

GROWING GLOBALLY COMPETITIVE SINGAPORE-BASED INNOVATIVE TECH COMPANIES THROUGH ACCREDITATION

Overview

Small local technology companies face an uphill task in competing for projects with government and large enterprises. The challenges they face are difficulties in substantiating their product claims, lack of track record and gaining market visibility.

As Singapore moves towards the Digital Economy, one of Infocomm Media Development Authority (IMDA)'s priorities is to grow the technology industry by assisting the growth of promising Singapore-based Infocomm Media (ICM) companies. Accreditation@IMDA was launched in July 2014 to level the playing field of our promising Singapore-based techproduct companies to win projects, grow and compete in the global market.

For these companies, being accredited opens up more opportunities for their products and solutions to be showcased and commercialised. For buyers from the Government and large enterprises, the accreditation process provides an independent third party evaluation of the companies' claimed product core functionalities and ability to deliver. In the long run, Accreditation@IMDA aims to grow an innovative ICM ecosystem to drive economic growth, inspire the younger generation, and build more innovative products and technology companies that can scale globally.

To-date, through the accreditation evaluation process, Accreditation@IMDA has helped companies uncover and deal with more than 16,000 functional and security concerns to enable more than 80 companies to strengthen their products, as well as improve their internal software management and financial control processes. As of end October 2017, 23 companies had been accredited in areas such as video analytics, data analytics, robotics and energy management. More companies are currently undergoing the evaluation process.



Within three years, the Accreditation@IMDA programme has created a pipeline of over \$80m for its accredited companies, comprising over 600 government project opportunities from over 80 agencies. Of which, over 120 projects have been won to-date. It has also expanded its market access platforms into the enterprise sector, with the signing of Memorandum of Intents (MOIs) with leading enterprises¹ such as the 3 local banks, to give its accredited companies increased access to market opportunities locally and globally through the partners' worldwide footprint.

The accreditation evaluation process and increased business traction has also helped provide assurance and market visibility for investors. Fifteen accredited companies had secured \$68M in new growth capital during or after accreditation. Three accredited companies had successful exits through acquisitions (Deep Identity and Kai Square) and IPO (Anacle).

From 3 November 2017, the Accreditation@IMDA programme will be **re-branded as** "Accreditation@SG Digital (Accreditation@SGD)" to enable accredited companies to be better recognised overseas through a Singapore branding. To support the digital economy strategy and industry transformation, the programme will also expand its scope as follows:

- a. Expanding the pool of accredited companies beyond start-ups and young SMEs to include later stage SMEs and deep technology foreign companies. The programme has garnered growing interest from local and foreign companies. We will expand the programme to accredit later stage SMEs that are pivoting to leverage disruptive technologies to further their growth stories. We are also working with EDB to anchor best in class foreign high tech companies to complement our local enterprises and ecosystem. By congregating a critical mass of high growth tech product companies in Singapore, we expect more global investors and high tech talent to be attracted to our ecosystem, creating synergies and positive spinoff effects for our tech ecosystem.
- b. Curate a supply of tech companies in the 4 tech pillars of Al/Data analytics, Cybersecurity, IoT and immersive media to support and catalyse horizontal

¹ MOIs signed with: Lendlease and Surbana Jurong in Sep 2016; DBS, UOB and OCBC in May 2017.



digital transformation. Accreditation@SGD will work with various agencies and enterprises to supply relevant accredited companies to support the implementation of their Industry Transformation Maps. We will create opportunities to pitch and meaningfully engage key stakeholders through platforms such as CIO forums, focused workshops and events. To-date, we have enabled accredited companies to reach out to more than 250 key decision makers in more than 100 government agencies and enterprises. Strategic partnerships are also forged with leading enterprises in various verticals sectors to create recurring engagement and ideation platforms for accredited companies to support their digital transformation. To-date, we are already seeing our accredited companies supporting the transformation of our government agencies and enterprises, e.g. DC Frontiers' Al/data analytics solution has enabled more than 32 agencies to derive direct and indirect entity connections in their due diligence and investigative checks; Trakomatic's video analytics solution is supporting Cheer's first unmanned retail store.

c. Customised account management and ecosystem support to further accelerate growth. Accreditation@SGD provides customised and sustained assistance to help companies at the initial period where the growth challenges are the highest, i.e. where they have to build track records, raise funds and take steps to eventually break out of the attrition zone. We use a data-driven approach to identify potential red flags in companies' growth journey through tracking their pipeline, sales conversion, project delivery and cashflow, as well as feedback from potential buyers on their products. This approach provides us with information to work with the companies on making nimble pivots in areas that they need to address (e.g. product positioning, productisation to create new business opportunities, business model).

Beyond that, we are also working with various partners to further accredited companies' growth, including:

 i. Enterprise partners (e.g. DBS, UOB, OCBC, Great Eastern) for internationalisation;



- ii. SI partners / Go-to-Market partners (e.g. S&I, Crimson Logic, Deloitte) for access to large local/global projects;
- iii. VCs (e.g. Heliconia, GGVC, SPH Ventures, ST Engineering Ventures) for funding; and
- iv. Other financial/consulting / legal partners (e.g. SGX, Invoice Interchange, KPMG, Deloitte, Duan Morris) to support their growth / working capital, consultation and legal needs.
- d. Enabling commercialisation of R&D through accredited companies. We will also be working with GOVTech, I2R and IHLs to explore commercialisation of R&D through our portfolio of accredited companies to support their product development roadmap.

<u>Key Facts and Information of the Programme</u> *Overview Accreditation@SGD Programme*

The key objectives of the Accreditation@SGD are:

- a) To accredit promising and innovative Singapore-based technology product companies to establish credentials and facilitate access to government and large enterprise buyers in key verticals;
- b) To provide potential buyers assurance on the SGD-Accredited companies' product core functionalities and ability to deliver; and
- c) To build an innovative ICM ecosystem to drive economic growth, inspire the younger generation, and build more innovative products and technology companies that can scale overseas.

Expanding pool of supply

Increasing pipeline of promising young tech companies for Accreditation

Accreditation@SGD targets Singapore-based companies that develop and own innovative high-growth infocomm products in the enterprise market.



To support digital transformation of our Government agencies and enterprises, and meet expanded use cases and demands for newer products, Accreditation@SGD will work with EDB, SG Innovate and other industry accelerators to expand the pipeline and pool of promising high growth tech companies in the 4 tech pillars of artificial intelligence (AI), Internet of Things (IoT), cybersecurity and immersive media.

To support the evaluation of products in these new tech areas such as AI and Immersive Media, the Accreditation@SGD team will be acquiring new tools and developing new technical assurance frameworks for these new technological domains.

Companies are required to meet the following pre-qualification criteria for Accreditation@SGD:

- a) Singapore-based: Registered in Singapore with substantial level of value-added economic activities (e.g., R&D activities, test bedding, IP management and technical support) conducted in Singapore;
- b) Annual revenue less than S\$100 million at the group level; and
- c) Innovative enterprise product, with focus on solutions which can contribute to the Digital Economy (e.g. artificial intelligence, IoT, cognitive communications, future communications, robotics, cybersecurity and analytics):
 - i. Company must be the product owner (i.e. owns substantial IP / patent of the product and not a reseller / distributor);
 - ii. Product must demonstrate strong value proposition and competitive advantage to competitors / alternative substitutes in the market

IMDA will subsequently shortlist the companies for accreditation evaluation based on the following criteria:

- a) Management: The company has a clear business plan on how to grow the product and business; The company has a strong management team with established track records.
- b) Financials: The company has viable financing and/or a fund raising plan going forward to sustainably operate.



c) Customers: The company has clear identified customer segments and demonstrates demand; There is a sizeable addressable demand for the product to support the business plan.

Accreditation Evaluation

Through the accreditation process, IMDA aims to provide assurance to the Government and large enterprise buyers on the core functionalities of the product and the ability of the accredited companies to deliver, so as to remove the perceived procurement risks associated with the smaller companies.

The three-stage process for Accreditation@SGD is illustrated in Figure 1 below. The accreditation status would be valid for 18 months and companies would be reviewed by IMDA to ensure the validity of the status.

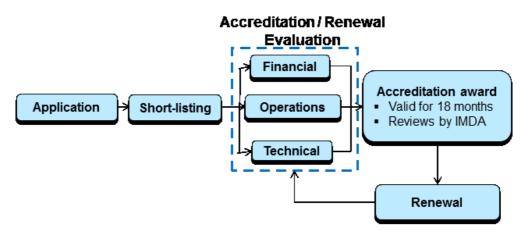


Figure 1. Accreditation@SGD process

To achieve accreditation, companies have to be evaluated on three aspects: Technical, Financial and Operations, as shown in Figure 2.



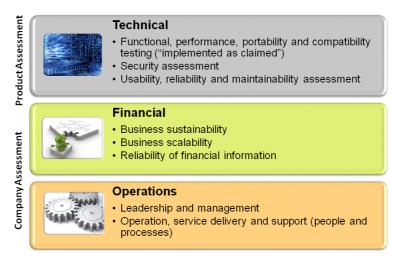


Figure 2: Key areas for accreditation evaluation.

Enhancing Government Procurement and Facilitating Company's Growth

Initiatives have been introduced to help companies generate pipeline projects, shorten accredited companies' sales cycle to potential Government / enterprise buyers and ease Government procurement from the accredited companies by:

- a) Providing opportunities to companies to win projects: Accreditation@SGD provides the platforms to create awareness and visibility on their products and capabilities. Accreditation@SGD organises focused workshops and discussion forums for accredited companies to meaningfully engage key government and enterprise stakeholders to pitch their value proposition, explore new use cases and develop proof of concept projects for their products. Accredited companies are also regularly featured at IMDA / industry events and in the media.
- b) Opening up new market opportunities: Beyond creating regular engagement platforms for accredited companies, IMDA works with selected agencies to co-create strategic projects with its accredited companies for new growth opportunities. One of the strategic projects is with the Singapore Land Authority (SLA), which seeks to address its operational concerns in inspecting state land and properties. Accreditation@SGD worked with AeroLion to identify the additional functionalities required to be incorporated into their product to address SLA's concerns. This resulted in AeroLion developing their advanced image analytics and machine learning module to enable auto-detection of building cracks, as well as illegal



dumping and water ponding on state land from its Unmanned Aircraft System video footages. With this new track record, AeroLion is currently engaging other agencies and enterprises for similar project opportunities.

c) Facilitating Government's procurement from accredited companies:

Together with MOF, Accreditation@SGD pioneered the approach of using Government lead demand to support our promising and innovative startups and SMEs to overcome the lack of track record and build trust in our local enterprises. Since November 2014, accredited companies have been considered first for innovative tech government projects and the procurement process for accredited products have been shortened.

Supporting Enterprises' Digital Transformation

Expansion of market access platforms into enterprise sector

In the first 2 years of the programme, Accreditation@SGD focused on providing assurance on innovative products for Government use cases, building the Government pipeline and helping companies establish credentials by leveraging on these Government demand. To sustainably grow our companies, we need to expand the focus to help our companies break into the enterprise sector.

As such, we started our first discussions with LendLease and Surbana Jurong in 2016 to explore how the Enterprise buyers could leverage Accreditation@SGD (on our independent assurance and curated pool of companies) to accelerate their innovation procurement while at the same time, helping accredited companies break into new market sectors and shortening their sales cycle. This culminated in an MOI with Lendlease and Surbana Jurong in Sep 2016. Since then, the three leading local banks (DBS, OCBC Bank and UOB) also came on board in May 2017, to provide accredited companies with increased access to innovative projects to build their track record in the banking sector. To-date, Accreditation@SGD is working with close to 20 large enterprises for regular targeted showcases and ideation workshops to key users to level up their technology knowledge and shorten adoption cycle of innovative technologies. Through these, we are working closely with the enterprises to drive innovation within their organisations/ sectors and identify



strategic national / sectoral projects that our accredited companies can participate in. These enterprise partners have a wide global footprint. The collaboration is also intended to enable our accredited companies to build exportable capabilities and leverage these large enterprises' worldwide presence to scale into the global markets, upon successful local implementation. Accreditation@SGD will continue to engage more enterprise partners with global footprint and create market access platforms in different strategic verticals, such as Healthcare and Cyber security.

Strategic account management and ecosystem support

Throughout the accreditation period, Accreditation@SGD also provides focused and sustained assistance throughout the growth stages of its accredited companies in areas such as technical advisory, financial modelling, facilitating fund raising, pitch coaching and business advisory.

Accreditation@SGD works with more than 24 VC partners to facilitate and channel private-sector investments into accredited companies to accelerate their growth and fuel internationalisation. The accreditation evaluation performed by Accreditation@SGD is often used by the VC partners to complement their due diligence. We proactively work with accredited companies to identify the right profile of VC partners to shorten the duration and increase the success of their fund raising. Often a strategic investor can also result in the opening of new markets, e.g. Tagit was able to penetrate Japan market through their Japanese investor (Japan SRA).

IMDA has also partnered various ecosystem players such as KPMG and Deloitte, to support the various needs of accredited companies such as tax advisory for overseas expansions.

Offering alternative financing solutions for capital expansion

To enable accredited companies to leverage capital markets for expansion, Accreditation@SGD and SGX signed an MOI in May 2017, to create a streamlined pathway where accredited companies can tap on IPO sponsors, law and audit firms (collectively,



"market professionals") in their IPO journey which includes facilitating pre-IPO funding, advising them on listing processes and preparing them for IPO listing.

Besides growth capital, IMDA recognises that bridging working capital needs is often a challenge in a company's growth journey. Commercial bank loan processes are often long-drawn and cumbersome, with the eventual loan amounts being sometimes insufficient to meet the needs of young high-growth companies. As such, we collaborated with Invoice Interchange to provide accredited companies with an alternative online invoice financing solution at a preferential discounted rate. Invoice Interchange had been able to meet companies' working capital needs by enabling accredited companies to raise finance against their existing invoices through Invoice Interchange's online invoice financing platform and receive the funds from reputable financial institutions and family offices within 24 hours. Invoice Interchange has to-date funded 60 companies with over \$21 million dollars in invoices.

Enabling Internationalisation Outcomes

Accredited companies have already set out their internationalisation plans at the onset. We had received their feedback that the Accreditation branding has enabled them to open doors. The track record built through clinching projects with the Singapore Government Accreditation@SGD is valuable for clinching deals in regional countries, such as Vietnam, Indonesia and Thailand. The re-branding of Accreditation@IMDA to leverage the Singapore branding (Accreditation@SGD) would help accredited companies to be better recognised overseas.

Beyond leveraging enterprise partners' footprint to enter overseas markets, Accreditation@SGD is also facilitating strategic partnerships between accredited companies and go-to-market partners such as large System Integrators and hardware providers. Such partnerships have yielded results for our companies, e.g. SenseInfosys has partnered Crimson Logic to successfully clinch a deal with Bahamas' Customs; Inspire-Tech is bundling their software with DELL's hardware to target emerging markets.



Besides strategic partners, Accreditation@SGD proactively works with accredited companies to create their marketing and communications plans, develop their thought leadership strategies and build the market awareness of their product and companies to increase their profile and exposure internationally.

Feedback from the Industry about Accreditation @IMDA

The programme has received positive feedback from industry which commended the technical and financial findings and advice received during and post accreditation evaluation, which were invaluable to young start-ups.

"The Accreditation@IMDA programme has helped to open up opportunities in the Govt sector that were not easily accessible previously. We are especially impressed and encouraged by the professionalism of the business and technology evaluation teams which not only helped us to better understand our technology but also to give us ideas on how to refine it. We strongly recommend other tech companies to be a part of this programme."

Lee Junxian

Co-founder of CashShield Pte Ltd

"As a startup, the technical, financial and operational evaluations which Accreditation@IMDA put us through was invaluable. It helped to refine our business model strategies and validate our product claims. Being accredited by IMDA was significant in assuring prospective investors on our product capabilities, helping us to successfully raise our Series A round."

Stephen Chow

Co-founder of Sense Infosys Pte Ltd

"Accreditation@IMDA continues to play a critical role in Trakomatic's growth journey. Due to our accreditation status, in the last 18 months alone, we have built greater credibility among multiple government agencies, ranging from libraries, public housing, education and citizen services. Furthermore, we see an uptake in new government agencies that are looking to adopt our solutions which improve operations and enhance the experience



for citizens. Our business revenues are growing 300% year on year and this is tied to the reassurance our clients have with us being an accredited company."

Allen Lin

CEO/Co-Founder Trakomatic Pte Ltd

"The Accreditation@IMDA programme turned out to be a journey of self-discovery for us. The rounds of rigorous review helped us distill what makes Handshakes a unique and compelling product for deal origination and due-diligence. We are grateful to the Accreditation team for their constructive feedback and belief in Handshakes."

Daryl Neo

Co-Founder of DC Frontiers Pte Ltd

"Our [Deep Identity and Accreditation@IMDA] mutual engagement went beyond the scope of just technology and product engineering. We got their support and guidance in areas like Finance, Product management and Go-to-Market strategy. The Accreditation team provided us key inputs where we can and have indeed improved and to name a few, source code quality improvement, product positioning and presentation to the customers. From a market perspective, we benefitted in getting good visibility and brand recognition and last but not the least in securing deals. We thank IMDA for everything they have provided us and would continue to seek their guidance and support even as we enhance our technology and our foot print in Singapore and beyond."

Sivakumar Balasubramanian CFO/Founder of Deep Identity Pte Ltd



List of Accredited Companies

1. As at end October 2017, the list of accredited companies are as follows:

Machine Learning
 DataRobot Pte Ltd*
Enterprise Search / Intelligent Virtual
Assistant
Taiger Pte Ltd*
Visual Recognition / Search
ViSenze Pte Ltd*
Ad Tech
Affle Pte Ltd*
iVideoSmart Pte Ltd
RegTech
TookiTaki Pte Ltd*
Robotics and Unmanned Aerial System (UAS)
AeroLion Technologies Pte Ltd
Hope Technik Pte Ltd
Energy Management Solutions / Analytics
Anacle Systems Ltd
Barghest Building Performance Pte Ltd
EverComm Uni-Tech Singapore Pte Ltd
Knowledge Sharing and Management
 Inspire-Tech Pte Ltd
 Third Sight Pte Ltd
Identity Governance and Administration
Deep Identity Pte Ltd
Linked Data / Data Management
DC Frontiers Pte Ltd*
Latize Pte Ltd
Sense Infosys Pte Ltd
Mobile Application Development Platform
Tagit Pte Ltd
Mobile and Web Security
V-Key Pte Ltd
Video Analytics
KAI Square Pte Ltd Tall and the Research Pte Ltd
Trakomatic Pte Ltd*
Fraud Detection
CashShield Pte Ltd*

^{*}Al companies



About Infocomm Media Development Authority (IMDA)

The Infocomm Media Development Authority (IMDA) leads Singapore's digital transformation with infocomm media. To do this, IMDA will develop a dynamic digital economy and a cohesive digital society, driven by an exceptional infocomm media (ICM) ecosystem – by developing talent, strengthening business capabilities, and enhancing Singapore's ICM infrastructure. IMDA also regulates the telecommunications and media sectors to safeguard consumer interests while fostering a pro-business environment, and enhances Singapore's data protection regime through the Personal Data Protection Commission.

For more news and information, visit <u>www.imda.gov.sg</u> or follow IMDA on Facebook IMDAsg and Twitter @IMDAsg.

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