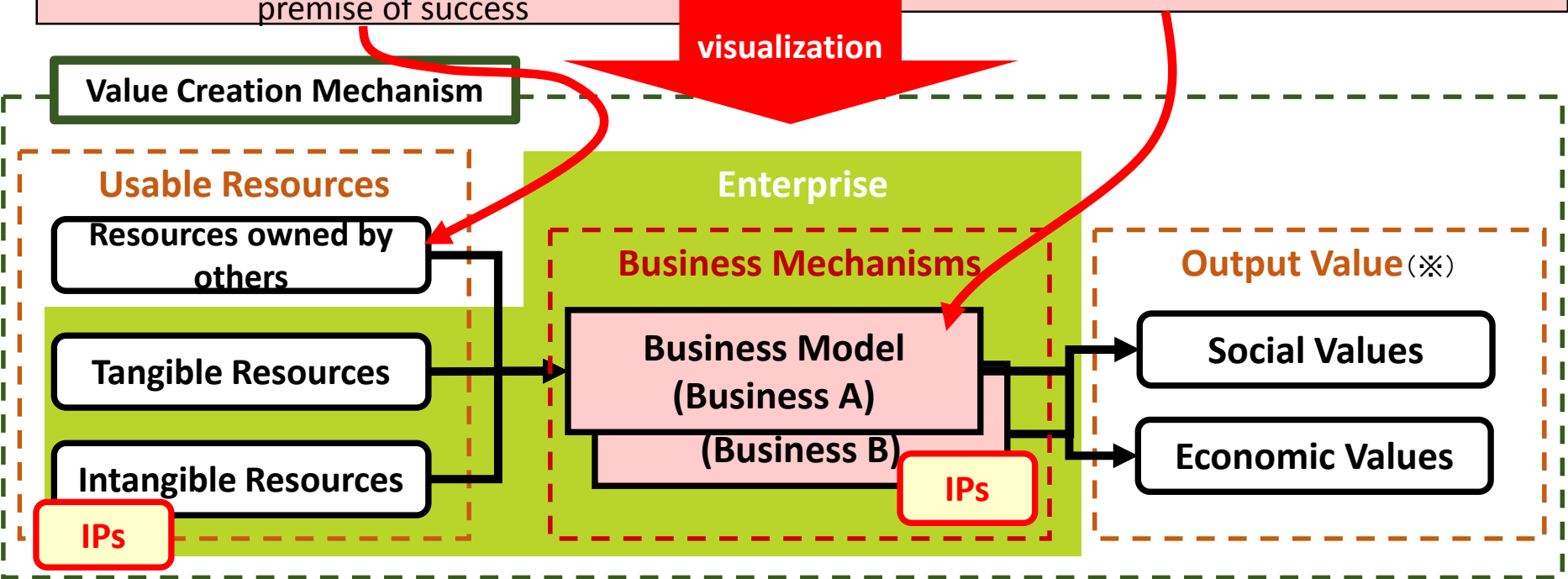
(<http://www.oceantomo.com/2015/03/04/2015-intangible-asset-market-value-study/>)

# Capture/Design of Value Creation Mechanism

We are in the era where simply providing technically superior products or services cannot overcome competitors in business

Diversified values, technological progress, etc. have made promoting open innovation a premise of success

It is necessary to design a mechanism that creates the value that users want



- The deliverables of open innovation and design, which are created through human creative activities, i.e. "intellectual property", to be the source of sustainable growth of companies
- It is important to capture the value creation mechanism in the past and envision the mechanism for the future while evaluating the role of "intellectual property" - which means "design of management"

(※) In recent years, a concept called "Creating Shared Value (CSV)" has also been proposed, that embeds solutions to social issues into their businesses and realizes economic outcomes through resolution of these solutions.

# Problems of Traditional IP Valuation and Purposes of Study

## Problems of Traditional IP Valuation

- Traditionally, in practice, IP valuation was conducted paying attention only to the value of "intellectual property" itself (purchase price of IP alone, license fee, collateral value, etc.)
- However, IPs essentially contribute to the creation of value by embedding into business (In the previous evaluation, the intrinsic value of IPs have not been evaluated.)

## Purpose of Study

- **To show how the IP valuation in business should be.**
- To propose a worksheet (management design sheet) to make people clearly conscious of the value creation mechanism and the position of the IPs in it, which is a prerequisite for conducting the valuation (worksheets are assumed to be used for dialogue between companies and stakeholders, for dialogue between management and IP professionals, etc.)

## Targeted Segments

- **Corporate executives and IP professionals** (including patent attorneys) as well as the ones who support corporations like financial institutions and the ones who belong to industry-academia collaboration Dept. and Technology-Licensing-Organizations of universities.
- Irrespective of the company size (large enterprises / small and medium-sized enterprises etc.,) or the company history (long-established enterprises or newly ventures)

# Corporation Management Design Sheet

## Business summary

Business vision, business concept, social issues the business is going to solve, business goals, KPI etc.

Relevance to management policy

## Business summary

Business vision, business concept, social issues the business is going to solve, business goals, KPI etc.

Relevance to management policy

Resource

Business Model

Value

Resource

Business Model

Value

### Major resource

Internal resources

IPs

External resources  
(from who)

IPs

### Profit mechanism

How you use resources to create value?

Role of IPs

In collaboration with whom?

Access to external resources?

### Output value

To whom?

What?

What to get in return

### Major resource

Internal resources

IPs

External resources  
(from who)

IPs

### Profit mechanism

How you will create values using resources?

Role of IPs

In collaboration with whom?

Access to external resources?

### Output value

To whom?

What?

What to get in return

### External Environment

Pros

Cons

Market situation

### Problem(weakness)

## Strategy for transition to the future image

Past

### External environment

Pros

Cons

Market forecast

### Challenges in transition

### Necessary Resources

IPs

### Solutions

- How to procure necessary resources
- How to shift the business to the "Future" form

Future

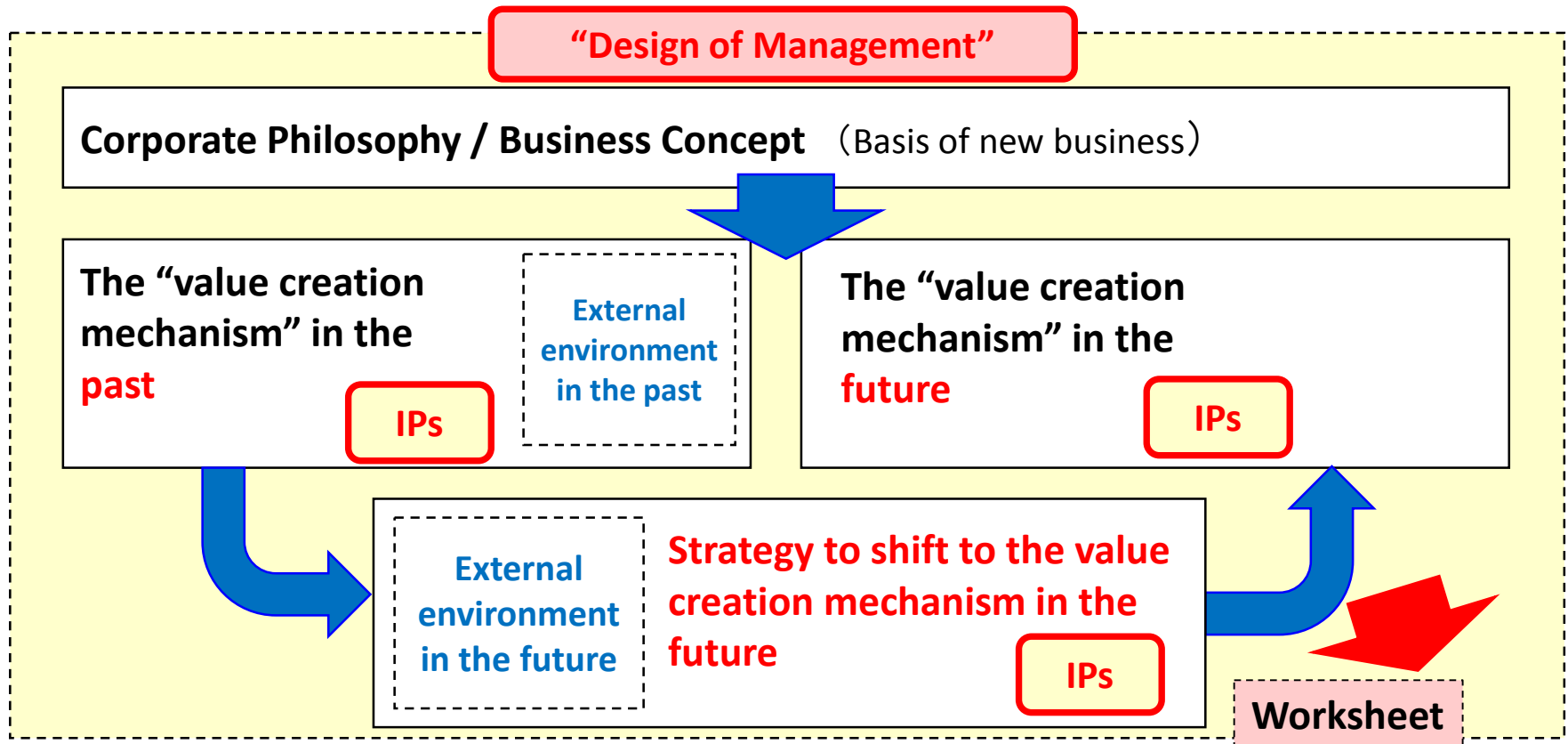
# Design of Management

## Company unit

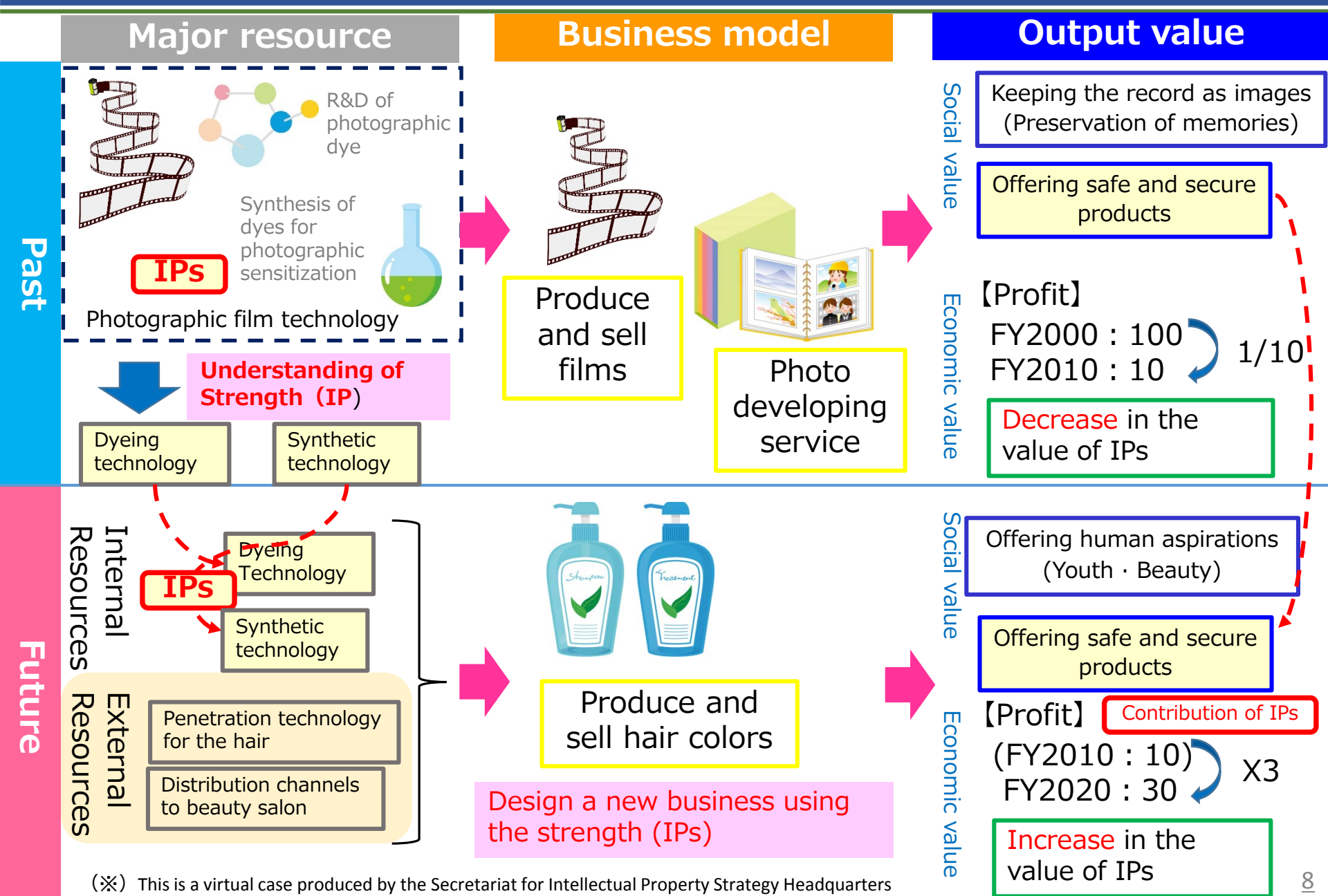
- Capture and design the relevance of each business and synergy among businesses from the company-wide viewpoint
- It is effective to make the business portfolio visible

## Business unit

- In the business portfolio, the value creation mechanism of the business unit cannot be captured / designed
- Capture and design how resources are used to create value in business



# Example of Management Design



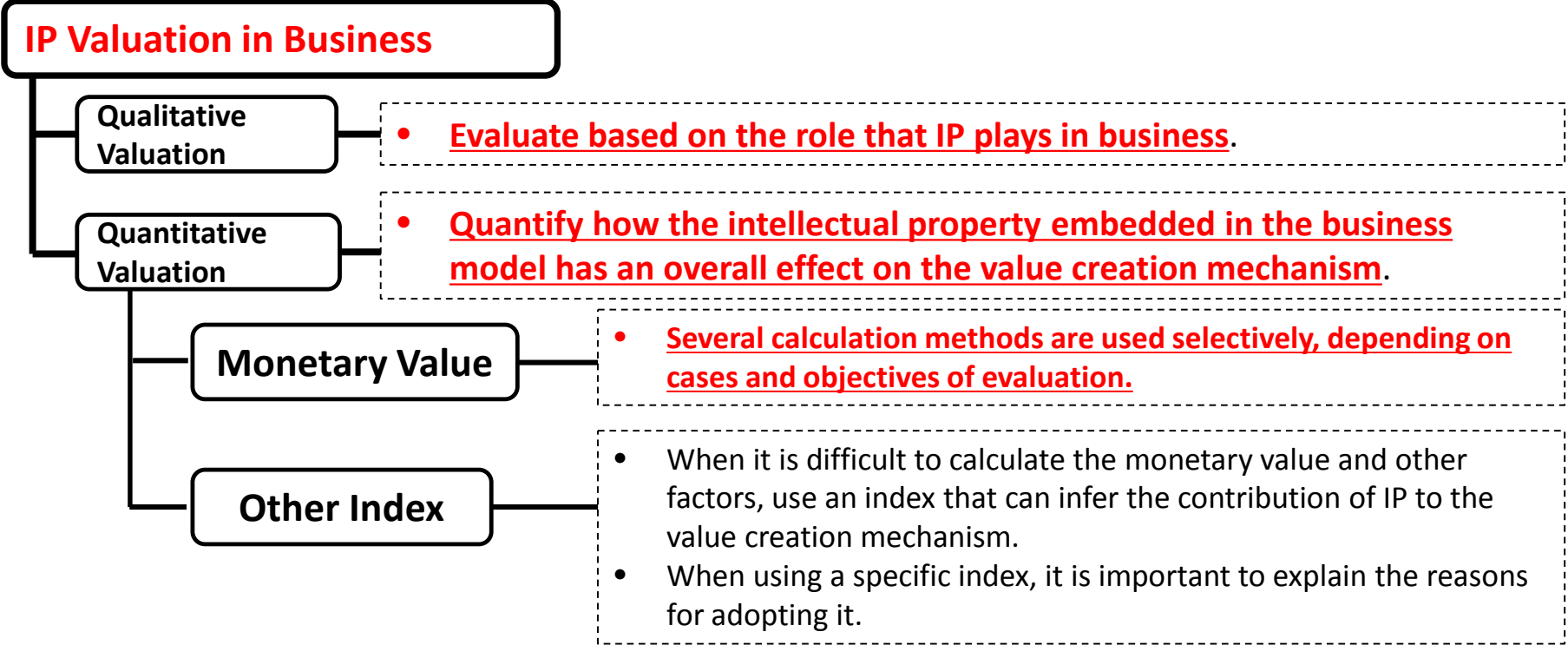
(※) This is a virtual case produced by the Secretariat for Intellectual Property Strategy Headquarters



# Basic Principles for IP Valuation in Business

The valuation of intellectual property (IP) should be done in relation to the value creation mechanism, since IP is a "one of management resources" and contributes to the value creation by "being embedded into the value creation mechanism." (※)

The value of IP to be captured based on this idea is entitled "business value of intellectual property."



- (※) According to this idea, IPs as follows could pertain to business values:
- IPs held for so-called defensive purposes, but which are contributing toward maintenance of the business model
  - IPs that contribute to new value creation by being embedded into other company's business, though it is not utilized in its original holder's business.
  - IPs that are expected to contribute to the value creation in the future by being embedded into the business plan, even if they do not contribute to the value creation at present

# Qualitative Valuation

Evaluate IPs **through capturing the role they play in business**. When necessary, classify the degree of contribution of IPs to business (by ranking etc.).

Major Role (Major classification)	Major Role (Examples of minor classification)	Examples of IP
Create business	—	Business model / corporate philosophy / organizational culture & climate
Realize, maintain, and develop business model	Encourage cooperation with others / Improve bargaining power / Secure the degree of freedom for business / Secure competitive advantage by excluding imitation to new entry into the market / Strengthen customer loyalty / Provide materials for planning strategies and products / Improve added value of products and services / Expand markets by open strategy	IP rights (patents, designs, trademarks, copyrights, trade secrets) / Know-how / Data / Technical standard / License agreement / Rules / Corporate philosophy / Organizational culture & climate
Secure direct income	License income / Income from sale / Securing price advantage / Ensuring cost advantage	IP Rights / Data / Technology Certification / License Agreement
Acquire / improve trust and reputation from outside	Acquire external recognition / Improve feasibility / Perception of future potential	IP Rights / Corporate Philosophy / Organizational Culture & Climate
Motivate employees	Acquire confidence / Improve employee's Loyalty to Company / Fulfillment of desire for honor & contribution	IP Rights / Corporate Philosophy / Organizational Culture & Climate

# Quantitative Valuation

- In quantitative valuation of IP, after qualitatively evaluating IP embedded in the value creation mechanism, **the effect of the IP on the whole value creation process shall be quantified.**
- There are several monetary valuation methods including the well-known ones hitherto, and it is necessary to select an appropriate method according to the case of valuation.

## Major methods of monetary quantitative valuation

Cost approach	Historical cost method	A valuation method by the sum of all expenditure costs that have been borne by the target IP to reach the current state
	Replacement cost method	A valuation method to estimate and evaluate the necessary cost to recreate IP similar to the target IP
Market approach	Similar transaction comparison method	A valuation method to analyze the value of the target IP with reference to the sales price of a similar IP actually bought and sold in the past
Income approach	Royalty exempt method	A valuation method to estimate the royalty cost expected to be paid to the third party from a similar license agreement, assuming that the target IP is licensed from a third party
	Excess profit method	A valuation method to calculate the part attributable to IP (excess benefit) in the total benefit and discount it as the present value to make it the value of the target IP
	Profit division method	A valuation method to find the value of the target IP by allocating the profit (present value) obtained from the business according to the degree of contribution of the target IP

# Quantitative Valuation Except for Monetary Valuation

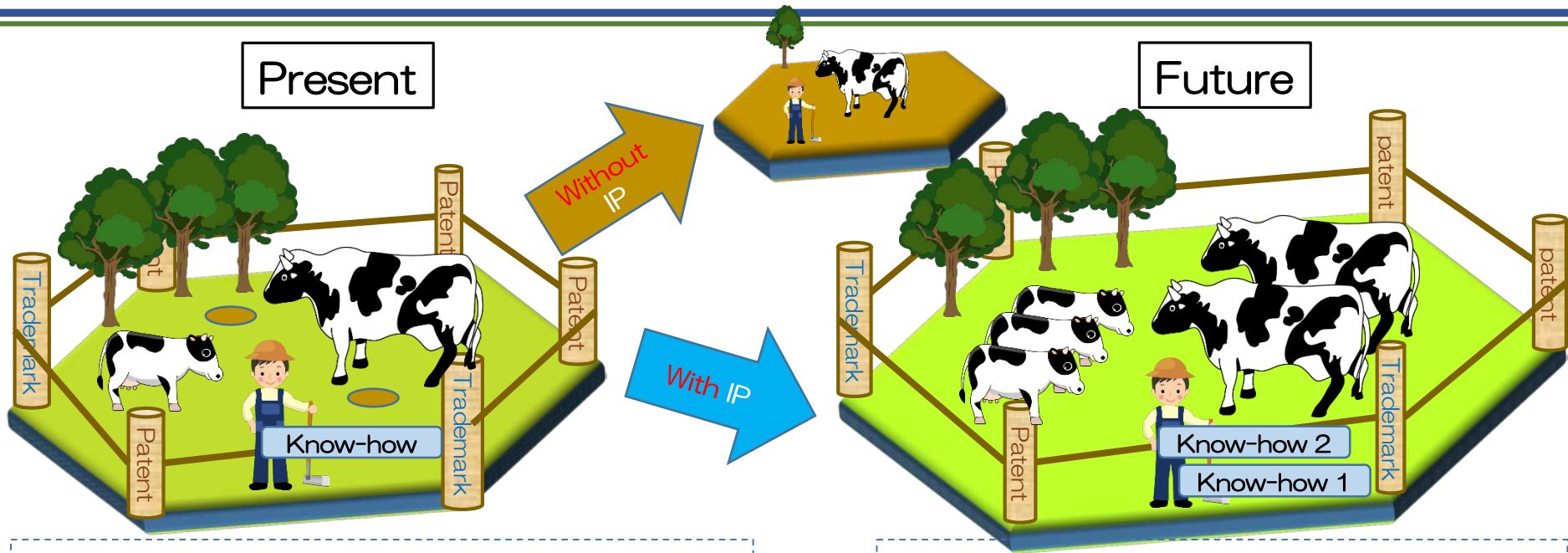
- When it is difficult to make a monetary valuation, it is effective **to use an index that can infer the contribution of the target IP to the value creation mechanism.**
- When such indexes are set and shown to the outside, it is required to explain the reason for setting them.

## Examples of index

(※It is not necessary to adopt the examples below. Index should be appropriately selected depending on the valuation case)

- Percentage of the number of patents owned by the company in the total number of patents which is essential for the business (patents which must be exploited for the business) in the electrical equipment / precision equipment business
- The ratio of the number of the standard essential patents (SEPs) owned by the company in the total number of SEPs on the market, when the SEP is necessary for entering the market, in the industry where standardization is being promoted like the IT industry.
- Number of IPs that became available due to the company's own ownership or formation of alliance.
- In small and medium-sized enterprises, (1) the ratio of transactions with large companies and (2) the proportion of non-OEMs in their products (for example, when both (1) and (2) are high, the degree of IP contribution is assumed to be high)
- In the venture company, the investment amount achieved by evaluating proprietary IPs
- Price premium rate by brand, when brand is established.
- Market share of products and other factors using proprietary IPs (including implementation by licensed competitors)
- Number of license-outs to strengthen / expand their business
- The decrease in scrap rate due to utilization of proprietary patents in the semiconductor business

# Concept Example of Monetary Valuation

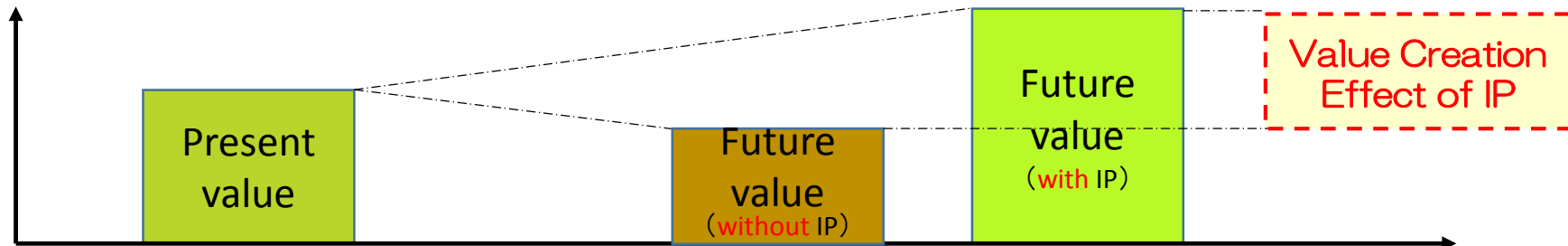


Running a business (expressed as a ranch) with protections of IP (expressed as fences)

Expanding a business by protecting with IPs

- More cows (goods) to sell
- The land improved and expanded
- Accumulated know-how etc.

Value of business



# Effective Use of “Management Design Sheet” ( 1 )

The “management design sheet” does not merely serve as a step of understanding the value creation mechanism and evaluating the business value of the IP, but also it can achieve the following effects through its drawing and utilization.

## The effect through drawing the management design sheet

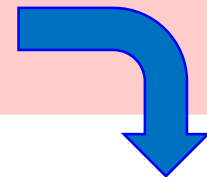
- ( i ) Environmental analysis & design and review of value creation mechanism at company level
- ( ii ) Design and review each business model
- ( iii ) Planning for optimization of resource allocation
- ( iv ) Planning of IP strategy, Planning for optimization of IP investment
- ( v ) Appropriate business valuation etc. in the course of M & A

## Showing the management design sheet inside the company

- ( i ) Facilitate in-house adjustment
- ( ii ) Improve employee's morale
- ( iii ) Promote in-house innovation

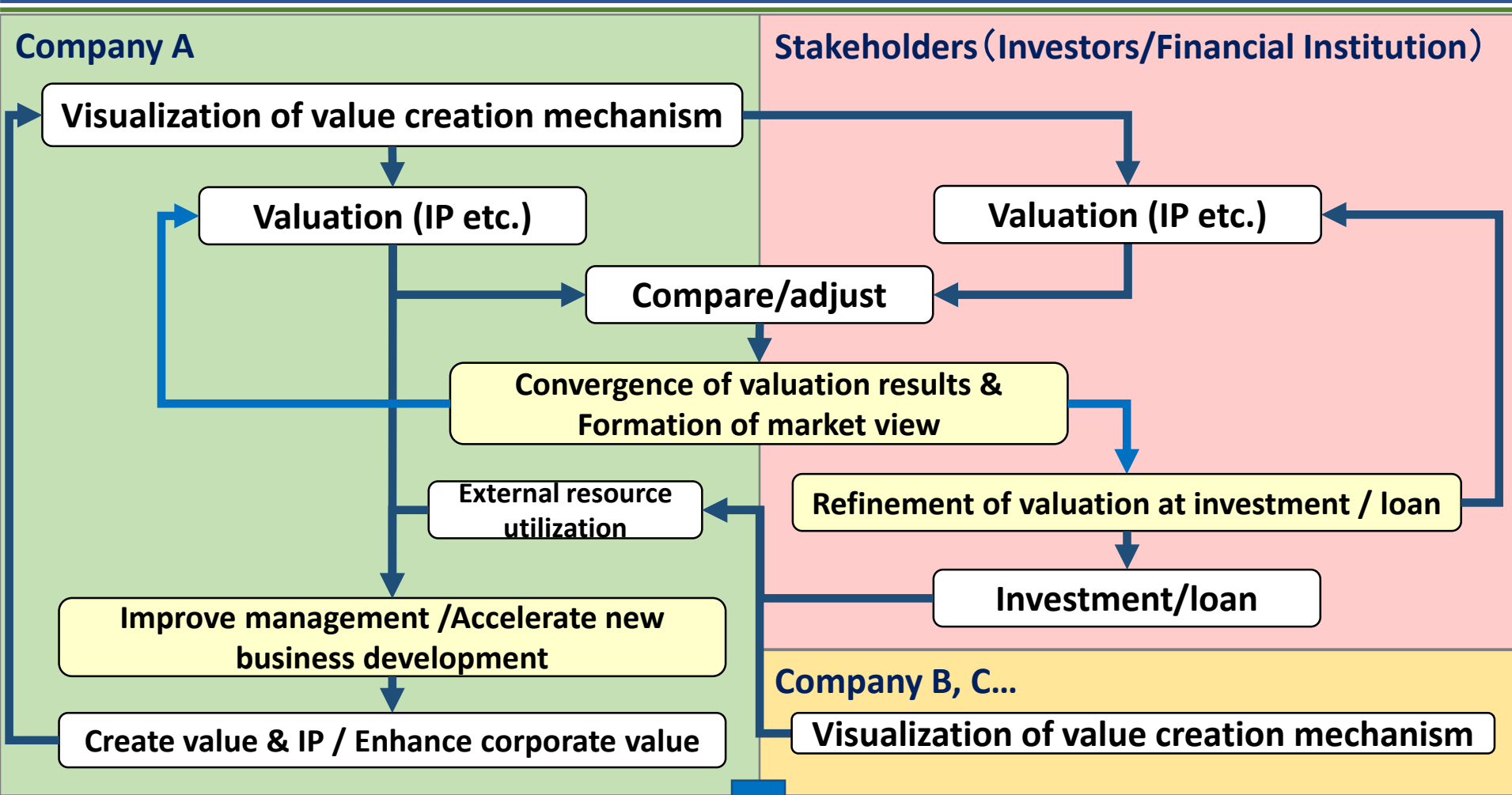
## Showing the management design sheet outside of the company

- ( i ) Facilitate open innovation
- ( ii ) Appropriate valuation by communicating with financial markets
- ( iii ) Convergence of results of valuation



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# Effective Use of “Management Design Sheet” (2)



**Benefit**

For the entire society

Accelerate innovation

Appropriate compensation for IP infringement

Improve productivity

Smooth business succession in small and medium enterprises

# Policy Examples Proposed by the Taskforce

## **1. Publicize the concept in this report when spreading communication tools like Intellectual Assets-Based Management Report, integrated report, Local Benchmark etc.**

Examples: Recommend as a model example of communication tool

Add usage situation of management design sheet to communication award criteria

## **2. Encourage financial institutions to introduce the concept in this report to be introduced in the business assessment**

Examples: Promote to improve IP valuation ability

Set incentives to introduce IP valuation in business

## **3. Increase opportunities for companies to evaluate business value of IP**

Examples: Use the sheet as attachments to verify applicant requirements with application form of subsidies

Use the sheet for technical review in bidding of comprehensive evaluation method

Collect and disseminate case examples of management design sheets

## **4. Increase opportunities for employees and others to value IP in business**

Examples: Hold study sessions / workshops aiming at preparing management design sheets

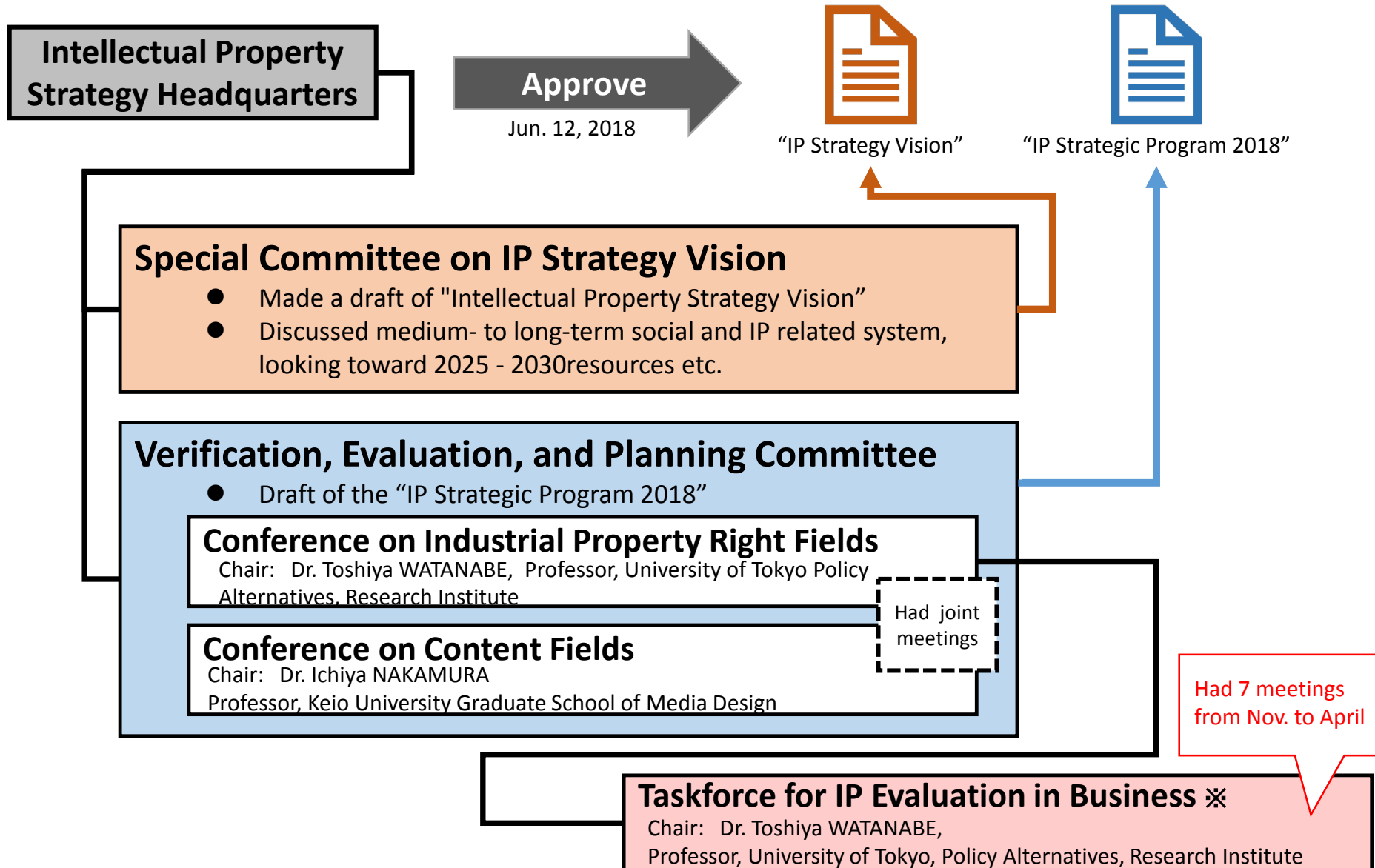
Use the sheet in business contests etc.

Add to the scope of qualification examination on management and IP and to the skill standard examination

Use the sheet in lectures and exercises of universities



# [reference] Examination system (2017-2018)



# [reference] Task Force Members

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