

**CHIN WEI MIN**

Securities Commission Malaysia

**AZRINA AZMEL**

Securities Commission Malaysia

Developing a Facilitative Ecosystem for Digital Innovation in the Malaysian Capital Market

Introduction

The potential of digital finance to spur greater financial inclusion is widely recognised. The digital wave is impacting the global financial landscape in a multitude of ways, leading to the introduction of new business models and solutions, making financial products and services available to more people by lowering costs and barriers to access. This evolution is being driven by a variety of factors, from changing demographics and investment



behaviour, increased consumer expectations, growing demands for alternative financing for small businesses, to technological advances.

At the Securities Commission Malaysia (SC), we believe that socially-beneficial financial innovation should be encouraged given that such developments not only address growing demands by consumers but also hold promise for greater democratisation of markets by complementing traditional channels of intermediation through greater ease of entry and use, enabling fundraisers and investors to benefit from accessibility, cost-savings and convenience.

This paper addresses the approach taken by the SC to facilitate digital innovations in the Malaysian capital market. The first part highlights key efforts undertaken to introduce innovative market-based financing avenues to cater for growing financing needs of small businesses, including targeted initiatives to garner awareness and catalyse greater interest in digital finance. This is followed by a high-level overview of the digital strategy which the SC has crafted to enhance access to finance, increase investor participation, augment the institutional market and develop synergistic ecosystems. A dedicated section illustrates innovations impacting the investment management domain, with a focus on SC's recently launched framework on digital investment management services. The final section looks into the SC's policy stance and guiding principles in embracing the digital innovations which are enabling new opportunities in the capital market.

Road to Digitisation

Providing new sources and innovative mechanisms for market-based financing

One of the features of the entrepreneurial landscape of recent years has been the transformation of the early stage risk capital raising through advancements in technology. In this regard, digital technologies can provide solutions for micro, small and medium enterprises (MSMEs) by lowering the costs of obtaining capital and increasing transparency, thus making them more attractive to potential funders. Through market-based financing avenues such as equity-based crowdfunding (ECF) and peer-to-peer (P2P) financing,^{*1} digital innovations have democratised financing by enabling the connectivity between businesses and funders.

Against this backdrop, the SC has embarked on efforts to enable both businesses and investors to benefit from a regulatory framework that will facilitate wider accessibility to market-based financing avenues as well as utilising technology to enable greater investor participation. Our journey

began with the development of a facilitative regulatory framework for ECF in 2014 which saw its release in February 2015. In June 2015, the SC registered six ECF operators as Recognised Market Operators. ECF is a form of “patient capital” where investors take equity stakes in new companies and are expected to maintain that stake in a long-term manner. Continuing the momentum from ECF, the SC focused its efforts in 2016 to facilitate P2P financing, a form of digital innovation which broadens the ability of entrepreneurs and small business owners to unlock capital from a pool of individual investors in small amounts. This has led to the introduction of the P2P framework in April, followed by the registration of six P2P operators in November 2016.

Garnering awareness on digital finance

At the time when the SC was still developing the ECF framework, the SC organised its inaugural SCxSC Digital Finance Conference (SCxSC) in 2014 to explore issues of fundraising for small businesses and raise public awareness on the potential of new technologies to provide market-based financing solutions to MSMEs. The SCxSC which was held in partnership with other government agencies and market participants, drew a large crowd ranging from investors, start-ups, market players and the public who were interested to learn more about the rise of alternative finance such as ECF. The positive feedback received has led the SC to hold SCxSC as an annual event given that it serves as a useful platform to socialise the SC’s on-going digital finance initiatives and build public awareness of local and global developments in digital finance. For the past three years, the SCxSC conference has featured expert speakers on ECF, P2P financing, digital investment services and distributed ledger technology. Conference attendees were also able to listen to business pitches by various MSMEs and entrepreneurs that are raising capital through ECF platforms approved by SC.

Unlocking the potential of digital finance development

As part of the SC’s initiative to catalyse greater interest and visibility towards nurturing the development of digital finance, the SC launched the “Alliance of FinTech Community” or “aFINity” at the World Capital Market Symposium (WCMS) in September 2015. To date, over 100 industry participants have registered with aFINity. These participants represent a wide spectrum of stakeholders, from large financial institutions and reputable core

banking technology providers to innovative fintech start-ups in areas such as P2P financing, crowdfunding, digital investment services, online trading and distributed ledger technology.

The objective of aFINity is twofold. Firstly, aFINity functions as the SC’s outreach program for the digital finance community, aimed at understanding their needs, concerns on the ground and to provide steer in terms of regulatory and policy guidance to promote responsible financial innovation.

Secondly, through establishing “Innovation Labs” which are administered under the aFINity umbrella, it also acts as a platform to facilitate the exploration of new digital innovations within our industry. Lab activities would range from discussing business ideas and concepts which are enabled by digital, to developing proof of concept of digital solutions to meet specific industry needs. To ensure that ideas explored in the labs are relevant and aligned with the aFINity community’s interests, the SC has leveraged and will continue to leverage its regular aFINity discussions to generate a pipeline of topics or ideas which could be further explored in the labs.

Since its inception, a total of 72 engagements have been carried out under aFINity, which include:

- community-wide sharing sessions to provide guidance and clarity on SC’s overall regulatory purview and to socialise SC’s newly introduced digital finance initiatives such as P2P financing and digital investment management services,
- targeted focus group discussions to:
 - obtain feedback on SC’s proposed regulatory framework on digital finance;
 - understand the operations of emerging digital finance activities such as crypto currency exchanges;
 - explore new ideas and approaches,
- one-to-one engagement sessions between the SC and business owners to:
 - delve into key aspects of the digital business proposition and understand how it is intended to be deployed in the Malaysian capital market;
 - provide a platform for continuous interactions to prepare them in meeting readiness requirements.

Out of the total engagements, 43%

were related to digital investment management services, 21% covered P2P financing areas, 10% were on distributed ledger technology, 7% on ECF-related matters and 19% on other emerging digital finance solutions.

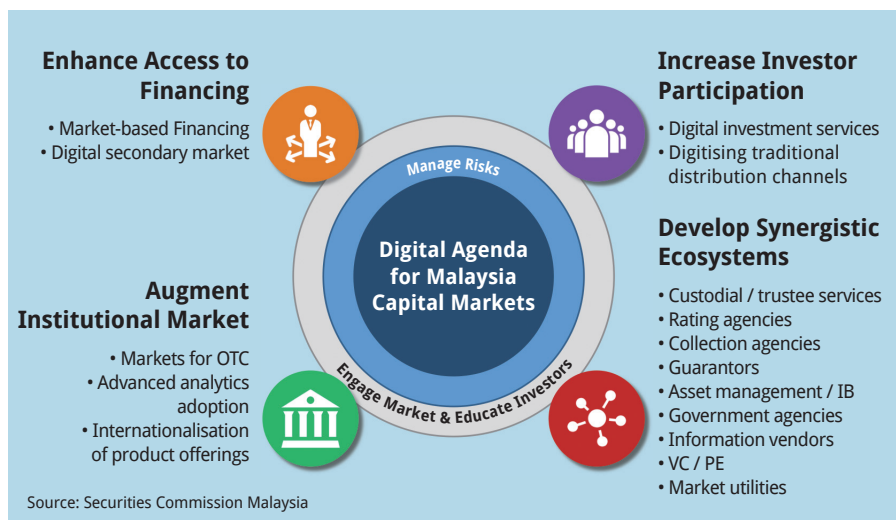
Notably, in developing the P2P financing and digital investment management regulatory framework, the SC socialised and obtained feedback for its proposed framework via targeted focus group discussions and engagement labs with industry participants who have registered with aFINity. The aFINity community was useful in galvanising a network of stakeholders in syndicating SC’s digital finance initiatives and soliciting wider industry feedback for further deliberation.

Digital Agenda for the Malaysian Capital Market

To meet the needs of the underserved and create a more vibrant investment environment, the SC believes in the potential for digital as one of the next engines of growth for our capital markets. We aim to continue our efforts in facilitating innovations to better serve the needs of our economy and participants, while at the same time safeguarding investor trust and confidence. In line with this, we crafted a holistic digital agenda, focused on enhancing access to financing, increasing investor participation, augmenting the institutional market and developing synergistic ecosystems (Figure 1).

Enhance access to financing: The MSME segment is the backbone of the Malaysian economy. Despite the significant role they play, many MSMEs still face challenges in obtaining funding through traditional sources of funding due to inconsistency of financial/credit reporting standards and lack of credit ratings, though many of these MSMEs may be creditworthy.

To address these issues, the SC has introduced ECF and P2P financing to allow for alternative market-based financing avenues for MSMEs to raise funds. Both ECF and P2P financing are expected to fill gaps in either early-stage capital or capital for growth for MSMEs. With ECF, it is possible that investors will not receive any financial returns for an extended period of

Figure 1: Digital Agenda for the Malaysian Capital Market

time; longer term financing arrangements on P2P financing platforms also mean that repayments are stretched out over a long period. Based on specific circumstances, investors might wish to withdraw their investments before ‘maturity’. Creating a secondary market becomes the natural next step of evolution to provide greater flexibility to investors to obtain financial returns from these asset classes. For ECF issuers as well, having a secondary market is also beneficial as it provides liquidity for early shareholders or employees who own equity in the issuer, giving them an avenue to realise capital gains via a marketplace.

Increase investor participation: In today’s world, many of us are finding we have less and less time to deal with our finances and are aware that many traditional investment routes are too expensive and perhaps not even accessible due to high minimum requirements.

Based on the SC’s internal research, it was revealed that the average age of our investor is 45 years old and out of those aged below 30, less than 5% have bought a stock or unit trust. This shows that our investing public is aging. It is imperative that we identify other innovative investment solutions to encourage more participation from the younger generation. While most people would associate the below-30 demographic as more digitally-inclined, further research has shown that the digital generation is not just limited to millennials, but extends across age demographics. Inspired by the digital user experience they encounter in their daily lives, these digital natives are beginning to demand similar level of experience from their financial

services providers, thus necessitating innovative investment solutions which offer greater convenience, access, transparency and lower cost.

To better serve the needs of this new segment of investors which can be customers of the future, the SC is facilitating the provision of digital investment services in our markets. The term “digital investment services” is used to describe a new range of capital market products and services which have emerged due to digital innovations such as digital investment management (which includes robo-advisory), micro-investments, social trading/trade mimicking, and the like. As part of the initial phase of the digital investment services, we have introduced the digital investment management framework to enable the offering of automated discretionary portfolio management services to investors. Details of this framework are further discussed in the next section of this paper.

Augment institutional market: By leveraging digital, greater transparency of information can be achieved within the capital market. With greater transparency, our market would become more efficient and hence be able to attract greater investor participation.

Today, information related to our over-the-counter (OTC) markets, for example our secondary bond, rates and credit market, is highly fragmented among different sources and not easily accessible. Using bond and sukuk as an example, information on a new issuance is generally readily available to all potential investors via offering circulars. However, there is less transparency of bond and sukuk data post-issuance, es-

pecially in areas of credit risk and pricing as these bonds and sukuk are traded between different counterparties. These data, even if available today, are only accessible to large institutional investors and seldom, if at all, available to smaller investors.

To introduce greater transparency and spur further growth in these markets, the SC looks to create a central information repository which would be readily accessible by market participants and investors towards the end of 2017.

Develop synergistic ecosystems: While intermediaries, financial service institutions (FSIs), start-ups and exchanges may be the main drivers of digital markets, there is still a need to develop the surrounding ecosystem of service providers which are also key players in the value chain. These service providers include custodians and trustees, rating agencies and information vendors. ‘Digitising’ these ecosystem players will allow faster, and more seamless access to these services, thereby creating a more transparent and efficient market. The SC is working closely with the capital market ecosystem service providers to build market-relevant digital services and offerings to meet the needs of the ecosystem.

Energising Investment Services for the Digital Era

Digital Investment Management Services

Globally, the digital revolution has been making inroads in the investment management industry as the industry is at a pivotal juncture to respond to changing customer behaviour, new technologies, new distribution and business models. Many investment managers are heavily invested to meet the digital requirements of their clients who are demanding investment tools that enable them to see, track and compare investments in real time. This has led to the emergence of new digital tools to assist investment managers in developing and managing investment portfolios, enabling them to hone in on investors to deliver bespoke and better quality products and services. The advent of digital investment services heralds a new era for goal-based investing

and wealth management, as it promises to take the stresses, burden of unnecessary costs and hidden fees away from investors, and simplify their lives by managing and growing their investments for them, at an affordable cost.

In the context of the Malaysian capital market, SC believes that new technologies can democratise the world of portfolio management by driving down the costs of providing these services and reducing the barriers of access, thus enabling firms to engage with consumers more effectively, while at the same making investments affordable and accessible to all. Focusing on the need to support the evolving fund management industry and emerging investor needs, the SC launched the Digital Investment Management Framework (framework) on 9 May 2017.

As part of the SC's digital agenda for the capital market, this framework aims to increase investor participation in the capital market by providing investors with a new mode of investment, which is more convenient, affordable and accessible channel to manage and grow their wealth. Towards operationalising this framework, the SC has undertaken a review of two key Guidelines, namely the *Licensing Handbook* and the *Guidelines on Compliance Function for Fund Management Companies*, setting out licensing and conduct requirements for those interested to offer automated discretionary portfolio management services to investors.

Regulatory framework to facilitate Digital Investment Management

To facilitate digital investment man-

agement activities to be offered in Malaysia, a new category of portfolio management licence has been introduced (Figure 2). Under this framework, interested applicants who wish to offer automated discretionary portfolio management services to consumers may apply for the new licence if they satisfy all the licensing and other relevant regulatory requirements. Digital investment management is defined as a fund management business which incorporates innovative technologies into discretionary portfolio management services. It aims to replicate many of the key activities performed by traditional fund managers through online access.

One of the key licensing criteria is the requirement for applicants to satisfy a clear digital value proposition, which includes the following:

- **Digital business model** – The business model must have a clear value proposition that demonstrates how digital innovations can deliver positive outcomes to its target investors and any other target beneficiaries.
- **User-centric delivery** – Delivery of services to target investors and any other target beneficiaries must include user-centric interface and experience, integrated investor education on the services offered to create greater confidence, trust and engagement, and transparent fee structure.
- **Automated investment proposition** – Automated proposition must involve core components of portfo-

lio management services including risk profiling, suitability assessment, asset allocation and rebalancing. Applicants may not be eligible if only limited parts or only non-core parts of the investment service are automated.

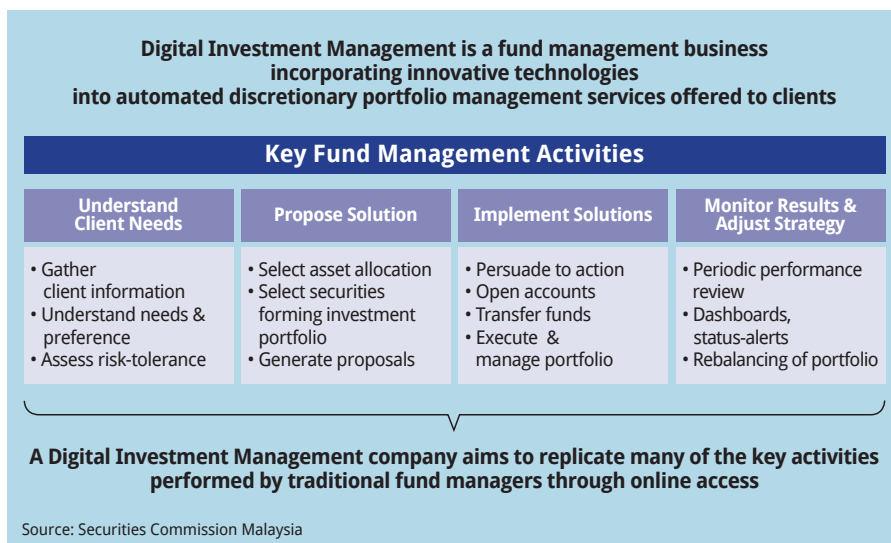
Given the unique aspects of the digital investment management business, the digital value proposition aims to assess the potential benefits of the digital innovations introduced, in particular the broad use of technology across the entire value-chain of portfolio management services, its digital delivery of financial education and client-relevant content, i.e., how they would put the client's needs first when designing their communication and disclosures. In particular, presentation and substance of key disclosures must be clear and effective in a manner that is easily understood to enable investors to make informed investment decisions.

Further, applicants are required to comply with other key entry and competency requirements, including local incorporation, minimum financial requirements and requisite technology capabilities to run the digital investment management business.

To reinforce investor protection, specific conduct requirements matched to distinctive characteristics of this new business model and effective investor redress mechanism safeguards are imposed on digital investment managers. This includes the requirement for the board to ensure that:

- requisite technology capabilities are in place including identification of a competent person or persons within the company who has sufficient understanding of the risks and rules of the algorithm applied
- outcomes produced by the algorithm are consistent with digital investment manager's strategies and securities laws;
- risk management framework is sufficiently robust to manage risks associated with the offering of automated discretionary portfolio management services including cyber security resilience;
- effective oversight on the overall compliance framework including reviewing the effectiveness of compliance programme to take into account the unique and specific aspects of the digital investment management's business model.

Figure 2: Digital Investment Management



In relation to the algorithm design and oversight, the SC requires the digital investment manager to have written policies in place to monitor and regularly test the algorithm employed, including ensuring that only authorised personnel are able to access and make changes to the algorithm. Any use of third party technology and algorithm, must entail on-going due diligence by the digital investment manager.

As a licensed fund manager, a digital investment manager is subject to all other existing regulatory safeguards and investor protection provisions applicable to a fund manager including maintaining custodial arrangements, membership with Securities Industry Dispute Resolution Center (SIDREC) and contribution to the Capital Market Compensation Fund.

Moving Forward

We have seen how advancements in technology have democratised financial services by driving innovative market-based financing solutions such as ECF and P2P financing. In Malaysia, the growth of ECF activities has been encouraging thus far. As of June 2017, 25 issuers have succeeded in collectively raising a total of MYR 17.04 million.^{*2} We observed that a majority of campaigns on ECF platforms were looking to raise less than MYR 500,000 and that 33% of investors are individuals aged 35 and below. This goes to show that ECF financing is truly catering to the needs of small companies and is attracting participation of young investors, who may use this mode of investment as their first asset class due to having a passion or interest in a particular business or venture. We expect the ECF platforms to gain further momentum over the coming years and complement the P2P financing platforms which are expected to be fully operational by the end of 2017.

Similarly, in the portfolio management services domain, the recent launch of the digital investment management framework is part of the SC's on-going efforts to bring financial inclusion to the masses through the use of technology. In this regard, the SC welcomes the introduction of investment services through digital channels to complement the existing suite of

investment channels to enable more consumers, particularly those who have been underserved, to access these services at an affordable cost. The framework is meant to encourage new and existing market players to develop innovative and more effective ways of delivering higher quality products and services to investors by embracing digital.

With the rise of digital distribution channels, it should be noted that there will always be investors who still value the services provided by human financial professionals, even if such services are charged at a premium. In the U.S. for example, hybrid human-digital models such as those offered by Vanguard, Personal Capital and Schwab blend human financial professional services with their digital offerings. This vast array of investment services and channels are meant to cater to the needs of a diverse range of investors with different risk appetites, financial literacy, goals and needs. Ultimately the investors will decide which channels best suit their individual needs.

In implementing key objectives of our Digital Agenda, the SC will proactively pursue initiatives that will facilitate a conducive market environment for continuous innovation. Through our aFINity programme and our regular engagement with industry, we will continue to have open discussions and dialogues to increase both awareness and our capacity to provide guidance and support for innovative developments. This is evident through our efforts in developing a regulatory framework for P2P financing and digital investment management, where we have involved the aFINity community in early stages of drafting the framework to ensure that the finalised framework will be fit for purpose. In parallel, the SC seeks to promote thought leadership via the SCx-SC Digital Finance Conference, which we organise annually to raise awareness on digital finance. We believe that collective thought leadership is essential to enhance skills and competitiveness, particularly for our local digital finance industry.

While we welcome digital innovations which are beneficial to the capital market, nevertheless, we are also cognisant of the potential risks that are associated with digital. In particular, increased adoption of digital in capital market activities, operations of market intermediaries, market infrastructure and market-based financing platforms calls for vigilant management of cyber risk to minimise disruption to the capital market, protect investors' confidential data and preserve market con-

fidence. This is more imperative given the global increase in cyber security breaches. In response to this, the SC released the *Guidelines on Management of Cyber Risks* in 2016, which were intended to strengthen and prepare the capital market entities against the risks of potential cyber threats and security breaches.

Moving forward, the SC will remain vigilant to potential emerging risks, and will continue to develop appropriate market and consumer safeguards. Given these considerations, the SC's position has always been facilitative of digital finance development while keeping a watchful eye over potential sources of risk. The SC believes that having a clear regulatory framework to facilitate digital finance would provide certainty to market players, issuers, as well as investors, and is facilitative towards growth and innovation. To this end, the SC will continue to work towards providing an environment that will enable firms to innovate and investors to be treated fairly, particularly in embracing the digital revolution which is enabling new opportunities in the capital market.

Notes

- *1 ECF and P2P financing are forms of fundraising which allow businesses to seek funding directly from the "crowd" by pitching ideas for a business on a web-based platform.
- *2 Securities Commission Malaysia – internal data collated by SC from ECF platform providers as at end June 2017

CHIN WEI MIN

Executive Director, Securities Commission Malaysia

AZRINA AZMEL

Assistant General Manager, Securities Commission Malaysia

Chin Wei Min and Azrina Azmel belong to the Innovation, Digital and Strategy (IDS) business group of the Securities Commission Malaysia (SC). The IDS business group was established in the SC to enable the adoption of digital finance while continuing to set a broad-based direction for the growth and development of the Malaysian capital market.