



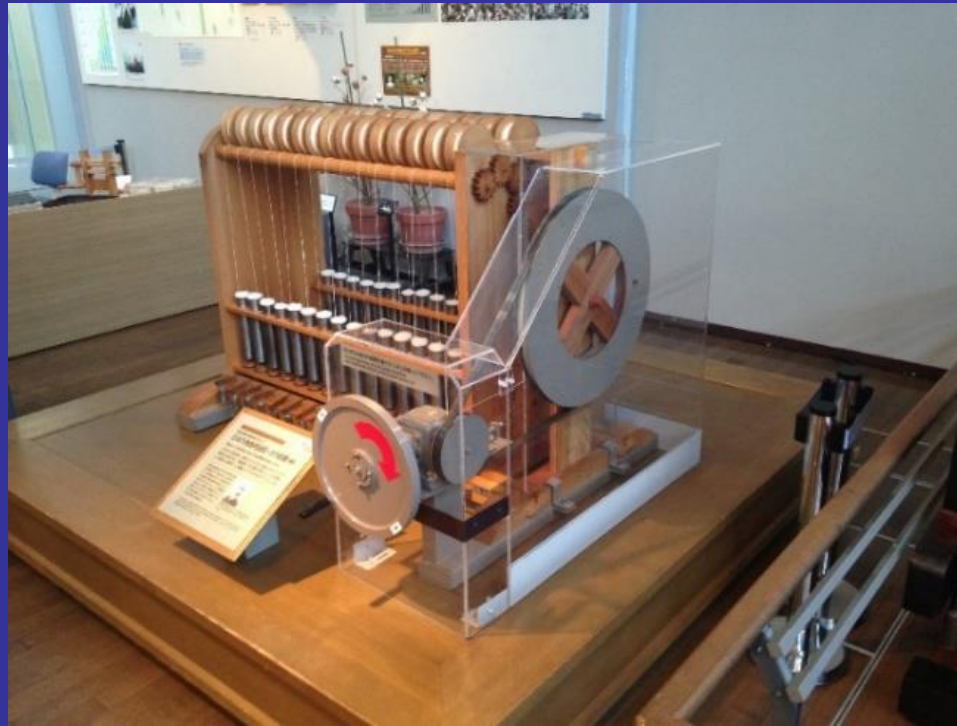
Intellectual Property for Open Innovation

February 10, 2020

SAWAI Tomoki
Director
WIPO Japan Office

Before and After: The Establishment of the Patent System in Japan in 1885

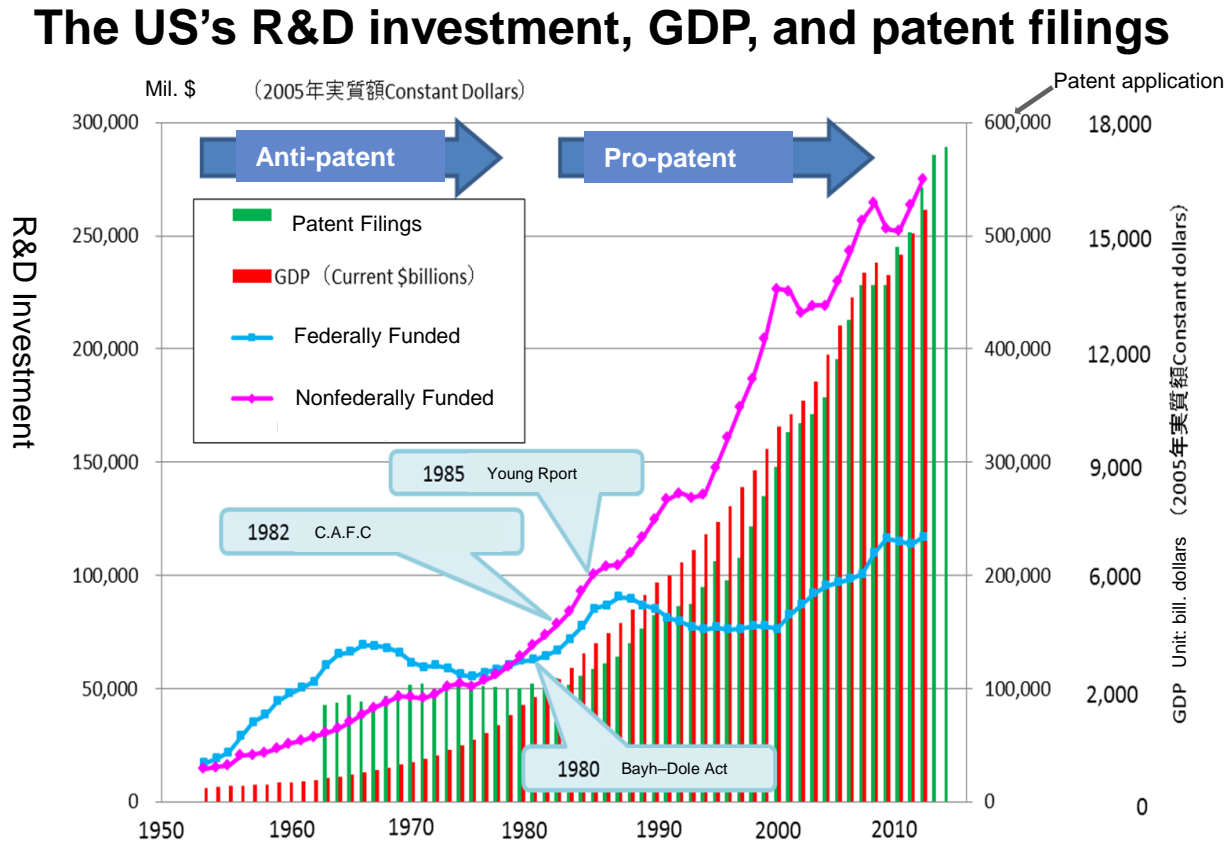
GAUN Tatsumune (1842-1900) and TOYODA Sakichi (1867-1930)



“Gara-bou” spinning machine, invented by GAUN Tatsumune in 1876

Toyota Commemorative Museum of Industry and Technology

US: Dramatic Increase of R&D Investment by the Private Sector under Pro-patent Policy

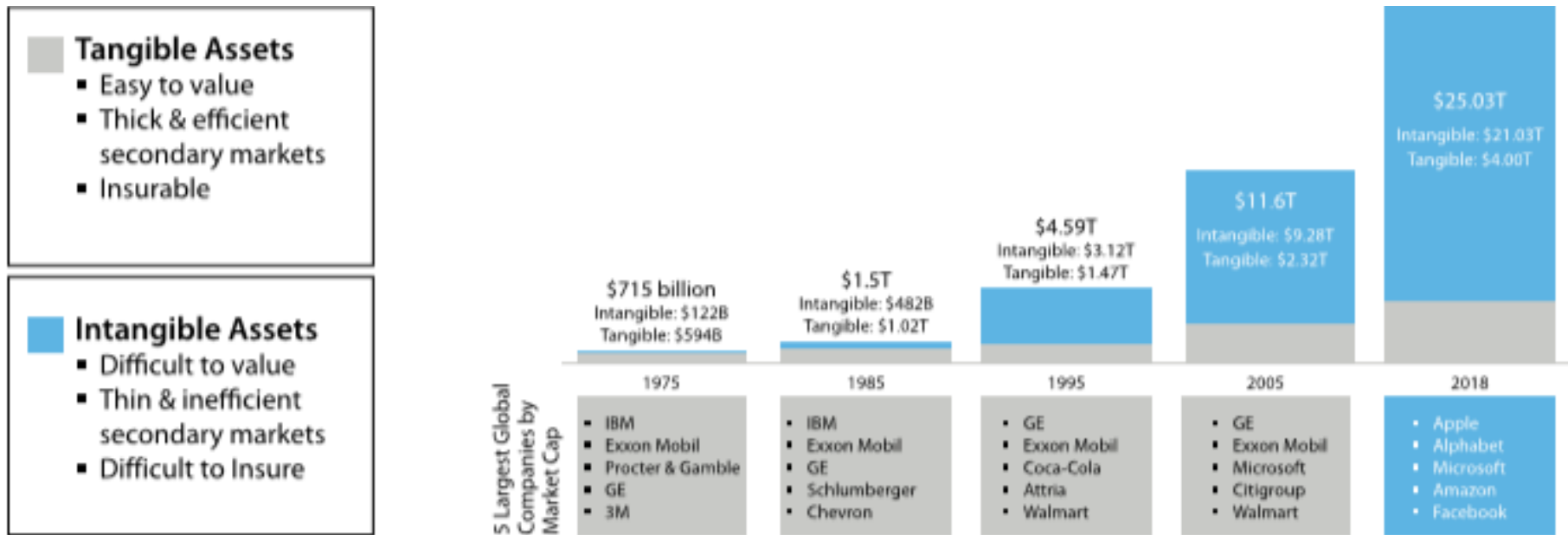


Source: (研究開発投資) National Science Foundation National Patterns of R&D Resources
(特許出願件数) U.S. PATENT AND TRADEMARK OFFICE Patent Technology Monitoring Team (PTMT) U.S. Patent Statistics Chart Calendar Years 1963 - 2014

Preface of the **Young Report (1985)**: *“That first sputnik wounded our pride, strengthened our resolve, ... What this country needs today is to have the Japanese launch a Toyota into space. Or perhaps a Sony Walkman.”*

Rapid Growth in the Ratio of Intangible Assets in Corporate Valuation

Tangible Assets vs. Intangible Assets for S&P 500 Companies 1975 - 2018



*Five Largest Global Companies by Market Cap as of December 31, 2018

Source: 2019 Intangible Assets Financial Statement Impact Comparison Report (Aon Empower Results, April, 2019)

Increased Importance of Innovation

Top five strategic priorities over the next 3 years



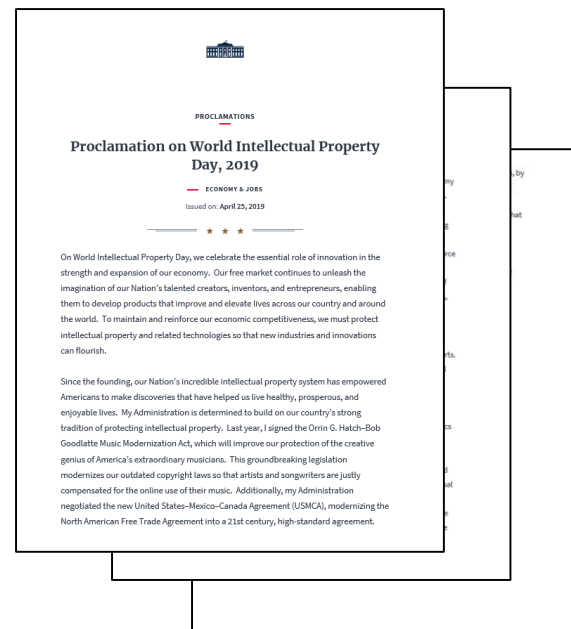
Source: 2016 Global CEO Outlook, KPMG International

The Heads of Both the US and China Pointed Out the Importance of IP

President Trump:

“To maintain and reinforce our economic competitiveness, **we must protect intellectual property** and related technologies so that new industries and innovations can flourish.”

-- *Proclamation on World Intellectual Property Day, issued on April 25, 2019*



President Xi Jinping:

“We will reinforce the **protection of IP** to further utilize the creation of knowledge and to decrease technology gap.”

-- *The Second China International Import Expo, November 5, 2019*

Japanese Companies **NOT** Confident in their IP Strategy and Business Alliances

Survey on the strong points of Japanese companies (24 items in total)

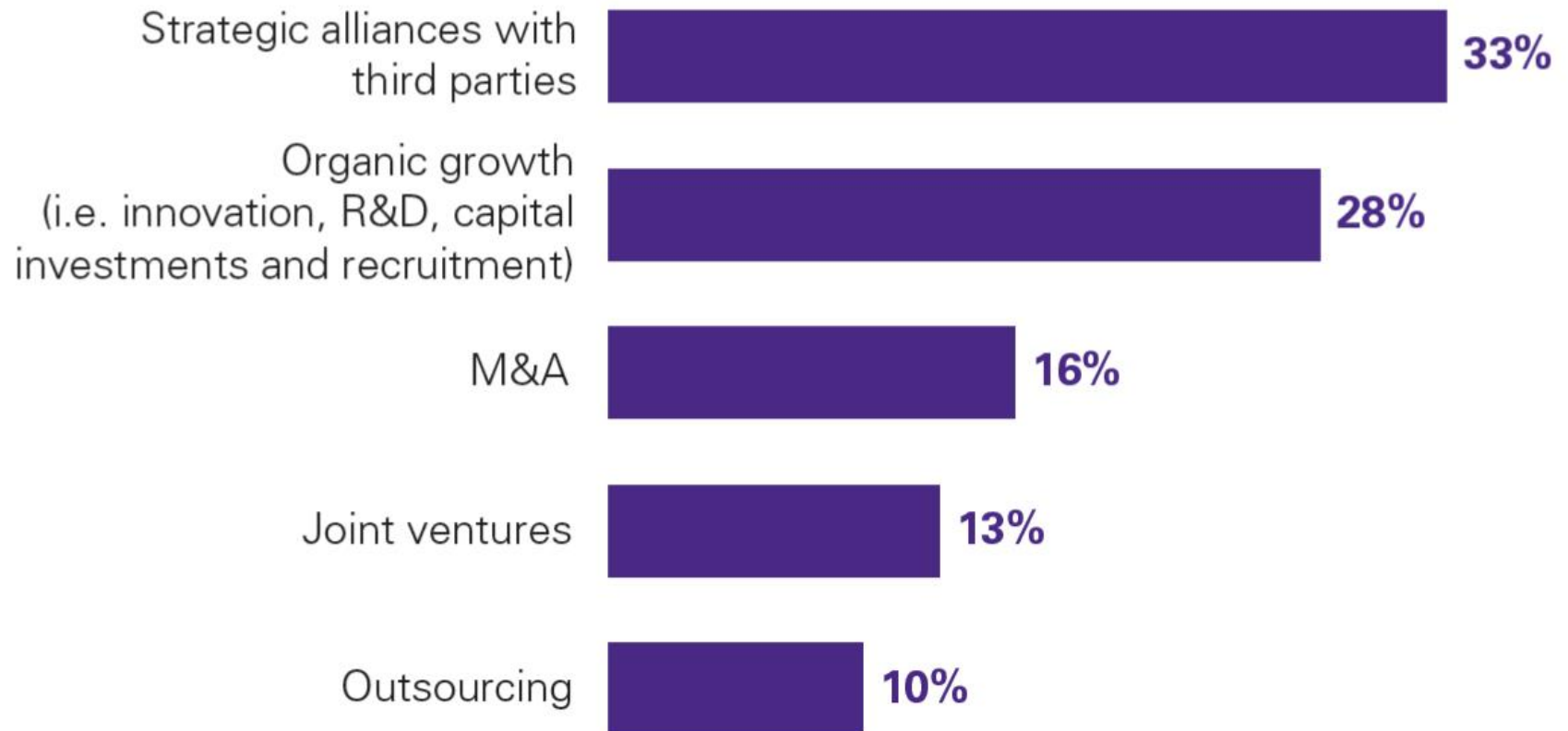
Rank	Item	Points*
1	Ability to Respond to Needs	0.82
2	Trust from Customers	0.72
	⋮	
11	R&D Ability	0.23
12	Ability for Product Design	0.19
	⋮	
21	IP Strategy	0.01
21	Stragegy for International Standard	0.01
21	Utilization of IT	0.01
21	Business Alliances	0.01

*Points are averaged by rankings of companies surveyed: 1st rank (3 points), 2nd rank (2 points), and 3rd rank (1 point)

Source: Survey by the Ministry of Economy, Trade and Industry (December, 2016)

CEOs Worldwide Consider “Strategic Alliances” more Important than “Organic Growth”

Most important strategies to drive growth over next 3 years



Source: 2018 Global CEO Outlook, KPMG International

The need for Open Innovation has increased

IP strategy is Essential for Open Innovation

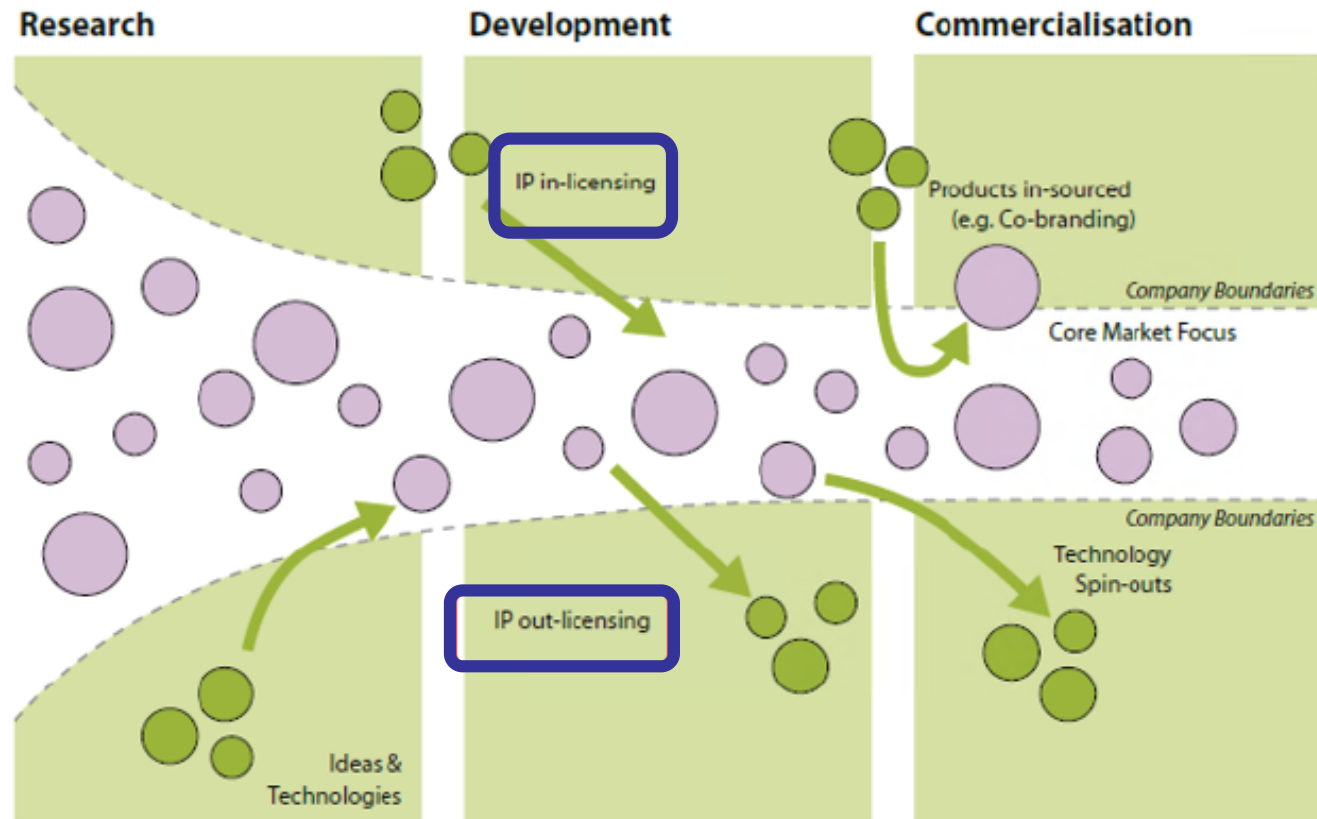
Product life-cycles have shortened due to increasing globalization and commoditization.



To remain competitive, it is essential for companies worldwide to embrace Open Innovation for the creation of value.



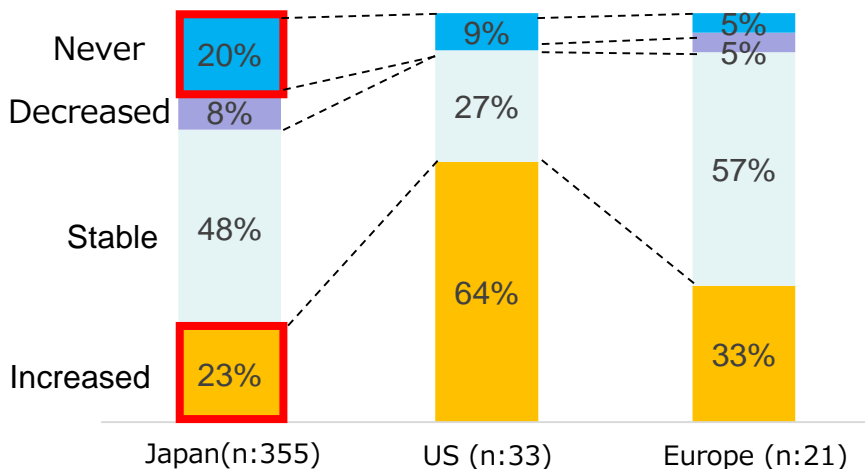
IP activities such as in- and out-licensing are key to effectively execute Open Innovation.



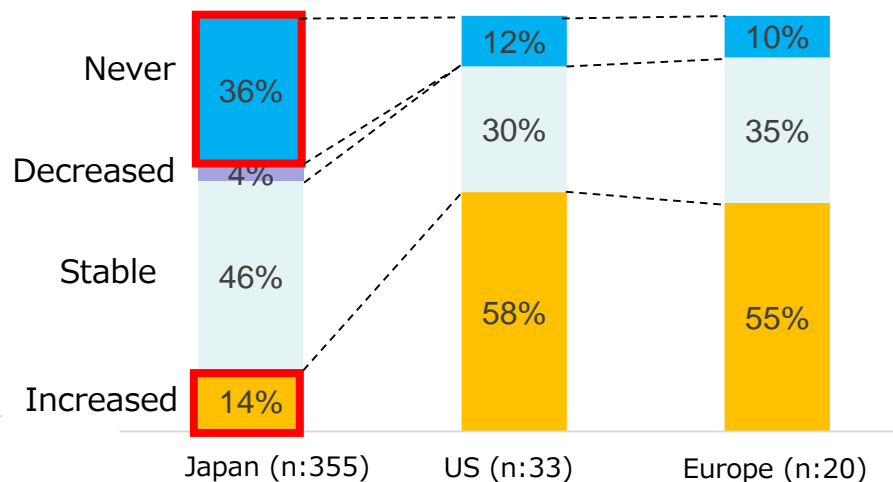
Source: "Top 10 Lessons on the New Business of Innovation," MIT Sloan Management Review, 2011, in "How to Implement Open Innovation – Lessons from Studying Large Multinational Companies," University of Cambridge, <http://sloanreview.mit.edu/files/2011/06/INS0111-Top-Ten-Innovation.pdf>

Open Innovation: Japanese Companies Behind the Trends of American and European Companies

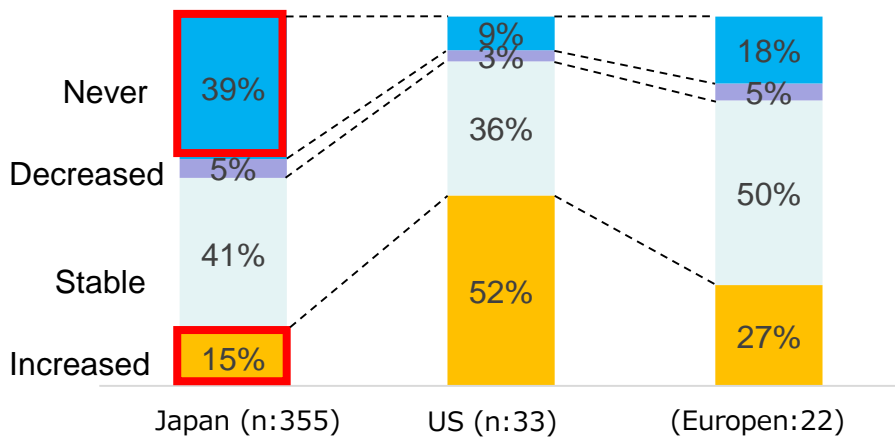
Trend of licensing-in from external resources (past 10 years)



Trend of purchasing IP rights from external resources (past 10 years)



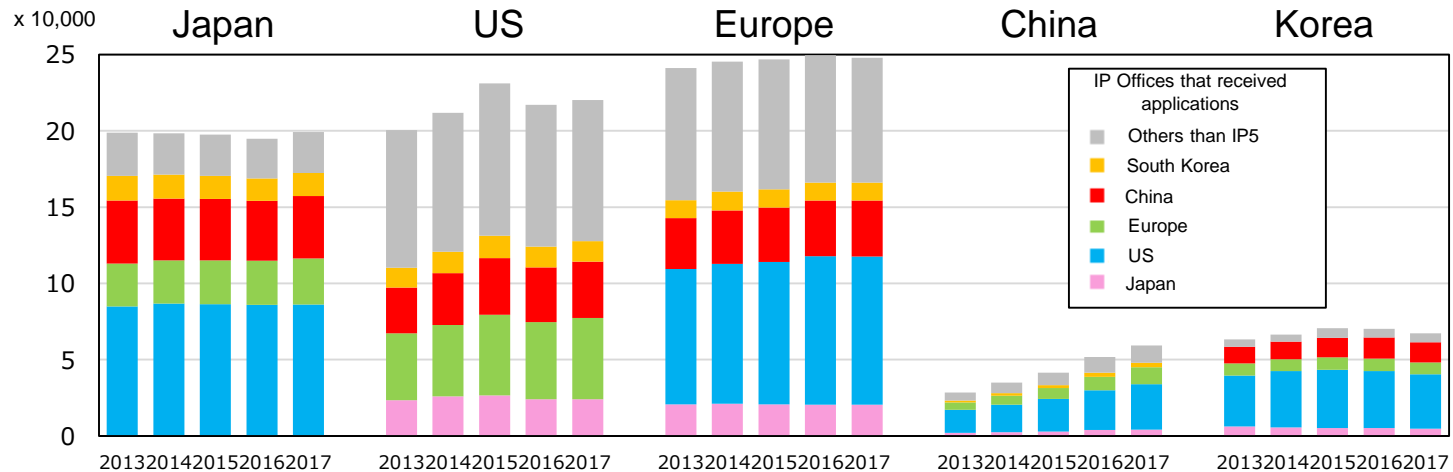
Trend of cross-licensing (past 10 years)



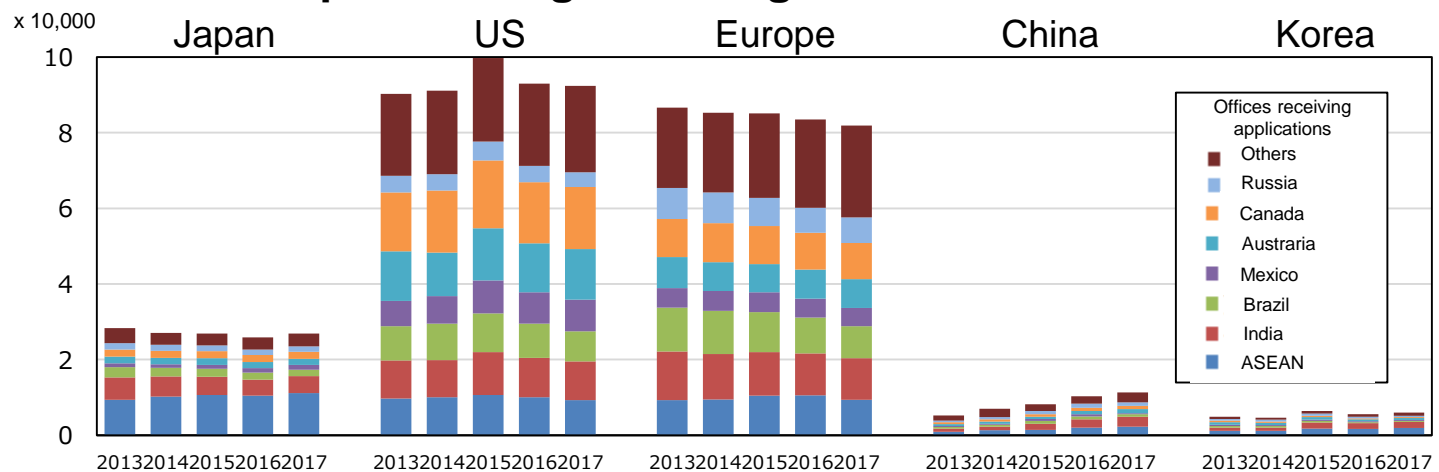
Source: "Report on the Survey of Procurement Strategies of IP Resources," 2012, Project to Promote the Strategy of Obtaining IP Rights Internationally, Japan Patent Office

Global IP Strategies: Japanese Companies Behind American and European Companies

Number of patent filings in foreign countries



Number of patent filings in foreign countries other than IP5

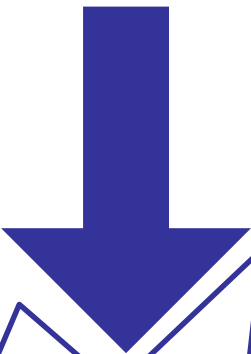


P&G: Transformation from “NIH” to “PFE”

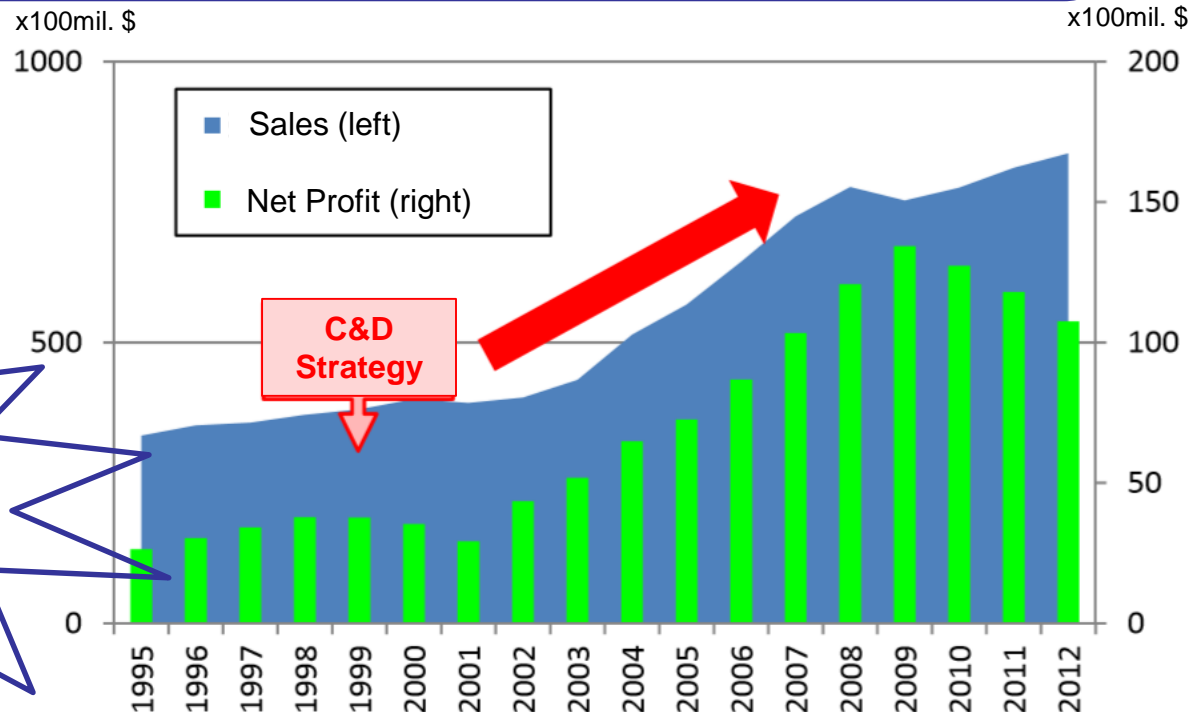
Case Study

2000: A. G. Lafley became the CEO of P&G

- Announced the start of the **Connect and Development Strategy**, which aimed to obtain 50% of innovation from external sources
- Transformed the company’s culture from NIH (Not Invented Here) to PFE (Proudly Found Elsewhere)



Huge increase in sales and net profit after 2000



Source: METI, 2014,

https://www.meti.go.jp/shingikai/sankoshin/sangyo_gijutsu/kenkyu_hyoka/pdf/004_s01_00.pdf

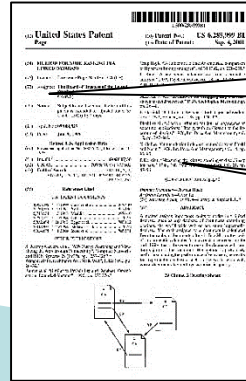
Google: Expanded its business based on key search technologies while reinforcing its patent portfolio

Case Study

1998: Start of Business

1998: Core Patent Application

Patent Gazette on ranking techniques of search results, a core technology of the Google Search



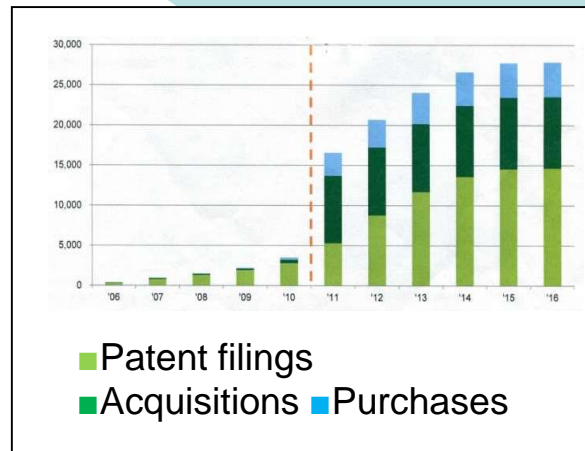
US6285999B1

Inventor: Lawrence Page (Google Co-Founder)

Examiner : Thomas Black, Uyen Le

2011 to Present: Expansion of Patent Portfolio

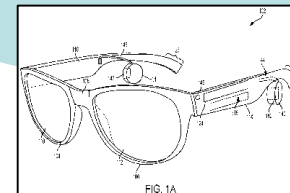
e.g. acquisition of Motorola



Source: Survey by Deloitte
Tohmtsu Financial Advisory LLC

2016

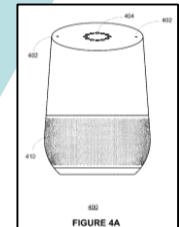
Filing on Smart Glasses



US9807490B1

2017

Filing on Smart Speaker



US2017-0332035A1

Amazon: Dramatic Growth from “1-Click” Order Patent Case Study

Amazon developed and patented its game-changing “1-Click” order technology within its first few years of business



1-Click™で今すぐ買う

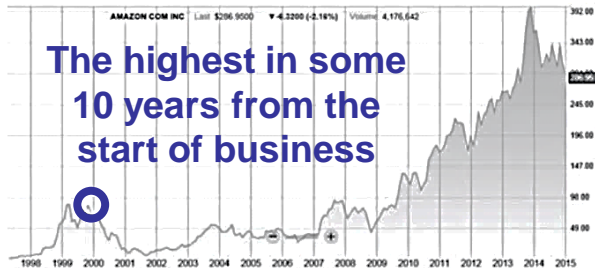


With their “1-Click” technology a customer could purchase an item immediately without going through a shopping cart screen!

1. IP rights on core innovations

Amazon filed a lawsuit against Barnes & Noble, one of the largest booksellers in the US, for patent infringement and obtained an injunction remedy.

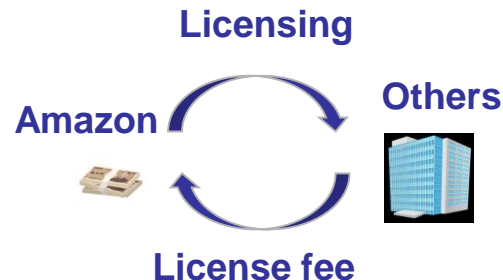
As a result, the stock price of Amazon drastically increased.



Source : Otani, Hiroshi, “The Roles of Patent Applications in the Competitive Advantage of Start-ups,” Data retrieved from nasdaq.com (2015/01/15)

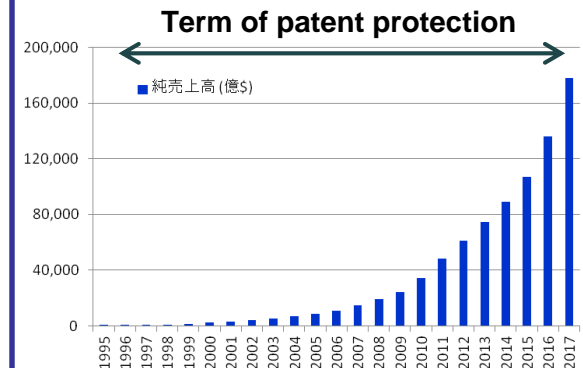
2. Income from Licensing

Obtained huge revenue through licensing to other companies



Source: “Apple, Amazon.com ‘1-Click’ Patent and Trademark License,” Apple Press Release, September, 2000, <https://www.apple.com/jp/newsroom/2000/09/18Apple-Licenses-Amazon-com-1-Click-Patent-and-Trademark/>

3. Steady increase in sales over term of patent protection



Source: Data retrieved from EDGAR, the US’s electronic disclosure system, <https://www.sec.gov/cgi-bin/srch-edgar> (2018/05/27)

Asahi Kasei Corporation: Dr. YOSHINO Akira, 2019 Nobel Prize Winner in Chemistry Case Study

“Patent rights on the lithium-ion battery and their proper licensing to others greatly contributed to expanding its market.”

-- Dr. YOSHINO, Nobel Laureate



Dr. Yoshino (right) and Mr. Sawai (left) on the eve of the European Inventor Award 2019 held in Vienna, June 19, 2019

Conclusion: IP strategy is Essential for Open Innovation

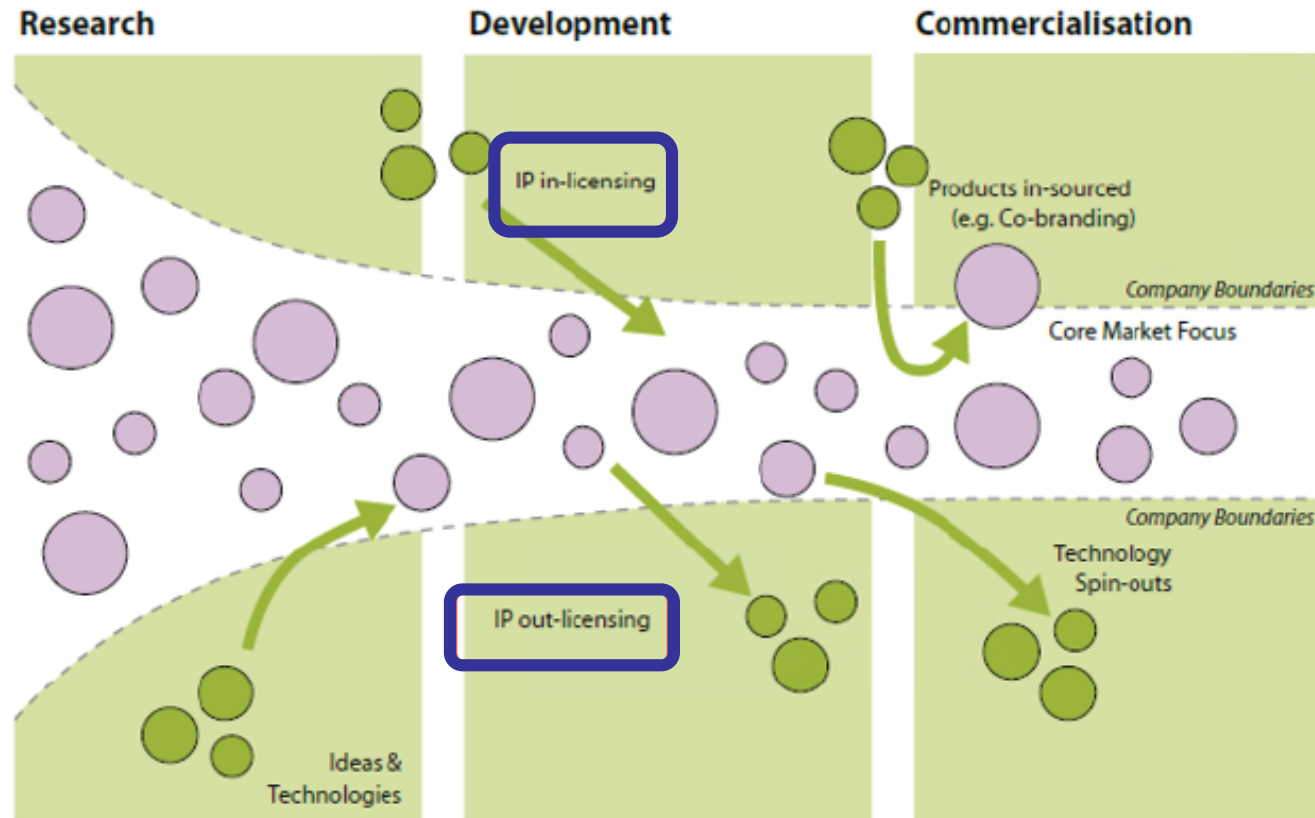
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Thank you so much for your attention!

Let's meet again at
World IP Day Memorial Symposium

Date: April 27, 2020

Venue: Iino Hall (Chiyoda-ku, Tokyo)

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