IP-Best Practices in Japanese Startups

Regional Meeting for Supporting Start-Ups in Africa

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Japanese Patent Attorney of Patent Firm iPLAB Startups

Main Topics

1. Introduction of Japanese startups
2. Problems with startups
3. Some examples of best practices
4. Q&A

Speaker

iPLAB

Patent firm, 2 Startups, Patent Management Company with Fund.

-Yokohama-city University (M.S. Molecular Biology / Optical Physics)
-2008 Patent firm as a Patent Attorney
-2013 Mobile game company (TSE Mothers to 1st)
-2016 Digital Healthcare Startup (Series B-D Finance)
-2017 DRONE iPLAB, Patent Management Company, CEO
DRONE Startup CIPO
-2018 iPLAB Starups General Partner / Co-Founder
METI, Industrial Structure Council, IP Committee
JPO Committee

Startup event with the commissioner of the JPO

-Graduated from the Faculty of Law, Gakushuin University.
-A major patent firm in Tokyo
-WIPO-Tokyo-branch (World Intellectual Property Organization: Headquarters Geneva, Switzerland)

CIPO Confurrence

Our professionals

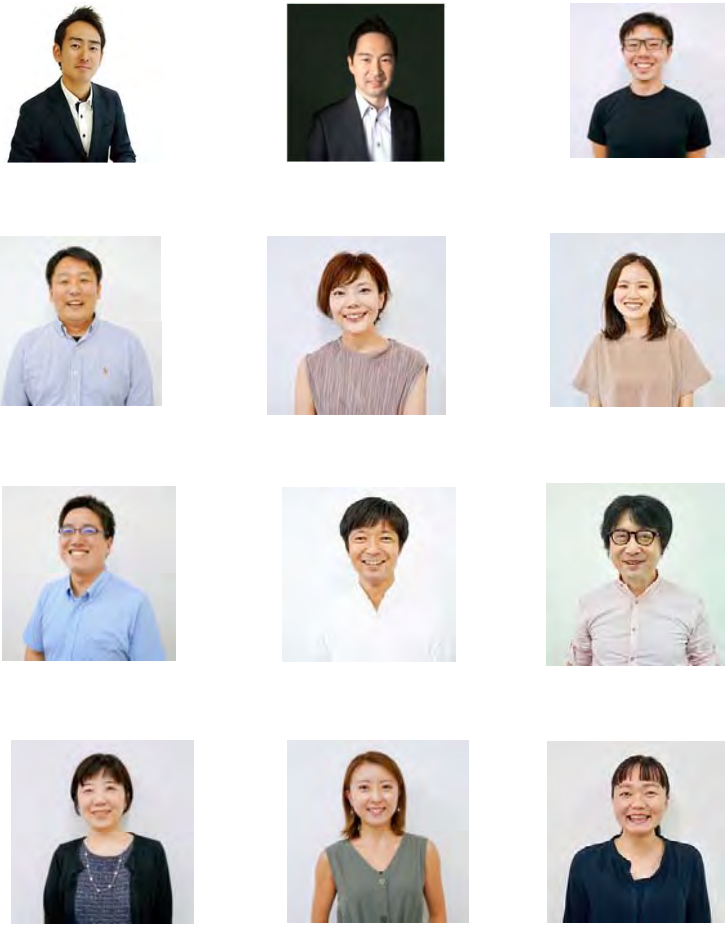
Expertise: Engineer, Licensing, Examiner, Finance, CEO.

VISION

To create new market by technologies and grow its industry with IP.

MISSION

To use intangible assets to the startup company management and to spread the CIPO position.



And other 4 Members

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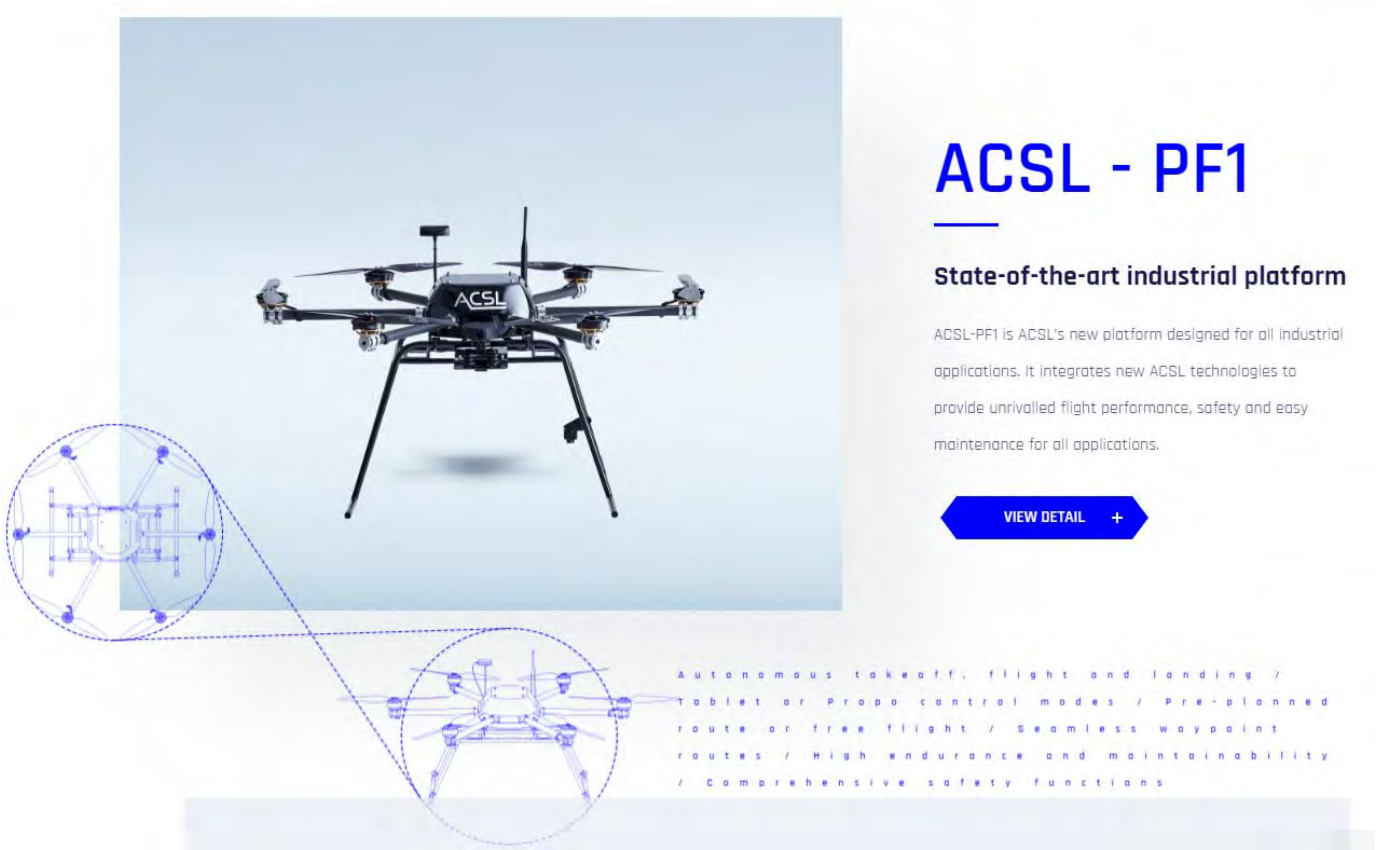
ACSL（Autonomous Control Systems Laboratory Ltd.）



https://www.acsl.co.jp/en/products/

SDGs Business Verification Survey with the Private Sector for Increasing Added Value for Agriculture Utilizing Drones (Toyota Motor Co., Rakuten Inc.)

Development Issues Concerned in Agriculture Sector

- Lack of rural infrastructure and high delivery cost
- Production and information management for securing stable quality and quantity of agriproducts
- Constraints in increasing agricultural export due to the two factors mentioned above

Products/Technologies of the Company

- Delivery services for agriproducts using drones
- Support services for farming and shipment management based on data captured by rover-type drones

Survey Outline

- Survey Duration: July 2019～December 2020
- Country/Area: Rwanda (Kigali, Rwamagana, Rulindo, Huye, Bugesera)
- Survey Overview: The goal is to increase export of high-value agriproducts by ensuring their stable quality and quantity, by improving access between rural farms and major roads using drones, and by supporting product management through data captured by rover-type drones.

Delivery Drone

How to Approach the Development Issues

- Collecting and gathering high-value agriproducts for export market using drone and selling the products to exporters or directly to the export market

Expected Impact in the Country

- Enabling "next-gen infrastructure development" with lower cost and shorter duration, as opposed to time and cost consuming conventional infrastructure
- Contributing to income increase for farmers by driving export of high-value agriproducts through farming and shipment management by data

As of July, 2019

Drone Japan

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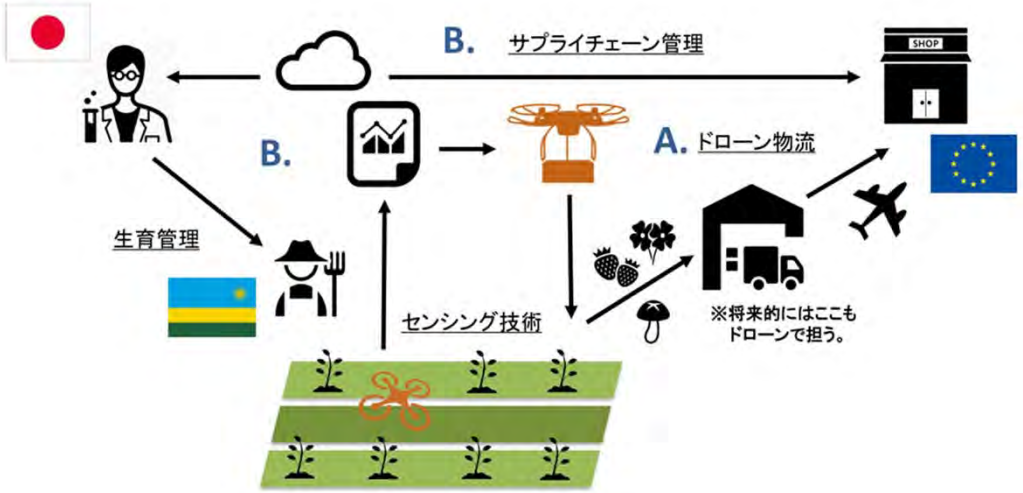
https://www.drone-j.com/english

Improve agricultural production capacity in developing countries

Supporting the Drone-Agriculture in Rwanda

＊TICAD7 （アフリカ開発会議）にて紹介されたPV　（time 16’30-18’00）
https://www.youtube.com/watch?v=mKaoR6xEHZI&feature=youtu.be



DRONE and ICT: JICA SDGs Project for Increasing Added Value for Agriculture Utilizing Drones and ICT in Rwanda.
Mr. Harada, who started as a farming entrepreneur at the age of 30 learning from an attentive farmer, has succeeded in cultivating “Japanese gentian (a kind of flowers)” in Rwanda.
He also contributes to rural employment.
Drone Japan supported its activities with Drone Rover Sensing.

https://service.drone-roofer.com/

CLUE is the first Japanese company to obtain a government-approved flight license in Ghana, West Africa.

2017年5月1日 BY 三好大悟

CLUEが西アフリカのガーナにて日本企業初の政府公認飛行許可証を取得

スポンサーリンク

2017年5月1日、ドローンソフトウェア開発企業の株式会社CLUEは、西アフリカのガーナに進出することをお知らせします。また、日本企業としては史上初のドローン公式飛行許可証をガーナの民間航空局であるGhana's Civil Aviation Authority (GCAA) より取得しました。これによりCLUEはガーナ国内で自由にドローンを飛行させることが可能となります。CLUEでは日本のドローン技術を活用してアフリカの課題を解決すべく注力していきます。

アフリカ進出の背景として、アフリカは2010年に人口が10億を超え、2030年には15億人となることが予想されています。これは同時期の中国14億人やインドの15億人を超えるためアフリカは「最後のフロンティア」とも呼ばれています。また、アフリカは過去5年の経済成長率が約5%で推移しており、今後巨大なアフリカ経済圏の形成が期待できます。

しかしその急成長の一方、インフラ整備が追いついていない現状があります。それらは紙で保管される記録や不正確な人力の点検作業など、旧来の仕組みから脱却できていないことで発生する非効率さが原因とされています。

CLUEでは西アフリカのガーナで、インフラをメインとしたあらゆる課題に対してドローンでの解決を目指します。

In road inspection, a road is captured from above using a drone camera. The captured geographic image is provided as two-dimensional data or three-dimensional data. As a result, the inspection time can be reduced to about 1/10 compared to the conventional inspection using humans and paper working.

https://www.borg.media/clue-ghana-gcaa-2017-05-01/

Aeronext

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Aeronext Inc., a drone architecture research start-up,
emphasizes IP strategy and conducts its original 4D GRAVITY® license business.

4D GRAVITY®:patented center of gravity control technology that improves stability

Flying Robots

360° VR Photography Drone

Bridge Inspection Drone

VTOL Logistics Drone

Short Distance Delivery Drone

Flying Gondola

AERONEXT

Flying Gondola

Drone Fund

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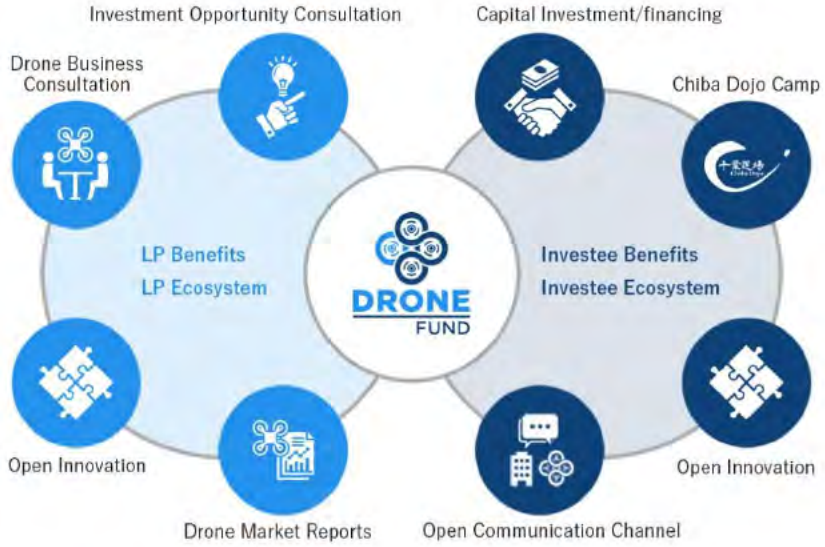
Drone Fund is the world's only VC fund dedicated exclusively to investment within the Drone Space. Drone Fund provides capital investment, operational support, collaborative planning, and regulatory assistance in order to expand the entire Drone space.

– The Drone Fund Ecosystem

Drone Fund's investment in companies includes support beyond financial; administrative, IP strategy, innovative planning, drone policy, and operational support are all included.

Drone Fund is proud to be a VC which offers much more than capital investment and financing. We are striving to create a "Drone Ecosystem" in which LPs and startups can successfully benefit from membership within the Drone Fund community and also grow within the drone space, as the more our investees grow, the more improvements are made in drone technology and ultimately the more humanity benefits.

The Drone Fund ecosystem is made up of two smaller systems (the LP ecosystem and the Investee Ecosystem). Each of these smaller components makes up the larger Drone Fund community and has different facets. Our LPs benefit differently than our investees do, but the benefits are shared and we grow as a whole.



The Drone Fund Patent Umbrella

DRONE iPLAB, a company that under the direct control of the DRONE FUND, is an IP consulting company supporting the DRONE Start-up companies.
They were established at the same time.
DiPL is (DF).

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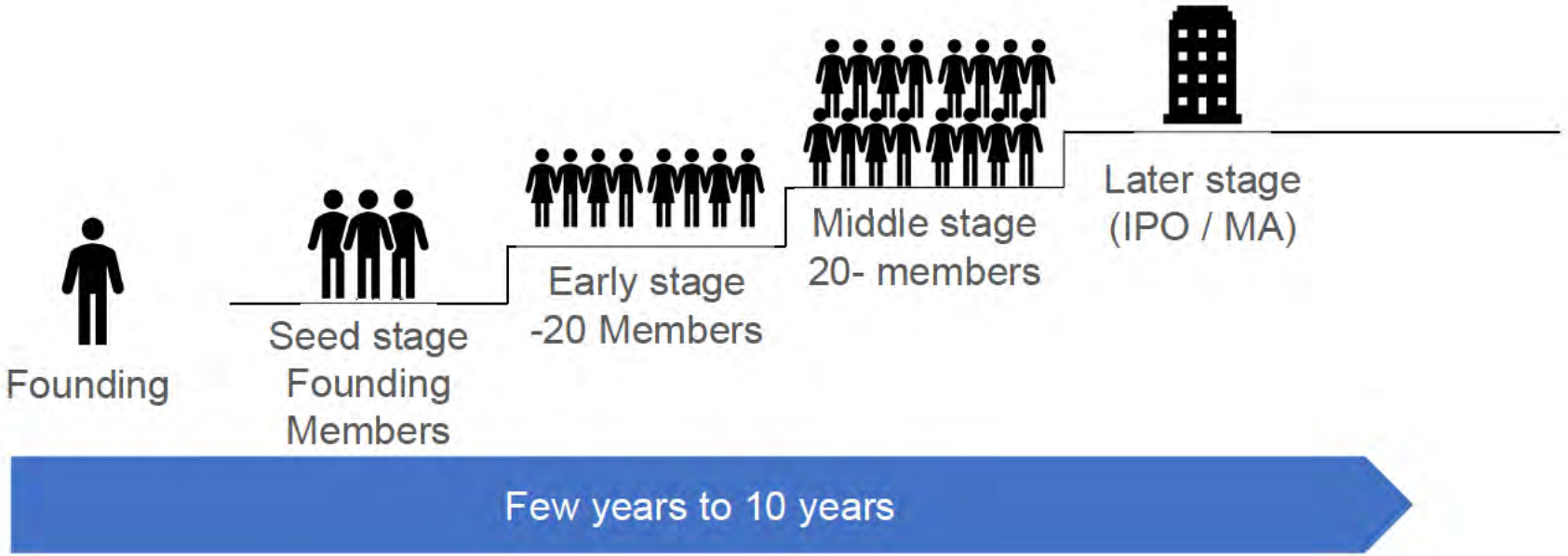
What is a Startup?

Startup: A company that creates new industries to solve social issues.

In a very short period



2nd year

4th year

3rd year

6th year

Digital Healthcare startup
https://finc.com/

The number of patent applications of SMEs

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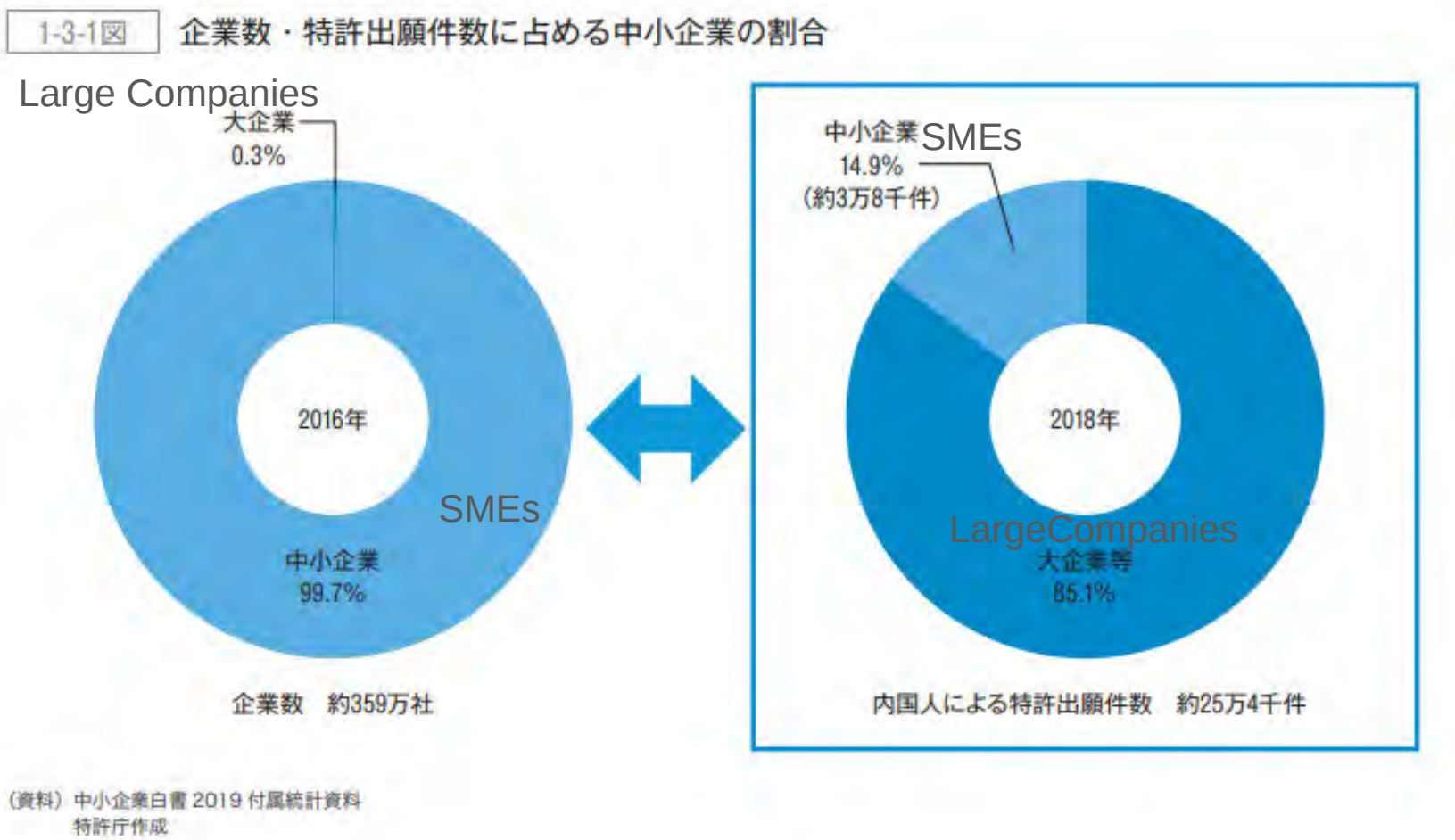
Although the number of SMEs is large, the ratio of SMEs to patent applications is about 15%.



Ratio of SMEs in the number of companies

Number of companies: approx.3.59 million

Percentage of SMEs in patent applications

Number of patent applications

Patent administration annual report 2019
https://www.jpo.go.jp/resources/report/nenji/2019/document/index/honpen0103.pdf

Why Startups Need “IP”?

The value of IP is high in their situation.

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~~Sales~~

In the red

~~Product~~

unfinished

~~Time~~

Human

retire

IP

Company's assets

There is no IP department in the Start-Ups.

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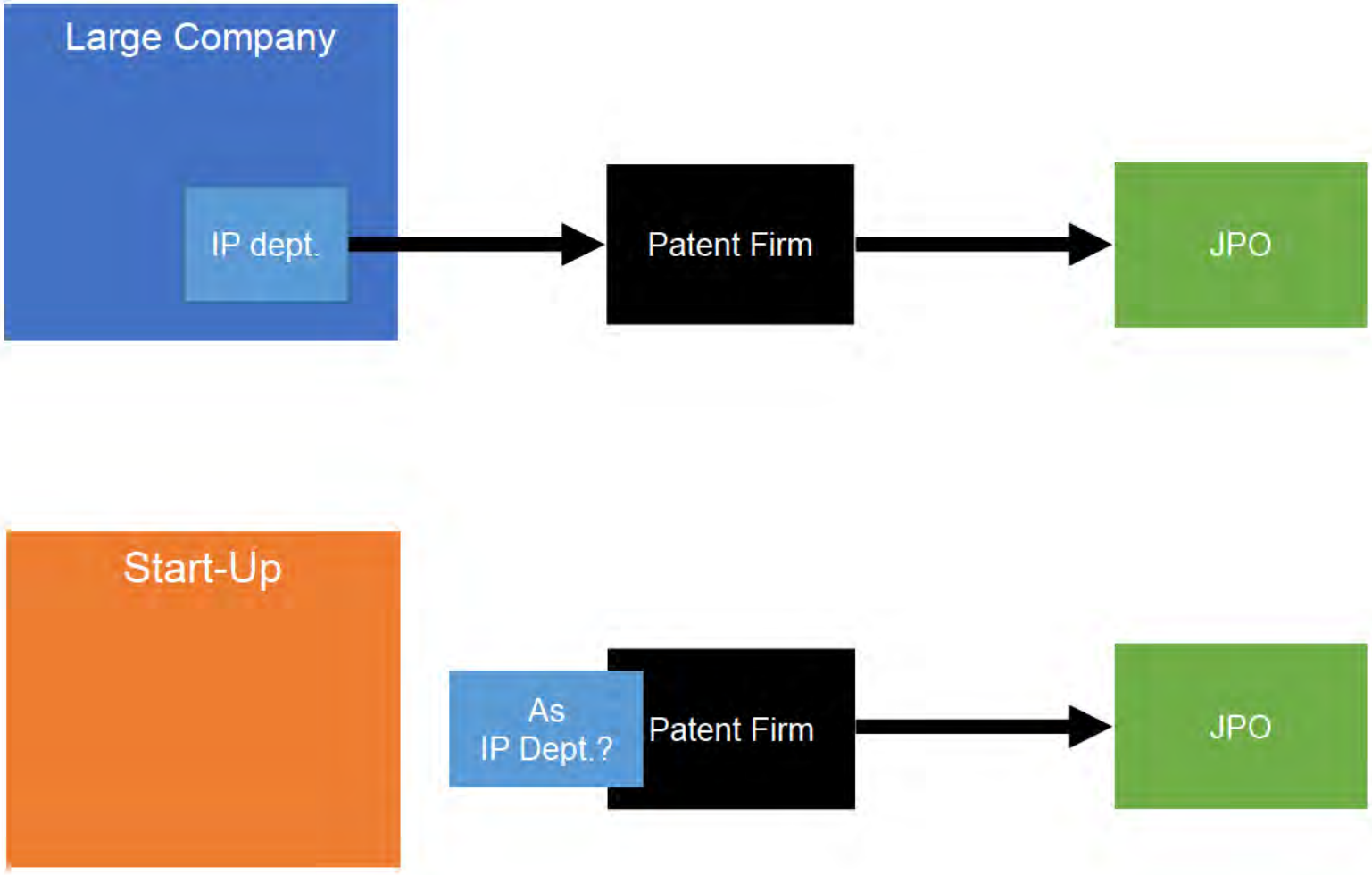

There are many IP pitfalls.

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Insufficient trademark search

Not using the mitigation programs for venture companies

Open their idea to the public before applying

CTO has spun out

Technical information has been taken by a partner

The patent scope has a very narrow

Not understand the importance of IP strategy

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IP support is important for startups.

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Typical examples of patent utilization

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- Improve corporate value
  capitalization, stock price, financing…
- Business contribution
  barriers to entry, business freedom, alliances, product appeal
- Deterrence
  reduction of exercise and litigation risk
- Monetization
  patent sale, licensing…

Only one patent cannot protect their business.

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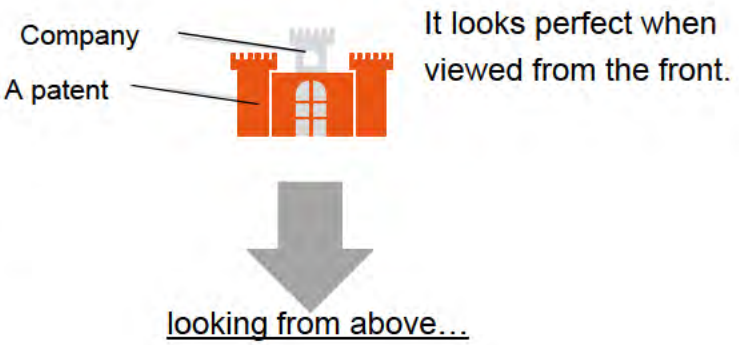
Startup

It would be enough to protect only the core technology.

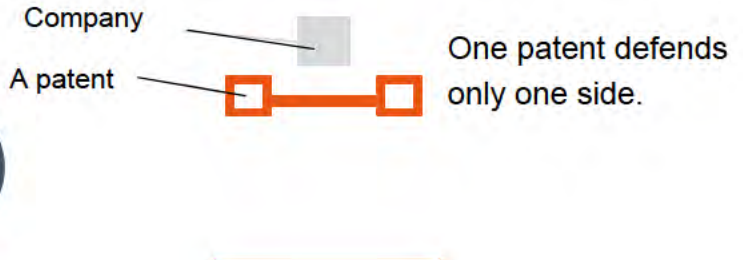
In fact…

A Company who has only one patent would lose their competitive advantage when the patent expires.



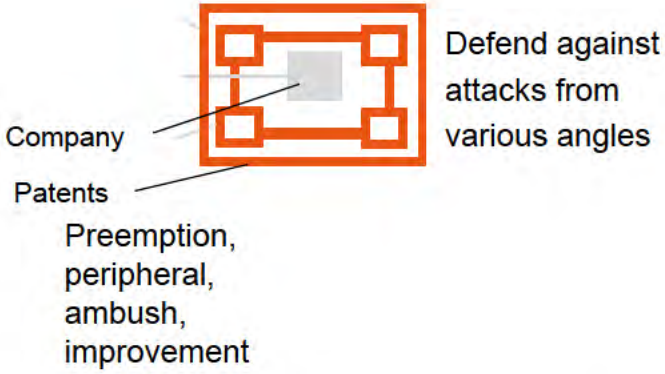
Startup

When and how many applications should be filed
Which technologies should we protect by patents?



solution

It is important to apply for and hold a patent strategically so that the combination has the highest value. The key is planning an intellectual property strategy that matches your business



Patent Portfolio

It is important to check where each patent is on the map

Trademarks

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In a fast-growing startup, naming can often change.

Company name	Investor check, IPO application check
Company logo	May change
Main service name	Investor check, IPO application check
Main service logo	May change
Icon	May change
Business genre	Genericized trademark?

Timing of applying for a patent

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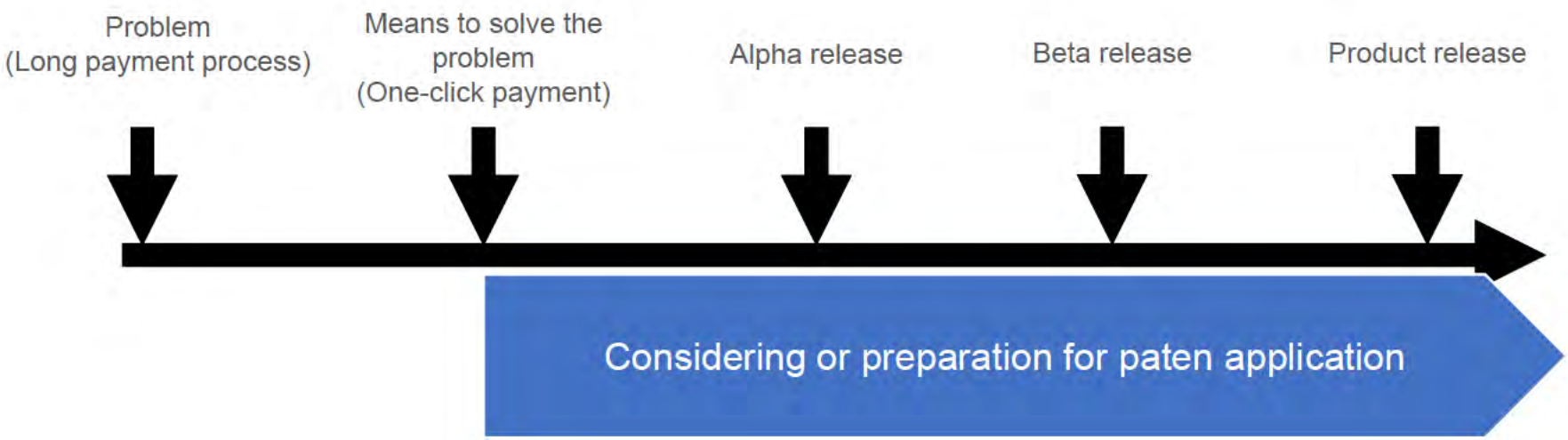
Preparation for patent application CAN begin even if product is not completed



Once the concept is decided, apply first

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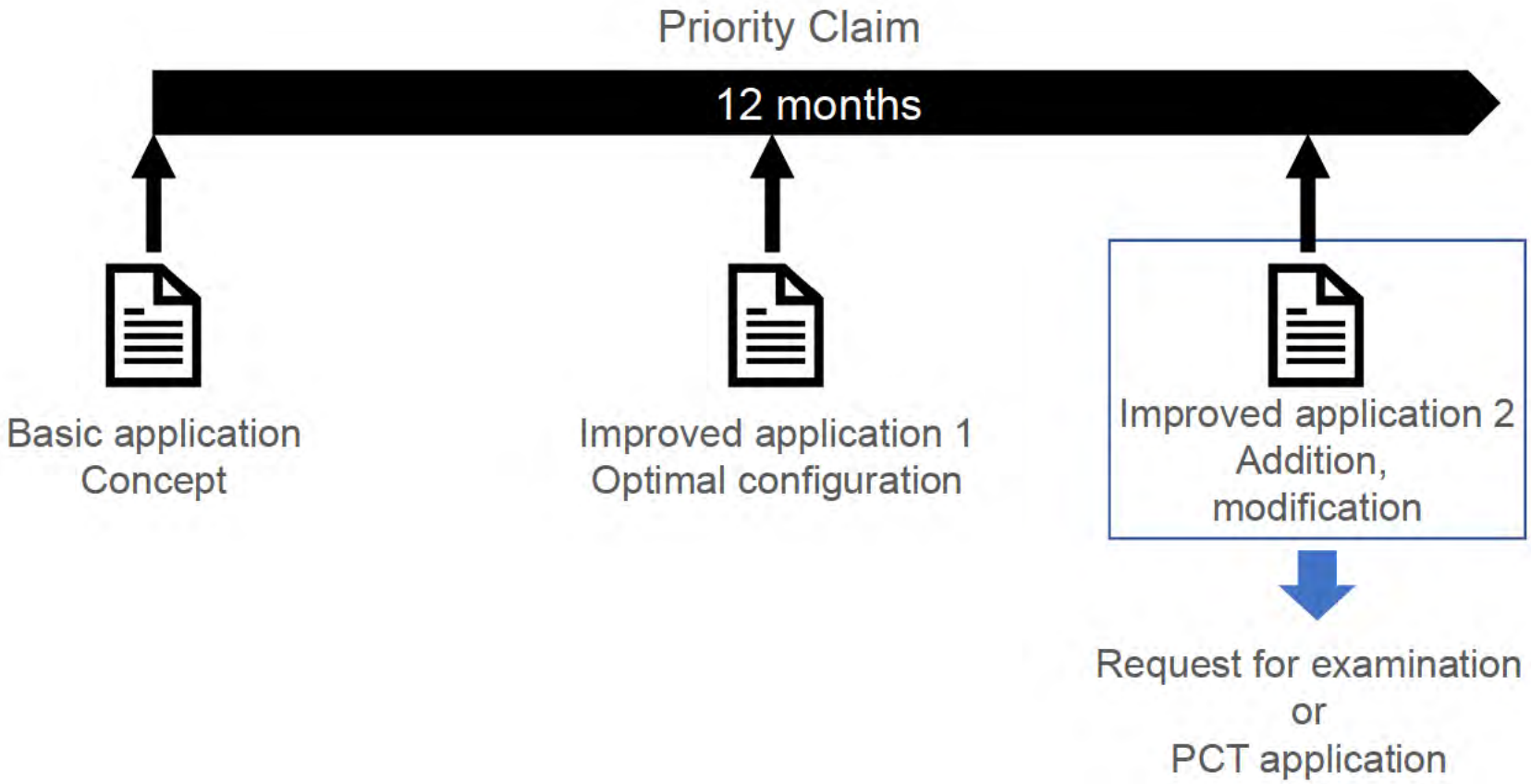
Use the priority system to apply for all results obtained from the PDCA cycle



Payment methods with Equity

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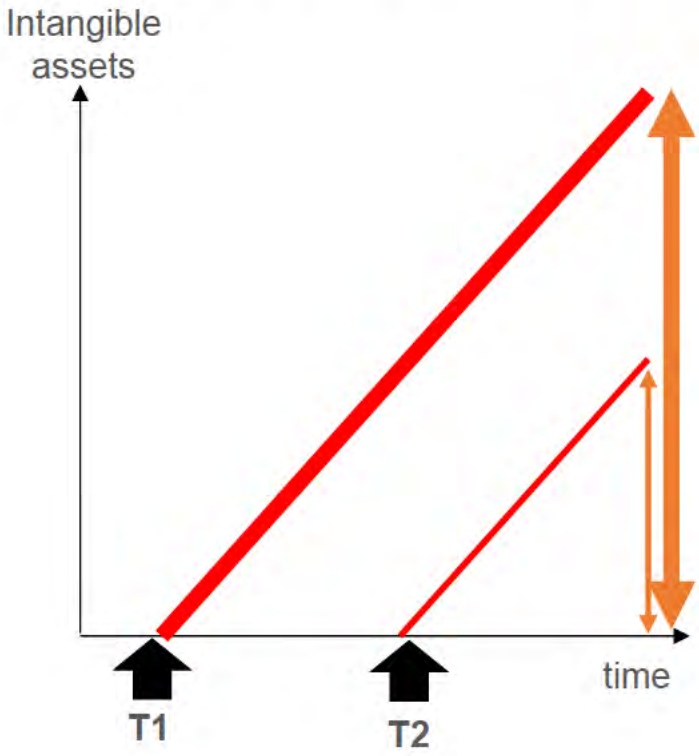
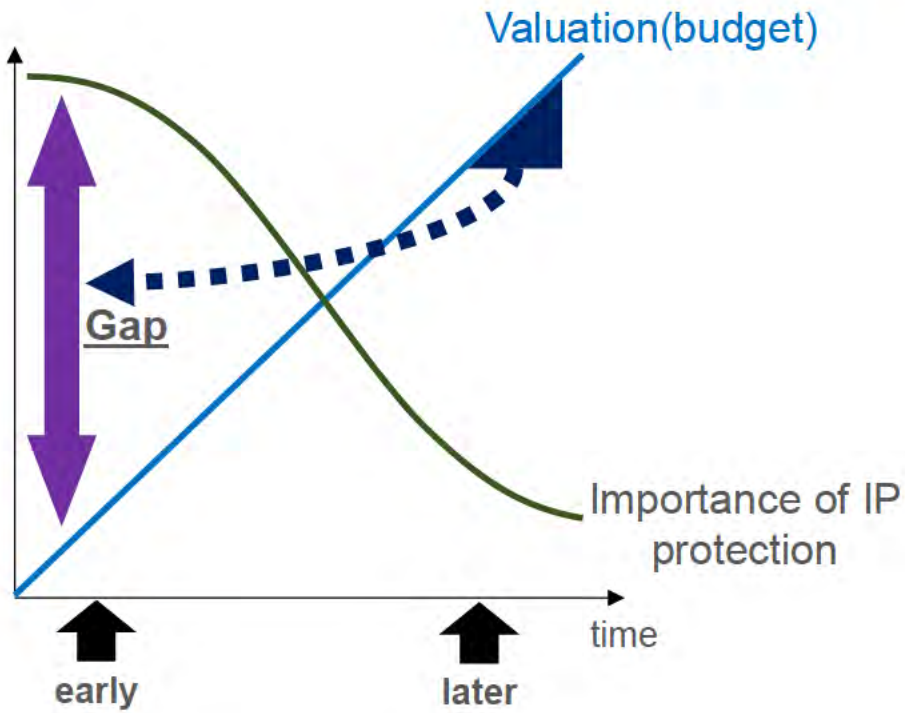
There is no budget when IP is important. However, it is too late to start IP management when there is a budget. Utilizing equity is a way to fill that gap

The faster the IP management, the better



Only startups can use equity



Multiple related applications

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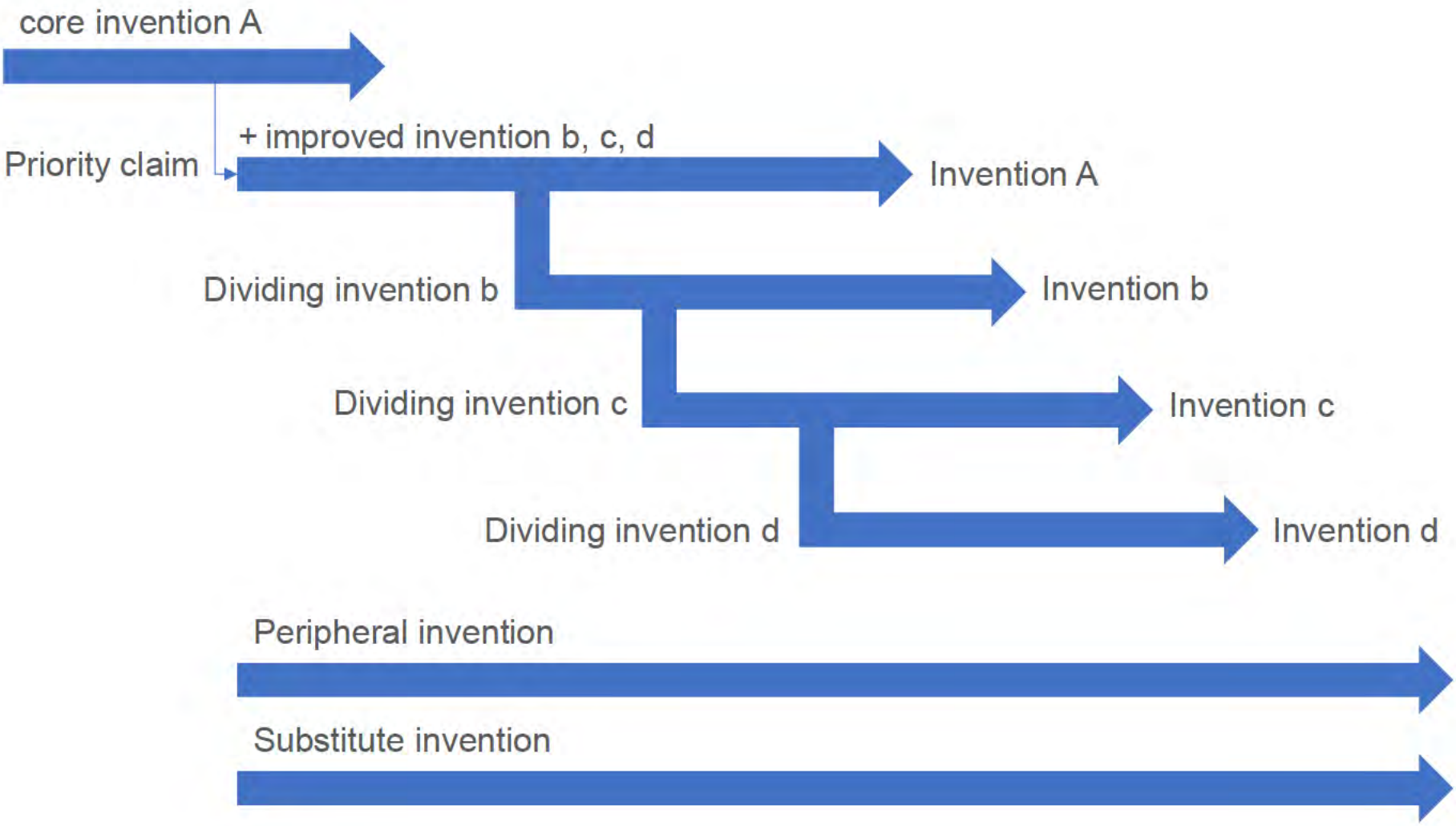
Strategic patent application to expand multiple branches from core technology



Fast / Super fast track for Ventures

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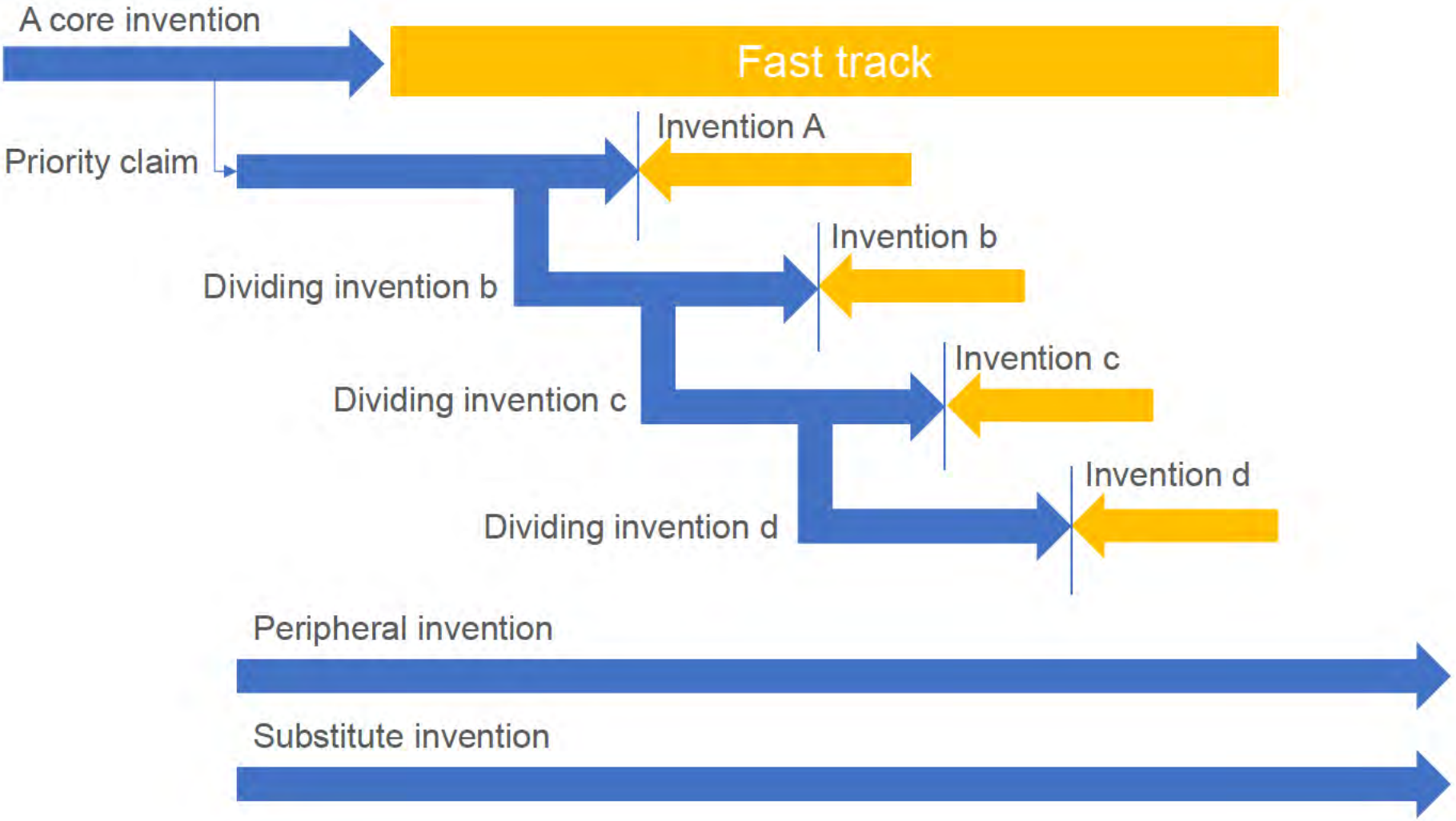
With Fast track examination, a patent portfolio can be built in a short period of time.



CIPO (Chief IP Officer)

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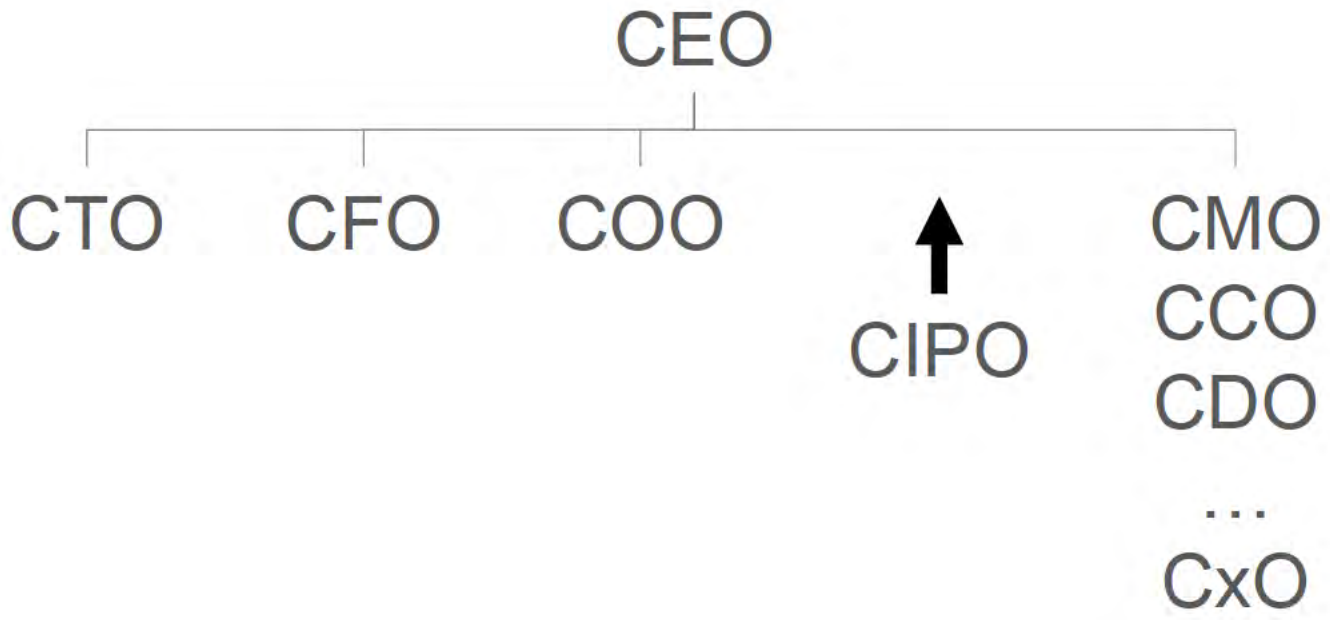
CIPO, who promote IP-based company management, will be strongly required.

The CIPO always thinks:

-What are the core properties that make the company win?
-How do we prevent the properties from being used by the other companies?
-Management and allocation of the properties.



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Thank you

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