Unlocking IP-backed Financing Series

Country Perspectives
Singapore's Journey

WIPO

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IP-backed
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Singapore's Journey

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Acknowledgments

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Acronyms

ACRA	Accounting and Corporate Regulatory Authority
AI	Artificial intelligence
AICPA	American Institute of Certified Public Accountants
ASA	American Society of Appraisers
ASEAN	Association of Southeast Asian Nations
CA	The Singapore Chartered Accountant
CEIV	Certificate in Entity and Intangible Valuations
CFE	Committee on the Future Economy
CVA	Chartered Valuer and Appraiser
DWB	Digital Wholesale Bank
EDB	Economic Development Board
EDBI	Economic Development Board Investments
EDG	Enterprise Development Grant
EFS-VDP	Enterprise Financing Scheme-Venture Debt Programme
ESG	Enterprise Singapore
FRS 38	Financial Reporting Standard 38 Intangible Assets
GII	Global Innovation Index
GN 4	Guidance Note 4
IA	Intangible asset(s)
IASB	International Accounting Standards Board
IDEAS	Intangible Disclosure Evaluation and Audit Scheme
IFRS	International Financial Reporting Standards
IP-PCP	Intellectual Property Professional-Conversion Programme
IPFS	Intellectual Property Financing Scheme
IPI	Innovation Partner for Impact
IPOS	Intellectual Property Office of Singapore
IPP	Intellectual property products
IPIII	Intellectual Property Insurance Initiative for Innovators
IPRs	Intellectual property rights
ISCA	Institute of Singapore Chartered Accountants
IVS	International Valuation Standards
IVSC	International Valuation Standards Council
LESI	Licensing Executive Society International
LIS	Loan Insurance Scheme
MAS	Monetary Authority of Singapore
MinLaw	Ministry of Law
MIPIM	Master of Intellectual Property and Innovation Management
MOF	Ministry of Finance
OCBC	Oversea-Chinese Banking Corporation
OECD	Organisation for Economic Co-operation and Development
PFIs	Participating financial institutions
POV	Panel of Valuers
PSPO	Professional Services Programme Office
RICS	Royal Institution of Chartered Surveyors
SAC	Singapore Accountancy Commission
SFRS	Singapore Financial Reporting Standards
SFwIP	Skills Framework for IP
SIPS 2030	Singapore Intellectual Property Strategy 2030
SUSS	Singapore University of Social Sciences
SSG	SkillsFuture Singapore
TRL	Technology readiness level
UOB	United Overseas Bank
VC	Venture capital
WDA	Writing Down Allowances
WIPO	World Intellectual Property Organization
WOG	Whole of Government
WSG	Workforce Singapore

Executive summary

Intangible assets (IA) are an emerging asset class that is increasingly representative of enterprise value across the world. A core component of IA is intellectual property (IP), such as patents, designs, trademarks and copyright. IA can also include know-how, data and branding, although its full scope is still evolving. The rising importance of IA/IP has been clearly observed in Singapore. For example, the intangible capital stock of Singapore companies has grown by an annual compounded rate of 30 percent (2013 to 2016),[1] while physical assets have stagnated.

As the value of IA/IP increases, Singapore recognizes the need for enterprises to proactively protect, manage and commercialize IA/IP to derive maximum benefit for enterprises and the overall economy. As such, Singapore launched the IP Hub Master Plan in 2013, which envisioned the growth of Singapore into a hub for IP transactions and management. The IP Hub Master Plan was subsequently updated in 2017 to recognize the value of IP as part of a broader national economic strategy, and the increasing importance of IP commercialization and financing.

Singapore is well positioned to drive adoption of IA/IP financing for enterprises given the robust IP ecosystem it has developed over the years. There are three key areas: (i) maintaining a robust legal and regulatory infrastructure to enable enterprises to protect, manage and commercialize IP; (ii) growing the pool of innovative enterprises; and (iii) having a comprehensive network of IP service providers, and strong public–private partnerships.

As a result, IA-/IP-rich companies in Singapore can access financing using their IA/IP through three key channels, namely (i) equity financing, (ii) debt financing and (iii) government grants. In the area of debt financing, Singapore piloted the IP Financing Scheme (IPFS) initiative. Under the IPFS, enterprises were able to access financing by pledging their IP as collateral to the lending bank. Beyond the IPFS, the Enterprise Financing Scheme-Venture Debt Programme (EFS-VDP) launched by Enterprise Singapore (ESG) is another program for innovative enterprises to access financing through their intangible assets.

The IPFS provided invaluable insights into IA/IP financing. It has revealed four key challenges to address for IA/IP financing to become more prevalent:

- **Limited acceptance of IA/IP as collateral.** Many lenders are relatively unfamiliar with IA/IP as a collateral, and the lack of internal IA/IP valuation capabilities makes it harder to offer this type of financing.
- **Information asymmetry.** Information on internally generated IA/IP is often undisclosed during the company's financial reporting process. This underreporting of IA/IP hinders the proper assessment of their value contribution, preventing efficient allocation of capital in the market.
- **Lack of secondary markets for IA/IP liquidation.** There needs to be clear processes and channels for the disposal of the IA/IP in the event of a default by the borrower.
- **Gap in IP management practice.** Building good IA/IP management capabilities and practices, including an inventory or portfolio listing of IA/IP, will enable enterprises to extract the most economic value from their assets.

Building on these past experiences, Singapore recently launched the Singapore IP Strategy 2030 (SIPS 2030) to set out plans for it to further develop as a global hub for IA/IP activities and transactions. Under SIPS 2030, relevant Government agencies will work closely with industry stakeholders in building a vibrant ecosystem for IA/IP financing. This will involve working on key enablers such as IA/IP valuation and disclosure.

This report gives an account of Singapore's IA/IP financing journey – the initiatives and the challenges faced, as well as the next steps on the journey to unlock IA/IP financing for innovative enterprises.

Singapore's Journey

Introduction

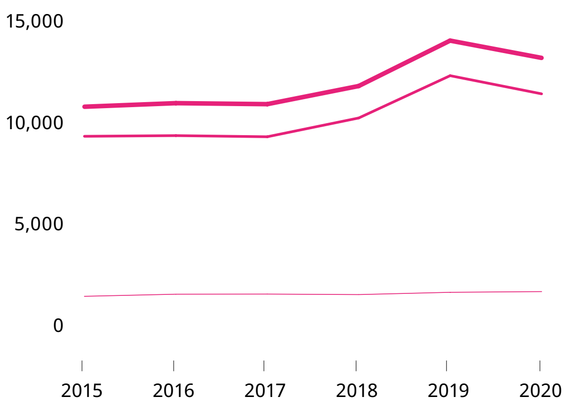
Intangible assets (IA), including intellectual property (IP), are increasingly critical for the growth of Singapore's enterprises and economy. The intangible capital stock of Singapore companies has grown by an annual compounded rate of 30 percent (2013 to 2016), while physical assets have stagnated. As a percentage of GDP, Singapore's IP products (IPP) capital stock grew by 11.8 percent annually over the decade from 2006 to 2016.[2]

The increasing growth in IA value of Singapore's companies is in line with global trends. In 2020, it was estimated that 90 percent of Standard & Poor's (S&P) 500 companies' value resided in their IA, compared to only 17 percent in 1975.[3] An internal Intellectual Property Office of Singapore (IPOS) study found that, at the end of 2017, companies in Singapore had SGD 235 billion of IA and SGD 80 billion of goodwill on their balance sheets.

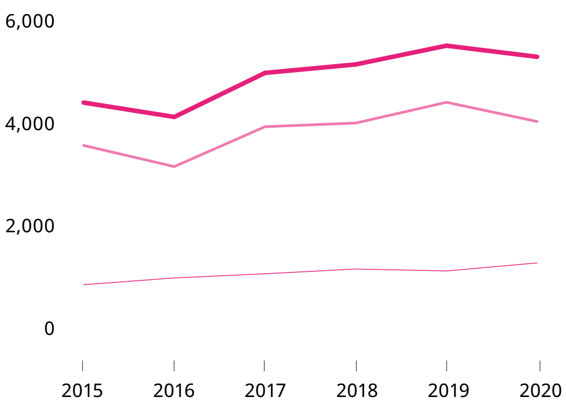
Due to the robust infrastructure in place, leading IA-rich companies have selected Singapore as a choice location to develop and commercialize their IA. Eighty of the world's top 100 technology companies and around 36,000 startup companies have set up operations in Singapore.[4]

At the same time, IP filings have been increasing in Singapore over the years. From 2015 to 2020, patent applications increased from 10,814 to 13,265, representing a compound annual growth rate (CAGR) of 4.2 percent, and trademark applications increased from 44,203 to 53,197, representing a CAGR of 3.8 percent.[5]

Patents filed



Trademarks (numbers are in class counts)



By Singapore-based applicants
By overseas-based applicants
Total
Source: Intellectual Property Office of Singapore (IPOS).

Singapore recognizes that enterprises' IP journey cannot simply stop at IP registration and protection. An enterprise needs to have an IP strategy that is aligned to its business strategy to support IP commercialization and business growth. IP financing is a subset of this process and can enable innovative companies to commercialize and grow. Singapore has articulated this principle in the form of developing the country as a hub for IP transactions and management in the IP Hub Master Plan 2013. This is in recognition that IP rights are increasingly important, not just as legal rights, but as strategic business assets. As such, enterprises need to proactively manage and commercialize their IP, to derive value and spur business growth.

IP management and commercialization continue to be important focus areas at the broader national level through the recommendations from the Committee on the Future Economy (CFE) that was convened in 2016. The Committee was led by Mr. Heng Swee Keat (then Minister for Finance) and Mr. S. Iswaran (then Minister for Trade and Industry) and comprised senior public- and private-sector leaders. The Committee sought to develop Singapore's economic strategies for the next decade. The CFE report clearly identified innovation and IP as critical drivers of Singapore's future economy. Singapore recognizes that a vibrant IP commercialization and transaction ecosystem is vital for enterprise and economic growth.

In line with the CFE recommendations, Singapore updated the IP Hub Master Plan in 2017 to strengthen enterprise capabilities to innovate and scale up, through building greater capacity for IP commercialization. Among other recommendations, the update to the IP Hub Master Plan recommended that Singapore explores new financing models for IA/IP, and create a more effective marketplace to facilitate IA/IP commercialization and transactions.

In April 2021, the Singapore Government launched the Singapore IP Strategy 2030 (SIPS 2030) to set out plans for Singapore to further develop as a global hub for IA/IP activities and transactions. SIPS 2030 builds on the strong foundation that has been developed through initiatives set out in the IP Hub Master Plan 2013 and its update in 2017.

A key thrust of SIPS 2030 is to enable enterprises to make better use of IA/IP for growth. One approach is to equip enterprises for successful IA/IP commercialization, and financing is often a core aspect of this. To facilitate IA/IP financing, Singapore also aims to develop a credible and trusted IA/IP valuation system to support IA/IP transactions. Singapore plans to facilitate this through two key areas: (i) by establishing credible IA/IP valuation guidelines and practices, and (ii) by providing an IA/IP disclosure framework to encourage better IA/IP disclosures by enterprises.

The work in developing Singapore as a hub for IA/IP transactions, financing and valuation will be a whole of Government (WOG) effort. The success of these efforts will require close collaboration between the relevant Government agencies in the IP, finance and accountancy spaces, including IPOS, the Ministry of Finance (MOF), the Accounting and Corporate Regulatory Authority (ACRA), the Monetary Authority of Singapore (MAS) and the Singapore Accountancy Commission (SAC).[6]

In addition, the Government will work closely with the business community and its practitioners, as well as key international stakeholders such as the International Valuation Standards Council (IVSC) and World Intellectual Property Organization (WIPO). This public–private collaboration will be critical for effective progress in this space.

Intangible assets, including IP rights used to secure financing locally

The definition of IA can vary across organizations and standards in accounting. Here, IA encompass conventional IP (e.g., patents, designs, trademarks and copyright) as well as other forms of intangibles such as know-how, data and branding that innovative enterprises have gathered. This is a non-exhaustive definition, as IA evolve with developments in technology and business processes. Given the close association between the two, the term IA/IP will be used throughout this report.

In the context of enterprise financing, an enterprise's IA/IP are typically assessed holistically as a portfolio. In addition, it is often important to demonstrate how the enterprise's IA/IP contribute to its strategy, cash flow and future growth.

Beyond direct financing, Singapore has also granted tax concessions to enhance the environment for holding or developing IP. Under Section 19B of the Singapore Income Tax Act, a company can claim writing down allowances (WDA) on the capital expenditure incurred in the acquisition of qualifying intellectual property rights (IPRs) for use in its trade or business, which works like a tax depreciation of the acquisition cost over a period of 5, 10 or 15 years. For the purpose of Section 19B, the qualifying IPRs are patents, copyrights, trademarks, registered designs, geographical indications, layout designs of integrated circuits, trade secrets or information with commercial value, and plant varieties.

Local legal and regulatory framework

Singapore's legal system is trusted globally and has gained a reputation for transparency, efficiency and neutrality. In 2019, the World Economic Forum's Global Competitiveness Report ranked Singapore second in the world and first in Asia for its IP protection framework. Singapore also ranked top in the Global Innovation Index (GII) 2020 among the Asia-Pacific economies for the seventh consecutive year, and placed eighth in the global rankings.[7]

Singapore has also provided a robust IP legal framework and strong infrastructure for the registration, protection and commercialization of patents, copyrights, trademarks and other types of IP. IPOS makes a constant effort to ensure that Singapore's IP laws stay relevant in the evolving ecosystem through periodic reviews. A series of consultations were taken for Singapore's registered design review from 2014 to 2016, leading to the broadening of registered designs to include virtual designs. IPOS also embarked on a copyright review from 2016 to 2019 to support the creation and use of creative works in this digital age. A new copyright amendment bill is expected to take effect in 2021. IPOS has also initiated a new series of consultations in 2021 to introduce a new IP amendment bill. This rides on an earlier public consultation on proposed changes to simplify and streamline IP processes and improve user experience with digital initiatives in August 2020.

Singapore has also taken active steps to strengthen its IP disputes regime, leading to the creation of a specialized IP Court in 2002. This was supplemented by the IP Court Guide, which was released in 2013 to set out special case management procedures for IP cases. Today, Singapore's High Court has a list of specialized and experienced IP judges to hear IP cases. This facilitates further deepening of expertise and improves the quality of decision-making.

In May 2010, the WIPO Arbitration and Mediation Center Singapore Office was established – the first WIPO Arbitration and Mediation Center office outside of Geneva. The cooperation between Singapore and WIPO enables enterprises to resolve IP disputes through alternative dispute resolution mechanisms without resorting to litigation, thereby potentially reducing the time and expense involved. The ability of enterprises to resolve their IP disputes effectively and efficiently creates a more conducive environment for IP activities to take place in Singapore.

Laws and regulations that impact IP-backed financing

The recognition of a financial asset within a company's reporting provides important information to potential financiers to understand the value of IA/IP. Singapore is well connected with international norms for accounting and financial reporting standards. The country is one of the earliest supporters of the International Financial Reporting Standards (IFRS) within the Association of South East Asian Nations (ASEAN). Singapore has assimilated the key requirements of IFRS into the Singapore Financial Reporting Standards (SFRS).[8] Since 2003, all companies incorporated and/or based in Singapore are required to prepare and present financial statements in accordance with SFRS. After approval by the securities regulator, listed companies may also adopt IFRS for financial reporting purposes. On that basis, Singapore's financial reporting requirements follow international comprehensibility and acceptance.

Recognizing an intangible asset

To recognize an intangible asset, an entity must demonstrate all of the following:

(a) the technical feasibility of completing the intangible asset so that it will be available for use or sale
(b) its intention to complete the intangible asset and use or sell it
(c) its ability to use or sell the intangible asset
(d) how the intangible asset will generate probable future economic benefits. Among other things, the entity can demonstrate the existence of a market for the output of the intangible asset or the intangible asset itself or, if it is to be used internally, the usefulness of the intangible asset
(e) the availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset
(f) its ability to measure reliably the expenditure attributable to the intangible asset during its development.

Source: FRS 38, Paragraph 57

Financial Reporting Standard 38 Intangible Assets (FRS 38) has defined an IA as "an identifiable non-monetary asset without physical substance." To meet the definition of an IA, requirements include identifiability, control over a resource and existence of future economic benefits. Examples of IA include assets that relate to or contain IP, such as computer software, IP licenses, trademarks, patents, films and copyrights. It can also include assets not related to IP, such as import quotas or an airline route.

Although IA is broadly defined, FRS 38 sets out the specific criteria which must be satisfied for an IA to be recognized, apart from goodwill. The asset must be separable – that is, capable of being separated or divided from its owner through sale, license or other mechanism. Alternatively, the asset may arise from contractual or other legal rights. For most enterprises IA is recognized as an expense rather than an asset. To be recognized as an asset, FRS 38 requires probable future economic benefits to flow from it, and its cost to be reliably traced and measured.

For IA to be recognized as an asset, meeting the specific criteria in accounting standards can present significant challenges. Particularly for early-stage IA, the probability of generating future economic benefits is too remote for accounting recognition. Moreover, determining the cost of developing the assets in a reliable manner may not be straightforward. FRS 38 requires that the associated costs be distinguishable from those to operate and maintain the business as a whole.

Local institutions engaged in IP-backed financing

In Singapore, several public and private stakeholders are involved in IP-backed financing. In order to build a conducive ecosystem for IP-backed financing, two broad areas need to be addressed.

First, close public–private partnerships are required to encourage IP-backed financing, to raise awareness and to build the necessary enablers for IP-backed financing to be effective.

Second, efforts made cannot solely focus on IP-backed financing. There must be a more holistic ecosystem strategy and approach that addresses the needs of (i) different stakeholders and (ii) different steps of the IP financing journey. For instance, enterprises need support to first build up a strong portfolio of IA/IP and to develop IP management capabilities before IP financing can take place. In parallel, professional service providers need to build the requisite IA/IP evaluation and valuation expertise.

The following subsection provides a non-exhaustive overview of the public and private stakeholders involved in building a vibrant ecosystem for IP financing.

Government institutions

Various ministries and agencies work together closely to support the financing needs of innovative enterprises. There are three main agencies involved in supporting the development and financing of innovative enterprises, described below.

Intellectual Property Office of Singapore (IPOS)

IPOS is the national authority that registers and is responsible for the administration of IP rights in Singapore. IPOS is a statutory board under the Ministry of Law (MinLaw). It helps businesses use IA/IP to grow, and is committed to building Singapore into an international IA/IP hub. Notably, IPOS piloted the IPFS in 2014 and continues to drive efforts (together with relevant agencies such as the Singapore Accountancy Commission (SAC) and the Accounting and Corporate Regulatory Authority (ACRA) in IA/IP valuation and disclosure as part of SIPS 2030.

Singapore Economic Development Board (EDB)

EDB is a government agency under the Ministry of Trade and Industry of the Singapore Government. EDB is responsible for strategies that enhance Singapore's position as a global center for business, innovation and talent. A strong IP regime is an important aspect of Singapore's attractiveness to international companies. EDB undertakes investment promotion and industry development in the manufacturing and internationally tradable services sectors. EDB also works closely with other government agencies to constantly improve Singapore's pro-business environment and talent pipeline. Additionally, EDB invests in innovative and high-growth enterprises through its corporate investment arm, Economic Development Board Investments (EDBI).

Enterprise Singapore (ESG)

ESG is a government agency under the Ministry of Trade and Industry of the Singapore Government with the purpose of championing enterprise development. Working with companies of various sizes, the organization helps companies build capabilities, innovate and internationalize. Additionally, it promotes the growth of Singapore as a hub for trading and startups. As such, many of ESG's initiatives have supported the growth of IA-/IP-rich companies.

To enable innovation, ESG has introduced financing schemes such as EFS-VDP and the Enterprise Development Grant (EDG). ESG also has an investment arm, SEEDS Capital, to directly inject capital into Singapore-based startups. Beyond financing, ESG supports the innovation ecosystem and provides advisory services through its subsidiary, Innovation Partner for Impact (IPI).

Financial institutions

Conventional financial institutions

Banks are the key financial institutions supporting debt financing for enterprises in Singapore. As the mainstream lenders for most businesses, banks will remain an important source of financing as business value is increasingly driven by IA/IP. Therefore, the ability of banks to assess and lend against IA/IP will be crucial to IP financing in the future economy.

Several financial institutions partnered with IPOS in the IPFS pilot program launched in April 2014 to increase the access to IP-backed financing for IP-rich (but physical asset-light) companies. Under this scheme, the Singapore Government co-shared the loan loss risk of the IP-backed loan with the participating financial institutions (PFIs) to encourage their acceptance of IP assets (namely patents, trademarks and copyright) as collateral. The PFIs included DBS Bank Ltd, Evia Capital Partners Pte Ltd, Oversea-Chinese Banking Corporation (OCBC) Ltd, Resona Merchant Bank Asia Limited and United Overseas Bank (UOB) Ltd.

Other financing channels – digital banks

Aside from the conventional financial institutions, Singapore has also opened its digital channels for capital raising in recent years. Besides the digital services that are currently available via traditional banks with an online presence, Singapore is also including non-banks in this industry. In December 2020, MAS announced that it would award digital full bank (DFB) licenses to the Grab-Singtel consortium and SEA Limited. On top of that, Singapore's central bank will also award digital wholesale bank (DWB) licenses to Ant Group and a consortium comprising Greenland Financial Holdings. These digital banks provide exciting new opportunities to explore the proposition of IP-backed financing beyond conventional lending.

Other participants in IP-backed financing

IA/IP management, strategy and consultancy

Under the IP Hub Master Plan 2013, the Professional Services Programme Office (PSPO) was set up jointly by MinLaw and EDB. PSPO looks to develop and promote the legal, IP and accounting sectors in Singapore.

A good mix of local and international IP service providers in Singapore helps to support IP marketplace activities, including IP financing. Currently, several firms (e.g., Allen & Gledhill; Ella Cheong; Marks & Clerk; Schweiger & Partners; Viering, Jentschura & Partner; Withersworldwide; and Yusarn Audrey) have established their presence in Singapore and offer a comprehensive suite of IP services, including IP portfolio management, strategy and consultancy, to meet the diverse needs of enterprises. Supplementing this, IPOS International, a wholly owned subsidiary of IPOS, also provides IA/IP strategy and management, patent search and analytics services to enterprises.

IP valuers and brokers

IP valuation is a critical enabler for IP-backed financing in assessing a reasonable and fair value for the assets. IPOS worked closely with a panel of appointed valuers under the IPFS pilot program. This panel included professional valuers such as (i) Baker McKenzie, Wong & Leow, (ii) Consor Intellectual Asset Management, (iii) Deloitte & Touche Financial Advisory Services, (iv) Duff & Phelps Singapore, (v) Ernst & Young Solutions, (vi) KPMG Services and (vii) PricewaterhouseCoopers Advisory Services. That said, there are other IA/IP valuers in the ecosystem to support enterprises in their IP valuation needs.

In addition, IP brokers or intermediaries are integral to any marketplace. They perform the crucial function of connecting IP rights holders with potential buyers and investors. IP brokers are particularly useful given the nature of IP, and because anonymity is often required for IP transactions to safeguard confidential corporate strategies.

In Singapore, there is a growing pool of professional service providers that facilitate transactions, such as EverEdge and Piece Future. Singapore will continue to grow the IP service providers pool to support a vibrant IP transactions and financing hub. As of 2021, there are 158 companies in brokerage and consultancy services of IP assets[9] and 210[10] patent agents registered in Singapore.

Use of IP in debt financing

The IPFS was a Singapore Government initiative launched in April 2014 to help Singapore-based IP-rich companies use IP as a collateral to obtain loans for business growth and expansion. This was the pilot initiative in encouraging financial institutions to accept IP in debt financing. Under this scheme, the Singapore Government shared the loan loss risk (80 percent) of the IP-backed loan with the PFIs to encourage their acceptance of IP assets as collateral. Initially, only patents could be used as collateral. However, this was later expanded in 2016 to include registered trademarks and copyrights to encourage the use of IP in the financing process.

IPFS application

The application process for the IPFS was as follows:

Step 1
- Ensure the institution meets the eligibility criteria.
- Approach any of the PFIs for a preliminary credit assessment.
- Complete and submit the application form for IP valuation to IPOS.
- Approach any of the IP valuers from the panel of valuers (POV) for an IP valuation. Applicants should subsequently obtain an IP valuation report from the appointed IP valuer.

Step 2
- Complete the requisite forms and submit to the PFIs, together with the valuation report and other supporting documents for the loan application, within four weeks from the date of the valuation report.

Step 3
- Upon successful application, sign the letter of offer and draw down the funds within six months from the date of the letter of offer.

Under this scheme, the PFIs could issue IP-backed loans up to an aggregate total of SGD 100 million. PFIs also had the flexibility to set the interest rates for the loan. There was no restriction imposed on the use of the loan by the companies. Enterprises could use the proceeds as working capital, to support research and development (R&D), to facilitate investment or for any other purposes. To qualify for the scheme, the entity requesting funds had to be incorporated or registered in Singapore. The rights serving as the collateral for loans had to be granted or registered, in the case of patents and trademarks, or capable of being exploited commercially on its own for copyrights.

The application process involved a preliminary credit assessment, a valuation of the collateral performed by a member of an expert panel of valuers appointed by IPOS and an application form.

Companies seeking financing under this scheme bore the cost of the IP valuation and other required administrative applications. As an incentive to encourage the use of IPFS, IPOS provided a valuation subsidy to successful applications. The valuation subsidy was capped at 50 percent of the IP valuation cost, or 2 percent of the value of the IP or SGD 25,000, whichever was lower.

The scheme was retired in 2018, after a total loan amount of SGD 12 million was disbursed from the PFIs to three different firms. While IPFS had allowed these companies from various sectors to successfully collateralize their IP assets[11] to obtain funding for business growth, the scheme ceased for three key reasons.

First, the high upfront valuation costs required to facilitate a PFI’s assessment of IA deterred a number of potential applicants. The estimated costs for valuation are provided in Table 1.

Table 1 Average valuation cost for IPFS applicants[12]

Pricing (SGD)	
Blended hourly rate	350–700
Quick assessment	5,000–15,000
Small (<50 person hours)	15,000–27,500
Medium (50–80 person hours)	20,000–50,000
Large (>80 person hours)	>32,000

Second, the PFIs lacked familiarity with IP as collateral with regard to conventional tangible assets (e.g., property and equipment), and how to structure such IP-backed loans. Third, the absence of secondary markets for IP assets in Singapore meant that the PFIs faced difficulties accepting IP collaterals that did not present clear avenues for disposal and recovery of value.

Government-backed guarantees and funds

Singapore has also launched several grants/schemes for companies to enhance their access to capital. One such example is the EFS-VDP introduced by ESG in October 2015 to finance the growth of innovative enterprises. This form of financing targets high-growth startup companies that do not have significant tangible assets to be used as collateral under conventional bank loans. The IA/IP of the enterprises form part of the due diligence process in the EFS-VDP. Enterprises may use the loan for several purposes, including to (i) grow and expand existing capacity, (ii) diversify into other product lines, (iii) augment working capital needs or (iv) undertake new projects.[13]

In 2021, the EFS-VDP was enhanced to support the growth of later-stage enterprises, and the supported maximum loan quantum was raised from SGD 5 million to SGD 8 million per applicant (for new applications initiated from April 1, 2021). The EFS-VDP provides PFIs with 50 percent risk-share for eligible loans, with the option of 70 percent risk-share for young companies. Lenders are allowed a maximum repayment period of 5 years.

Besides the EFS-VDP, there are several Government-backed investment entities to help innovative companies grow. One particular entity is SGInnovate, which seeks to help entrepreneurial scientists develop deep tech solutions. SGInnovate invests in promising deep tech startups and connects them to top talent in the ecosystem. It has invested over SGD 50 million into more than 80 portfolio companies (which have raised over SGD 700 million). Such deep tech companies typically have a substantive IA/IP portfolio, which secures their competitive edge. For instance, Structo (a digital dentistry company that provides bespoke 3D printing needs), Lucence Diagnostics (a cutting-edge cancer detection company) and Amai Proteins (a technology platform that specializes in bespoke proteins for the Food and Beverage industry) are examples of companies with a substantive IA/IP portfolio that SGInnovate has invested in.

Another Government-backed investment entity is SEEDS Capital, which helps to support the growth of promising Singapore-based startups by co-investing with independent investors. This allows tech startups to access funding investments of up to SGD 2 million for general technology and up to SGD 8 million for deep tech.

EDBI is the venture capital and private-equity arm of EDB, which invests in selected high-growth technology sectors globally. It has funded several innovative and IA-/IP-rich enterprises, with notable exits such as Coursera, Moderna and Biosensors International.

Use of IP for equity financing

Aside from government grants, Singapore also provides a robust environment for innovative enterprises seeking equity investments from angel investors or venture capital (VC) firms. This provides alternatives for enterprises with early-stage IP, as banks typically provide financing for more mature IP where the risks can be better managed.

Singapore is home to more than 150 VC funds, with venture funding having increased more than ten times over the past six years.[14] In recent years, several top-tier VC firms such as Insignia Ventures, Sequoia Capital, Vickers Venture Partners and Accel have been injecting funds into innovative and IA-/IP-rich firms in the Fintech, Biotech, Artificial Intelligence (AI), Urban Solutions and Sustainability, and Healthcare areas.

Investments in high-growth innovative companies by VC firms have remained steady despite COVID-19. Overall venture investments in Singapore have grown substantially over the past few years. For instance, a total of SGD 13.4 billion was funded across 437 deals in the first nine months of 2019 alone, representing an increase of 36 percent from the previous year.[15] The Fintech sector in Singapore attracted a total of SGD 400 million in the first half of 2020, whereas Analytics and AI attracted approximately SGD 150 million in the same time frame.[16]

Many innovative enterprises which have attracted investments from VCs are also likely to be IA-/IP-rich, and have shown promising progress in managing and protecting their IA/IP.

Such enterprises might not have sufficient tangible assets to secure the level of financing that they require, as the bulk of their value lies in the form of IA/IP. In Singapore, investors are becoming increasingly attracted toward IA-/IP-rich companies as more attain “unicorn” or “decacorn” status.

For example, Singapore-based IP-analytics platform PatSnap recently achieved unicorn status when it raised USD 300 million, backed by SoftBank Vision Fund and Tencent Holdings in 2021.[17] Its existing investors are located globally and include names such as Summit Partners, Qualgro and Vertex Ventures. Another example is the leading rewards and discovery platform ShopBack, which has extended its funding round to USD 75 million with investment led by Temasek in 2020. ShopBack is also backed by its existing investors such as Rakuten, EDBI, EV Growth, Cornerstone Ventures and 33 Capital.[18]

Other promising IA-/IP-rich technology startups that have recently received sizeable funding from VCs include Ninja Van, Carousell, StashAway, Zilingo and Eureka AI.

The role of IP insurance

Singapore’s financiers have expressed that the high risk and uncertainty associated with the collateralization of IA/IP are obstacles when considering the use of IA/IP in financing. One of the ways to manage this risk is through the use of IA/IP insurance (or IA/IP collateral protection insurance), where an insurance company underwrites an insurance policy to offer protection in the case of a loan default. Collateral protection insurance can transfer the risk of loan defaults to the insurer, thereby making loan portfolio expenses more predictable. At present, Singapore is exploring collaborations with commercial stakeholders on IA/IP collateral protection insurance.

Beyond the IPFS, the Loan Insurance Scheme (LIS) launched by ESG was the closest in providing security against loan defaults for financiers. Under the LIS, enterprises could secure short-term trade financing loans from PFIs, and commercial insurers engaged by the enterprises would share the loan default with the PFIs in the case of insolvency. A portion of the insurance premium paid by the enterprises was supported by the Singapore Government. In 2020, this support from the Government increased from 50 percent to 80 percent. While the LIS was not directed solely at IA/IP financing, IA-/IP-rich companies could still use the scheme for their financing needs.[19] In the longer term, Singapore aims to encourage commercial entities to provide such IA/IP insurance for PFIs to support the ecosystem. This would have to be carefully balanced to ensure that the overall cost to enterprises for securing IA/IP financing would still be reasonable.

Another form of risk that could be mitigated by IP insurance pertains to IP infringement cases where there is a need to pursue or defend an alleged infringement. This protects the value of the underlying IA/IP, which could have been collateralized for IP-backed financing. IPOS, in collaboration with Lloyd’s Asia and Antares Underwriting Asia, launched the Intellectual Property Insurance Initiative for Innovators (IPIII) in 2019 to cover such needs. This initiative aims to provide enterprises with insurance coverage for legal costs in relation to IP infringement.

Under IPIII, enterprises with a Singapore patent, trademark or registered design can take up an insurance policy with substantial cost savings that pays the legal costs of enforcing IP rights or defending against allegations of IP infringement.[20] The insurance policy will cover the legal costs of pursuing and defending actions, as well as the legal costs of an opponent in an unsuccessful case. Besides the IPIII, other commercial entities in Singapore such as Tokio Marine Kiln and Delta Insurance have also emerged to offer insurance against liabilities from IP infringement. Nevertheless, this is still a nascent space as enterprises seek a balance between the risk undertaken and the cost involved for the IP insurance.

The role of IP valuation

Consistent valuation framework overview

In recent years, the purpose of IP valuation in Singapore has expanded from financial reporting to strategic planning, alliance, IP financing, transfer pricing, licensing, and so on. As of 2017, an internal IPOS study estimated that between 495 and 695 IA/IP valuations are conducted annually by valuers with a Singapore base, generating a total fee income of SGD 11.7 million to SGD 16.5 million.

Given Singapore's rising importance and role as a global hub, it works closely with international partners on its valuation practices to ensure interoperability. IVSC, the independent global standard-setter for the valuation profession, is one such partner. By promoting cooperation among its members, IVSC develops high-quality valuation standards and encourages the adoption of the standards throughout the world. In 1985, IVSC issued the International Valuation Standards (IVS), which serves as the key guide for valuation professionals and underpins consistency, transparency and confidence in valuations globally. This standard is also widely applied by professionals involved in the IA/IP valuation process. Valuation practices in Singapore generally follow the IVS. The latest IVS was published in July 2021 and will become effective from January 31, 2022. The valuation of IA is treated in IVS 210.

IA has been valued by companies for many years, but the adoption of IFRS around the world has greatly increased the need for consistency and transparency. To facilitate that, IVSC published an updated Guidance Note 4 (GN 4) in 2010 for the valuation of IA. GN 4 identifies the main techniques recognized for the valuation of IA such as brands, IP and customer relationships, and provides instructions on how these should be applied. Following a business combination, IFRS requires the purchase price allocation to be performed with regard to the tangible assets and IA based on fair values. However, based on studies of listed companies, it was found that the level of disclosure and quality of information provided on the value of IA was often poor. Therefore, IVSC recognizes that comprehensive and authoritative guidance is needed in valuing intangibles to benefit not only enterprises but also investors and others who rely on financial statements to make strategic investment decisions.[21]

Development of international IA/IP valuation techniques and frameworks

The practice of IA/IP valuation could differ across jurisdictions, and some professional bodies are looking to come up with guidance which expands on IVS 210. For example, the guidance note issued by the Royal Institution of Chartered Surveyors (RICS) elaborates on the specific aspects of different subgroups of IP assets, including brand-related IP, technology-related IP, artistic-related IP and data-related IP. The IP valuation committee within the Licensing Executive Society International (LESI) also aims to present and distribute recommended IP valuation standards by working with WIPO and other industry and NGO partners.

At the same time, certification programs are developed broadly to help professionals comply with these valuation standards when conducting valuation practices. Established through the joint efforts of the American Society of Appraisers (ASA), the American Institute of Certified Public Accountants (AICPA) and RICS, the Certificate in Entity and Intangible Valuations (CEIV) credential is for professionals performing fair value measurements of entities and IA for financial reporting purposes.

Nevertheless, given its cross-border nature, IA/IP valuation guidelines will need to be constantly adapted to evolving international practices and norms. For IA/IP valuation guidelines to be relevant, it would have to be interoperable across jurisdictions. Singapore seeks to facilitate global mindshare in interoperable IA/IP practices within and across the economies by developing IA/IP valuation guidelines that are widely recognized and adopted. To this end, Singapore is spearheading work in this area through the formation of an international IA/IP valuation panel.

Disclosure of IA/IP

Singapore has made efforts to enhance transparency and certainty in IA/IP transactions, by encouraging listed companies (and companies looking to list) on the Singapore Exchange (SGX) to disclose and communicate their IA/IP. The intention is to provide investors with better insights into the company's IA/IP portfolio, and how this contributes to the competitive edge and business growth of the company. SGX and IPOS partnered to launch the Intangible Disclosure Evaluation and Audit Scheme (IDEAS) program for SGX-listed companies and companies preparing for a listing in early 2020. IDEAS provided companies with financial support for their IA/IP evaluation and audit process, which helped them identify important IA/IP (such as their business growth drivers), decide on the disclosure of such IA/IP information and communicate the value of their IA/IP to the capital market.

One beneficiary was Hyphens Pharma International Limited, which announced the current state and value creation of its IA/IP assets in its quarterly briefing to investors after participating in this program. With enhanced transparency and clarity on IA/IP disclosure, investors can gain a better understanding of and build greater trust in IA/IP. Ultimately, this will translate into IA-/IP-rich businesses having better access to IA/IP funding.

Secondary markets for IP

Secondary markets for the resale of IA/IP are important to facilitate the transaction of IA/IP in the ecosystem. Such markets also provide channels for financiers to dispose their IA/IP collaterals, creating liquidity and making IA/IP more attractive in this regard.

Singapore has made some headway in this direction through the Innovation Marketplace by Innovation Partner for Impact (IPI) and A*STAR Collaborative Commerce Marketplace (ACCM). Innovation Marketplace by IPI is a platform which provides technology opportunities, expertise and resources at various technology readiness levels (TRLs) across international locations. The A*STAR platform, with over 1,000 companies on board, serves as a marketplace platform which focuses on technologically driven business-to-business (B2B) solutions that are commercially ready. Both platforms enable companies and technology providers to collaborate and find business solutions together, with IA/IP as possible underlying enablers.

However, such marketplace platforms do not address all challenges for financiers. The value of IA/IP can be eroded in the case of forced liquidation, which makes disposal challenging. One of the reasons for this value erosion is that IA/IP are often an integral part of the business, and it can be very difficult to separate them from the business itself (e.g., brand). Additionally, the IA/IP may require other complementary resources to function, such as technical know-how and employees. If the assets can only be efficiently exploited by the owning firm, they will be less attractive in a secondary market. This interconnectedness makes these assets hard to transact, and ultimately serves as an obstacle for financiers trying to recover investment in the case of distress.

The degree of risk can therefore depend on how separable the IA/IP are from the business. For example, patents used in a complex and niche product may require the IP owner to transfer other technologies or know-how before they can be used by a third party. A trademark portfolio that protects a sub-brand for a company may be more easily sold to another firm. The more mature the IA/IP, the more assurance financiers have in predicting the ability of the asset to generate future cash flow. IA/IP holders would have to take such factors into consideration when managing what might be valuable in their IA/IP portfolio as collateral.

In addition, the marketplace platforms cannot exist in silos. The supply and demand of innovative technological solutions are cross-border in nature. An enterprise seeking technological solutions locally might be able to do so overseas. This also applies to the innovator providing its offering. For this reason, there is a need for greater international collaboration to enable a more robust and vibrant market. This is reflected in the extensive international partners network that IPI and ACCM have established over a period of years. It is desirable to continue building on this network and expanding it further as enterprises become increasingly receptive to the value of IA/IP.

Addressing workforce and educational needs

As the ecosystem for IA/IP evolves, the demand for more skilled talent in the ecosystem will grow. Providing a steady talent pipeline in these peripheral areas is key to enabling and supporting the IP financing ecosystem. This will create more job opportunities along the entire IP value chain. While not exhaustive, some of these enabling areas include:

- IP protection and dispute resolution – patent agents and IP lawyers
- IP strategy and transaction – IP strategists, IP managers and IP brokers
- IP valuation and disclosure – accountants and valuers
- IP due diligence – accountants and consultants
- IP financing – accountants, financial advisors and bankers.

To support the talent ecosystem for IP financing, Singapore is also looking to build a workforce with relevant IP skillsets to remain globally competitive in the future innovation economy. In partnership with SkillsFuture Singapore (SSG) and industry stakeholders, IPOS developed a national Skills Framework for IP (SFwIP) to help the workforce develop the necessary IP skillsets to remain competitive in the future innovation economy. The SFwIP provides information on the IA/IP sector, and charts the career pathways and skills required for vertical and lateral progression, and for advancement and growth in 11 key job roles (for example, IP management, IP commercialization and IP strategy).

To enhance the skills of the workforce within the marketplace, IPOS has established a dedicated center for IP education and training. Founded in 2003, IP Academy aims to help enterprises and industries become equipped with IA/IP knowledge and expertise. The training provided is multilingual and includes IP law, IA/IP management and value creation. Currently, there are more than 100 training programs conducted annually, with over 4,000 professionals trained.22

To support this increase in demand for IP skillsets, programs have been put in place to upskill working professionals to join the industry. The IP Professional Conversion Programme (IP-PCP) was jointly conducted by IPOS and Workforce Singapore (WSG) to help jobseekers reskill and acquire the necessary competencies to take on IP-related jobs. To train professionals in the management of IP and innovation, IPOS collaborated with Singapore University of Social Sciences (SUSS) to roll out Singapore's first Master of IP and Innovation Management (MIPIM), which integrates knowledge and skills from three disciplines – law, technology and business.

Singapore also ensures a steady supply of quality accountants that are internationally recognized. The Singapore Chartered Accountant (CA) qualification is the national qualification for accountants, developed by SAC, and administered by the Institute of Singapore Chartered Accountants (ISCA). The CA qualification is recognized internationally in other chartered accountant jurisdictions such as Australia, New Zealand, Ireland and the United Kingdom.

In addition, to enhance valuation capability, the Chartered Valuer and Appraiser (CVA) program offered in Singapore since 2016 was developed based on IVS, and is the first business valuation certification in Asia helping local valuers to align their valuation practices with international valuation standards. The CVA program comprises three levels and six modules, ranging from valuation of entities, specific assets and industries, to different stages of a company, etc. The valuation of IA is covered in the fourth module, "Business Valuation for Financial Reporting."

In this module, candidates will learn the conceptual framework, the valuation process under various approaches and practical insights and methodologies used in estimating the value of businesses and IA. Candidates will also learn how to perform purchase price allocation exercises across tangible assets and IA after the completion of business combinations, and they will be able to perform impairment testing of goodwill and IA in accordance with financial reporting standards. Specifically, for IA valuation, candidates will understand the nature of the IA, identification, and classification and valuation methodologies of IAs. The CVA helps to ensure that there is a high degree of international interoperability for valuation professionals in Singapore.

Currently there are 171 CVA holders across Asia, with the majority coming from Singapore. A steady supply of talent in accounting and valuation, with skillsets that are interoperable globally, enables Singapore to advance in the work of IA/IP disclosure and valuation, which is necessary to enable financing for enterprises.

Challenges of IP-backed financing in the country

The IPFS served as a pilot initiative which allowed Singapore to gain valuable insights about IP-backed financing and recalibrate its focus, moving forward. This segment lists the key challenges found in consultation with industry stakeholders and sets out the key areas Singapore is looking at to advance the ecosystem.

Challenge 1: Acceptance of IA/IP as collateral

IA/IP by nature often lack the attributes (e.g., liquidity, ease of valuation, stability of value) of an attractive collateral for financiers. For a lender, it is important to be able to measure the realizable value of the collateral in case of a loan default. However, in Singapore, there remains uncertainty among the banks over IP valuation techniques, the liquidity of IP assets and the disposal options in the event of default. This is further complicated by unfamiliarity with this asset class.

The current internal processes and regulations of banks are not optimized for considering IA/IP as a common collateral (e.g., for a simple credit risk assessment). This is exacerbated by the fact that the international regulatory framework for banks, specifically the Basel III requirements, does not recognize IA/IP as suitable collateral that can be used to justify banks holding a lower amount of capital to guard against risks.[23]

In addition, many banks do not have the deep internal IA/IP valuation capabilities and, as such, tend to rely on external professionals to measure the true value of such IA/IP. Aside from the additional cost, there remains a general lack of confidence in accepting external IA/IP valuations given the associated risks.

The complexity is multiplied when dealing with differing IP laws across jurisdictions as businesses expand globally. Moreover, each type of technology is unique and requires different expertise to be evaluated. Adding further to the complexity, the underlying technologies behind the IP (e.g., patents) are also fast-moving and could face potential obsolescence.

Challenge 2: Information asymmetry and financial reporting

IA/IP are critical to long-term value generation in many companies. Increasingly, IA/IP represent a large part of enterprise value. Despite this growing importance, information on internally generated IA/IP is often omitted during the company's financial reporting process. This underreporting of IA/IP hinders the proper assessment of their value contribution, which prevents efficient allocation of capital in the market.

Internationally, accounting standards-setters are aware of this issue and have started studying potential enhancements to IA/IP reporting. For example, the International Accounting Standards Board (IASB) commenced a public consultation in May 2021 on a new framework that allows companies to adequately share the information investors need to assess their long-term prospects, including their intangible resources.

The availability of information on IA/IP portfolios to financiers/investors is often incomplete and asymmetric. IA/IP owners are often better informed of the quality and value of their IA/IP than the financiers, and they might not appreciate the perspectives of the financiers assessing their IA/IP portfolio. The IA/IP owners might overvalue their own businesses or play down their ability to manage and generate returns from their IA/IP. Furthermore, such asset owners are reluctant to engage professional advisors due to concerns over valuation costs. This information asymmetry impedes the financing process.

Some of the reasons why enterprises might have trouble communicating their assets true value to the investors are as follows:

- Enterprises have other business priorities, and lack the bandwidth or resources to consider IP financing.
- Enterprises (or the relevant teams/people) may not be trained in accounting or finance, and may not fully understand the financials and key metrics of their IP.
- Enterprises may have unrealistic business plans and projections, and lack the ability to articulate the key assumptions to support their stance.
- Enterprises are typically less focused on the risks relating to the IA/IP, which is a major area of concern for financiers.
- Capital funders typically require a deck with the relevant business information, value drivers and key metrics, which owners might find difficult to produce quickly.
- Enterprises might not have sufficient resources to engage service providers who can assist them in this area.

Challenge 3: Lack of secondary markets for IA/IP liquidation

One key consideration in the acceptance of an asset as a collateral is its disposal. In order to encourage IA/IP as an acceptable collateral by the financiers, there needs to be clear processes and channels for the disposal of the IA/IP in the event of a default by the borrower. Tangible assets such as real estate, factories or inventories have a more widely accepted liquidation process compared to IA/IP. For this reason, there needs to be a robust and stable secondary market for the liquidation of IA/IP that is currently lacking in the ecosystem. Enterprises and financiers currently rely on foreign brokers and platforms. This challenge is further complicated by the fact that illiquid IA/IP may face volatility in value and certainty of disposal under distressed situations.

Challenge 4: Gaps in IP management practice

Mere ownership of IA/IP would not be sufficient to significantly add value to enterprises, nor would it enable enterprises to unlock the value of their IA/IP for financing. It is also necessary to manage, protect and extract value from such assets. This is essential to ensure that the value of an enterprise's IA/IP can grow in parallel with the business to achieve optimal returns. As such, enterprises must develop strong IA/IP management practices in keeping with their overall business plan.

Good IA/IP management practices include the need for a company to maintain an IA/IP inventory or portfolio listing, which includes details about the IA/IP such as:

- evidence of ownership (e.g., ensuring proper documentation for proof of ownership, agreements)
- restrictions on use (e.g., geographical restrictions due to the territorial nature of IP)
- potential infringement risks, appropriate IP protection and freedom to operate strategies, particularly when entering overseas markets
- competitive landscaping or analysis to strengthen the company's portfolio in anticipation of such competition
- assessments of potential for non-essential IA/IP to be out-licensed.

Having good IA/IP management practices in place enables enterprises to extract the most economic value from their IA/IP assets by balancing the potential benefits, risks and costs. In the area of IA/IP valuation and financing, it would also help enterprises to retain the value of their IA/IP portfolio.

Moving forward

Singapore recognizes the challenges of IP-backed financing. However, efforts to deal with these challenges cannot focus solely on IA/IP financing; a robust and holistic approach is necessary. SIPS 2030 sets out Singapore's blueprint for the next decade. Under SIPS 2030, IPOS will continue to work closely with other government agencies and stakeholders to enable better appreciation and assessments of IA/IP to help unlock IA/IP financing.

Opportunities for IA/IP transactions and marketplace

SIPS 2030 will increase IA/IP commercialization opportunities for businesses by facilitating transactions through platforms and connections. SIPS 2030 will explore programs or incentives for IP owners to offer their dormant IP for licensing or other commercial activities, including collaborations with existing IP marketplace platforms, and closer links with IA/IP brokerages and disposal service providers in key overseas markets. The increased liquidity of IA/IP assets will in turn increase their attractiveness to capital providers.

IA/IP valuation guidelines

Singapore also plans to develop a standardized set of IA/IP valuation guidelines (together with IVAS and other professional valuation organizations and industry partners) that can be recognized internationally. This set of guidelines could help stakeholders to better understand and build confidence in the value of IA/IP. This would in turn facilitate information transparency relating to the value of IA/IP in financial reporting, transfer pricing in secondary markets, and acceptance as collateral in the IP financing process for innovation-driven businesses.

Encouraging disclosure around IA/IP

Adequate disclosure of IA/IP within an enterprise will be critical for the wider community to appreciate and accept IA/IP as an asset class. It will also help to enhance transparency to facilitate the flow of IA/IP transactions. Moving forward, IPOS and ACRA will co-chair an inter-agency committee to co-develop an IA/IP disclosure framework with the industry to help companies better communicate the value of their IA/IP.

This report has outlined the main initiatives in Singapore’s journey toward enabling IP financing. The journey is ongoing, and Singapore will continue to work alongside international stakeholders and partners. This report is intended to share experiences, challenges faced and key areas of focus that will help the global community on their journey to developing IA/IP financing. Singapore welcomes and looks forward to working with international stakeholders and partners on this journey.

Singapore case studies

Case study 1:
Masai Barefoot Technologies (under Masai Group International)[24]

Company sector
Consumer Goods

Company location
Singapore

Type of IP rights used
Patents

Institutions or entities that enabled the transaction
Loan backed by DBS Bank, under IPFS

Photo: Getty Images / © warrengoldswain

Detailed description of the use of IP-based finance

The bulk of the loan, estimated to be 50 percent, was allocated for research and development activity. The company set aside around 25 percent of the funds into IP protection efforts as it faced IP infringements in the form of counterfeit products from unlicensed factories in China and Indonesia. Another 15 percent was channeled into building its trademarked branding, and the remaining 10 percent was set aside for IP registration fees.

Challenges identified

This was the first IP-backed loan approved in Singapore. As such, financial institutions were new to collateralizing this asset class. However, it was noted by experts that the IP involved in this particular transaction was “mature” and this would have provided parties with some comfort in forecasting future earnings.[25]

Case study 2:
A hobby games publisher specializing in developing and publishing tabletop games (including board games and miniature war games)

Company sector
Consumer Goods – leisure products

Company location
Singapore

Type of IP rights used
Patents, trademarks and copyrights

Institutions or entities that enabled the transaction
The company engaged a third-party independent valuer to perform an IP valuation to facilitate its application for IPFS. The company had sought additional financing for its expansion plans. While the application was not approved by the PFIs, the company managed to raise significant funds via Kickstarter (an online crowdfunding platform).

Photo: Getty Images / © gorodenkoff

Detailed description of the use of IP-based finance

IP-backed financing was unsuccessful, but the company managed to raise funds via other platforms, which showcased the potential for monetization from such IP.

Challenges identified

The application under IPFS did not go through due to the lack of confidence in the nature of the business. Although the company received the finances it required through another financing option, it highlighted the need for a more suitable investor to realize its full potential. This illustrated the challenge of information asymmetry, which is an ongoing concern in the IA/IP ecosystem, and there is an increasing demand for better disclosure practices across the spectrum. SIPS 2030 focuses on supporting IA/IP transactions with better IA/IP disclosures, and this will help to narrow the gap required for successful IA/IP financing.

Case study 3:
Full-spectrum leading-edge cryptographic technology and components design and development house

Company sector
Information Technology

Company location
Singapore

Type of IP rights used
Copyright

Institutions or entities that enabled the transaction
The company required funding for its IP under development and was able to obtain this funding from a strategic private investor, and subsequently from a sovereign wealth fund.

Photo: Getty Images / © scyther5

Detailed description of the use of IP-based finance

The company owned a portfolio of copyrights relating to cryptography. Some of the copyrights were already commercialized and monetized via government contracts. In addition to the existing copyrights, the company was also continuously researching and developing new cryptographic methods. These new methods were in the prototype/pre-commercialization stage and required funding to further develop the technology, build up the personnel supply and commercialize them.

The founding partners were uncertain how to obtain such funding and approached a financial advisor and valuer for help. A valuation was conducted to ascertain the value of the IP. Thereafter, the financial advisor went through a nine-month process to search for an interested party to fund such an IP development. Eventually, a strategic private investor entered into an agreement to acquire the company from the founders, and also to inject additional capital for the development and commercialization of the IP over the next two years.

This commercialization opportunity further expanded after two years, when the strategic private investor and a sovereign wealth fund set up a joint venture to inject their IP assets. Together with the company's IP assets, this led to greater access to global markets and a wider range of solutions. This joint venture is an example of an IP financing journey that led to an acquisition, and the consolidation of synergistic IP to generate a higher value than its standalone portfolio.

Challenges identified

The founding partners were uncertain of the value of their IP and how to obtain funding. The company also faced skepticism regarding the intangible nature of its IP and the economic benefits and value that could be derived from it. With the help of an independent valuer, the founders were able to identify the value of their IP and the commercial opportunities it could bring.

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