Alternative Modes of Finance: Overview and Guidelines for the Arab Countries

Arab Regional Fintech Working Group
ACKNOWLEDGEMENT

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This document was produced within the Arab Regional Fintech Working Group activities.

The Arab Regional Fintech WG has a comprehensive structure from the different Fintech industry stakeholders, within the Arab region and outside, to enhance the proper Fintech ecosystem in Arab countries. This implies the exchange of knowledge and expertise, strengthening the capacity-building of the Arab regulators, as well as building a network of relations between Arab and international experts from the public and private sectors to promote Fintech industry and the development of innovation.

The “Alternative Modes of Finance: Overview and Guidelines for the Arab Region” document was collectively prepared by Kokila Alagh, Luna de Lange, Soumya George, Akshata Namjoshi, Barkha Doshi, Poojitha Janarthanan and Manav Joshi of KARM Legal Consultants PVT Limited, members of the MENA Fintech Association, in collaboration with Nouran Youssef from the Arab Monetary Fund.

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<tr>
<td>ADGM</td>
<td>Abu Dhabi Global Market</td>
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<td>ADGM - FSRA</td>
<td>ADGM Financial Services Regulatory Authority</td>
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<td>AFIN</td>
<td>ASEAN Financial Innovation Network</td>
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<td>AML</td>
<td>Anti-Money Laundering</td>
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<td>API</td>
<td>Application programming interface</td>
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<td>APIX</td>
<td>API Exchange</td>
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<td>ASEAN</td>
<td>Association of Southeast Asian Nations</td>
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<td>ATM</td>
<td>Automated Teller Machine</td>
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<td>BAM</td>
<td>Bank Al Maghrib</td>
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<td>CBB</td>
<td>Central Bank of Bahrain</td>
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<td>CCR</td>
<td>Consumer Contracts Regulations 2013</td>
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<td></td>
<td>(Information, Cancellation and Additional Charges)</td>
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<tr>
<td>CF</td>
<td>Crowdfunding</td>
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<td>CFP</td>
<td>Crowdfunding Platform</td>
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<td>CFT</td>
<td>Combatting the Financing of Terrorism</td>
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<td>CMA</td>
<td>Capital Market Authority</td>
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<td>CRA</td>
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<td>DFSA</td>
<td>Dubai Financial Service Authority</td>
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<td>Dubai International Financial Centre</td>
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<td>DLT</td>
<td>Distributed Ledger Technologies</td>
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<td>e-KYC</td>
<td>Electronic Know Your Customer</td>
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<td>EIS</td>
<td>Enterprise Investment Scheme</td>
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<td>European Union</td>
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<td>FTC</td>
<td>Federal Trade Commission</td>
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<td>GBP</td>
<td>Pound Sterling</td>
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<td>GCC</td>
<td>Gulf Cooperation Council</td>
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<td>Abbreviation</td>
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<tr>
<td>GFIN</td>
<td>Global Financial Innovation Network</td>
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<td>World Bank Group International Finance Corporation</td>
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<td>Monetary Authority of Singapore</td>
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<td>MENA</td>
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<td>Market Rules</td>
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<td>NFC</td>
<td>Near-Field Communications</td>
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<td>OFS</td>
<td>Offering of Securities</td>
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<td>Person to Business</td>
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<td>Peer-to-Peer</td>
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<td>Securities Exchange Commission</td>
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<td>SME</td>
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<td>STO</td>
<td>Security Token Offering</td>
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<td>UAE</td>
<td>United Arab Emirates</td>
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<td>UK</td>
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Executive Summary:

In various regions globally, the alternative finance market and the need for liquidity creation is growing prodigiously.

The sphere of alternate financing has been created by the onset of retreat from the services of the mainstream-banks, finance houses and other financial (credit) institutions, which have been challenged by restricted assets and capital constraints, leading to a slow credit cycle and low returns on equity. Such flawed and outdated business models are decreasing the fortunes of these credit-shy institutions such as, inefficient money transfer practices, which ultimately cost banks billions every year in foregone revenue. The growing demand for credit from the business and consumer markets, including informal markets, have forced global financial market infrastructures regulators to encourage financial technology innovations, however, with the reciprocal responsibility of adequate regulation thereof – achieving a necessary balance between growing, continuous innovation (accepting this to be a need and not to be stifled unnecessarily) and regulation of financial technology innovations.

The subject of alternative forms of financing and liquidity creation is highly regarded to be the need of the hour, pre-COVID 19 and post; now more than ever.

This report seeks to capture the current state of the fast paced, evolving alternative financial market and to highlight the environment in which tokenization, crowdfunding and peer-to-peer lending are used as viable means of liquidity creation, in its varied forms; together with technological resource innovation bolstering and enabling this further. In doing so, we provide an intricate and in-depth evaluation of these specific alternative finance solutions, which are seen as vital tools of the more recent, wide-ranging universe of technologically innovative solutions that presently have and will continue to vest transformative implications for the financial system, its intermediaries and its users.

This report offers an overview of how crowdfunding, in its varied declinations, perfectly blends the features of fund raising or crowdsourcing and microfinancing by using various online platforms to raise funds from the masses, even in small amounts. We further highlight, the obvious benefits of being able to access new funds which would otherwise be unavailable by traditional norms, as well as the enjoyment of non-pecuniary benefits, such as feedback about the idea from the crowd and early access to the skillset of a contributor.

On the other hand, the emergence of Distributed Ledger Technology (DLT) and blockchain technology, together with the perceived multiplicity and diversity of its uses has created new avenues of fundraising, including one of the various major avenues enabling persons to capitalise on the ability to tokenise assets. The application of DLTs and smart contracts in asset tokenization has the potential to deliver innumerable and far-reaching benefits, including that of efficiency gains, driven by
automation and disintermediation; transparency; improved liquidity potential, lowering of barriers to investment by facilitating the fractional ownership of assets; and many more.

The extent of the impact of crowdfunding and tokenisation, as newer age alternative finance solutions, have resulted in entities ranging from that of mere start-ups and micro sized, to large multinationals, all seeking to complement and supplement the cumbersome shortcomings of legacy traditional sources of finance, to capitalise on a whole host of benefits afforded to them by newer age finance solutions. This report further contains an assessment and analysis of the market and regulatory landscape of the Arab Countries, from which it is made clear that governments globally have increasingly become active in their implementation of regulations and in their undertaking of initiatives to foster the growth of Financial Technology, looking specifically at the alternative finance market within their respective regions.

As of 2017, the Abu Dhabi Global Markets and the Dubai International Financial Centre free zones within the United Arab Emirates (UAE) were named as two of the most prominent financial centres of all of the Arab Countries, however, the market landscape in the Arab region has not yet maximised its immense potential and must continue to stride towards mass scale implementation of financial technology and other, newer or advanced alternative finance solutions in the region. Several countries in the Arab region, such as the UAE and Bahrain, have already introduced; and countries such as the Kingdom of Saudi Arabia and Oman are planning to introduce, domestic regulatory frameworks on crowdfunding which are aimed to be tailored to the characteristics and the needs of their local markets and investors.

Most importantly, this document seeks to conclude with the provision of guidance to its audience concerning tokenization projects, as well as crowdfunding and peer-to-peer lending ecosystems, for the proper and adequate regulation thereof; and for adoption and implementation as may be appropriate, by any authority desirous to do so. As such, and following the analysis of the facts mentioned herein, we have reached some conclusions and propositions discussed hereinbelow, focusing on key measures that the authorities should consider and as appropriate, seek to adopt, while developing or revamping, as well as implementing a national regulatory framework. We advocate and recommend the following:

A. The establishment of a bespoke regulatory framework and relevant governance processes, which shall dynamically approach the regulation of crowdfunding, peer-to-peer lending, tokenisation and other alternative financing solutions, allowing for suitable flexibility;
B. Encourage, promote and host initiatives to foster innovation and encourage sandbox and testing environments to strengthen the ecosystem of alternative financing;
C. Implement harmonisation measures to ensure coherence between the rules on tokenization, crowdfunding and peer-to-peer lending to allow the authority the necessary flexibility to adapt
to market fluctuations, firstly within the country, region and further, to strive to achieve regional and extended global compatibility, together with multi-jurisdictional acceptance.

D. Ensure compliance with Anti Money Laundering (AML), the Countering of the Financing of Terrorism, Know your Client / Business (KYC/KYB) and applicable tax related laws.

E. Ensure appropriate and adequate checks and balances with regards to the safety of data and ensuring utmost (best enabled) cyber resilience.

F. The implementation of mechanisms to educate and ensure greater clarity, intelligibility and awareness around the regulatory and supervisory frameworks applied to tokenisation, crowdfunding, peer-to-peer lending and other alternative finance market solutions and mechanisms.

The recommendations set out above are a non-exhaustive list of proposed best practices which we have identified and consider should be mandatory, as well as necessary. The full list of our proposed mandatory best practices and non-mandatory additional tools, which may be employed, are listed throughout the report, for due consideration and adoption, with adaption, as required.
Introduction:

Alternative finance means and mediums warrant greater awareness, understanding, acceptance, implementation and use; as opposed to being eschewed or shunned as the credit and financing industry continuously undergoes rapid transformation. Why such a need, you may ask? Very often instances arise where persons or entities need capital or funding, but they, by traditional standards are regarded and graded as un-bankable. Traditional banks, finance houses or other financial institutions (stock, bond markets, etcetera.) are conventionally unable to provide required finance to certain applicants, due to a variety of reasons, including categorising same as being uncreditworthy, based on an array of traditionalist creditworthiness scoring models and mediums; and thereby classify same as being rated either too risky, not able to meet required covenants, or for some other reason – arbitrary or otherwise. In demonstration hereof:1

- Company A is a two-year-old company that has a technology that will not be market ready for another six years.
- A bank will likely not fund that project because there is no projected revenue for the next six years and there is no guarantee that the company is ever going to be financially successful — thus, based on this limiting scope of evaluation, the risk assessment is equated in the negative.
- Alternative forms of financing will help Company A continue to research and develop their product; and potentially allow the Company to successfully bring it into market.

In addition, hereto, alternative financing often provides benefits, like mentorship, customer validation, advice and buy-in. The categorised unbanked and un-bankable persons or entities, by necessity look to solutions for alternative forms of financing to overcome the restrictive barriers and reams of red tape created by the traditionalist credit and finance systems.

The size of the Alternative Finance market, according to Statista2:

1. Alternative Lending3:
   a. Total transaction value in the Alternative Lending segment amounts to US$291,474.5m in 2020.
   b. Total transaction value is expected to show an annual growth rate (CAGR 2020-2024) of 8.7% resulting in the total amount of US$406,717.4m by 2024.
   c. The market's largest segment is Crowdlending (Business) with a total transaction value of US$206,120.7m in 2020.

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1 https://strategiccfo.com/alternative-forms-of-financing/
2 https://www.statista.com/
3 https://www.statista.com/outlook/399/100/alternative-lending/worldwide
d. From a global comparison perspective, it is shown that the highest cumulated transaction value is reached in China (US$251,878m in 2020).

2. Consumer / Marketplace Lending⁴:
   a. Transaction value in the Marketplace Lending (Consumer) segment amounts to US$85,353.7m in 2020.
   b. Transaction value is expected to show an annual growth rate (CAGR 2020-2024) of 4.1% resulting in the total amount of US$100,170.0m by 2024.
   c. In the Marketplace Lending (Consumer) segment, the number of users is expected to amount to 38,045.7 thousand by 2024.
   d. The average transaction value per user in the Marketplace Lending (Consumer) segment amounts to US$2,752 in 2020.
   e. From a global comparison perspective, it is shown that the highest transaction value is reached in China (US$61,380m in 2020).

3. Crowdfunding⁵:
   a. Transaction value in the Crowdfunding segment amounts to US$927.5m in 2020.
   b. Transaction value is expected to show an annual growth rate (CAGR 2020-2024) of 5.7% resulting in the total amount of US$1,159.7m by 2024.
   c. The average funding per campaign in the Crowdfunding segment amounts to US$5,195 in 2020.
   d. From a global comparison perspective, it is shown that the highest transaction value is reached in the United States (US$438m in 2020).

**In the greater context of liquidity creation:**

Fundamentally, tokenization⁶ is the process of converting rights, or a unit of asset ownership into a digital token on a blockchain. Tokenization can be applied in relation to assets, securities and other resources, including regulated financial instruments - such as equities and bonds; tangible assets - such as real estate, precious metals, and even to tokenization of copyrights of works of authorship and intellectual property - such as music. The benefits of tokenization are particularly apparent for assets which are not traditionally traded electronically, such as works of art or exotic cars, as well as those needing increased transparency in payment and data flows to improve their liquidity and tradability.

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⁴ https://www.statista.com/outlook/338/100/marketplace-lending--consumer-/worldwide
⁵ https://www.statista.com/outlook/335/100/crowdfunding/worldwide
In the context of tokenization of physical assets, prominent benefits include:

1. the possibility to buy or sell tokens representing fractions of ownership, allowing a far broader investor base participation;
2. broader geographic reach with public blockchains, as well as permissioned blockchains, incorporating relevant KYC/KYB (Know Your Client/Business) and AML (Anti-Money Laundering) laws and regulations;
3. reduced settlement / transaction times, potentially by permitting 24/7 trading, and as smart contracts triggered by predefined parameters can instantaneously complete transactions, reduce settlement times from the current durations (and at best T+2), to essentially real-time transactions, also therein reducing counterparty risk during the transaction and the possibility of trade breaks;
4. allowing for increased efficiency through infrastructure upgrades, in the digitizing of assets on a DLT infrastructure, with such effects further being amplified in areas that currently have non-existent, or traditionally slow, laborious, and even paper-based documents exchange infrastructure;
5. Decreased cost for reconciliation in securities trading by means of the blockchain infrastructure as a digital ledger for the record keeping of each shareholder position. As the market becomes more comfortable with the digital ledger as the “golden source” of data, reconciliation may be completely obviated, as parties will rely and accept this record, therein improving the efficiency of numerous administrative processes, such as: profit sharing, voting rights distribution, buy-backs, etcetera. This is further amplified through the existence of a secondary market which facilitates the accounting operations (such as net-asset-value calculations) of professional investors.
6. Tokenization improves the ability to manage asset-liability risk through accelerated transactions and improved transparency.
7. By accelerating and improving the fractionalization of new asset classes, tokenization will expand the range of available and acceptable collateral, beyond traditional assets. This significantly increases the options available to market participants when selecting non-cash assets as collateral in the securities lending or repo markets.
8. Trading of tokens (or their use as collateral) regulated exclusively by the terms of a smart contract in the blockchain which would help automate securities servicing, such as dividend payments and embed regulatory compliance, such as controlling transfer of ownership;
9. Smart contracts establish rights and obligations of a transferor, transferee and third parties as legal rights and obligations intended to be created (by the parties entering into a smart contract),

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which in turn correspond to the actions undertaken by the code in which the smart contract is created.8

10. The tokenization creates commodities trading (and futures exchanges) in economies without formal markets; as asset tokenization and the trading of tokens representing assets in secondary markets may increase or create the potential for liquidity for those assets.9

11. Increases transparency and reduces administrative costs; automates record keeping and transaction reconciliation; transfer, payments and tendering process registered on blockchain, rather than public registries which may be paper-based and cumbersome; and, removes intermediaries.

12. There is greater market efficiency and liquidity as trading of tokens enables users to trade assets more easily. Also, a token model minimizes transaction costs and removes geographical constraints.10

13. Coupled with the holistic benefits of tokenization described above, collateral management globally may be more efficient, transparent and relevant in new asset classes.

In the context of peer-to-peer (P2P) lending, prominent benefits include:

1. In majority of P2P platforms, a loan application process is paperless, quick and convenient.

2. P2P platforms which have a large market with a high number of users expend almost negligible marginal costs for the setting up each additional user account.11

3. Borrowers do not have to provide collateral for obtaining loans from P2P platforms.

4. Lower transaction costs allow P2P platforms to offer borrowers cheaper credit rates than that which are levied by banks.

5. Transactions are conducted in a much shorter time span, when compared to bank loans. This is because of the concept of “24/7 accessibility of the platform, reduced bureaucracy and documentation requirements, and a simple and transparent application process”.12

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6. Network effects allow P2P platforms to attract a high number of customers and as more customers join, the more valuable the platform becomes for each user.\textsuperscript{13}

7. This also results in an increase of the average value per transaction, ‘because the larger the network, the better the matches between demand and supply’.\textsuperscript{14}

8. P2P platforms also provide the investors with software solutions for automatic order placement - i.e. investors can set their maximum amount of investment and its distribution according to the risk bands and maturities of loans.\textsuperscript{15}

9. P2P platforms generally do not levy any pre-payment fees to its users.

10. Moreover, P2P platforms generally allow for part-payment.\textsuperscript{16} One instance hereof is demonstrated in Lending Works\textsuperscript{17}, a UK-based P2P lending platform which allows borrowers not only to make an overpayment (by paying more than is necessary at a given interval of a required instalment payment), but also settle the balance of their loan(s) at any time, with no extra costs or early-settlement penalties involved.\textsuperscript{18}

**In the context of the raising of funds via Crowdfunding, prominent benefits include:**

1. Greater efficiency than traditional fundraising, as a means to raise funds without giving up equity or accumulating debt.

2. In crowdfunding, publicity and public awareness of the business is created. This helps the entrepreneurs to involve the crowd and receive comments, valuable feedback and ideas.\textsuperscript{19}

3. Crowdfunding provides the business with early adopters and prospective loyal customers who believe and invest in the success of the entrepreneur’s campaign. These serve as potentially useful contacts to the business.\textsuperscript{20}


\textsuperscript{14} Ibid.

\textsuperscript{15} Ibid.


\textsuperscript{17} https://www.lendingworks.co.uk/ accessed on 17 August 2020.

\textsuperscript{18} Lending Works, <https://www.lendingworks.co.uk/> accessed on 17 August 2020.


4. Crowdfunding beneficially provides access to funds for good projects that would not be financed otherwise (by traditionalist means), which aids small companies and the new entrepreneurs to overcome fundraising financial difficulties.\textsuperscript{21}

5. Crowdfunding also enables access to additional funding from investors, as raising funds from the public signals their interest; and that the project has generated traction and validation.\textsuperscript{22}

6. For some projects, Crowdfunding also enables access to both venture capital and bank financing, which in turn benefits the entrepreneur.\textsuperscript{23}

\textbf{Traditional Finance solutions:}

Traditional financing\textsuperscript{24} commonly means a loan or line of credit, which is secured through a financial institution (such as banks, credit unions, finance houses \textit{etcetera}) under conventional terms, usually based on the “four Cs”: character, collateral, capital, and capacity\textsuperscript{25}, whereby financiers assess an applicant’s credit history, business plan and assets - collateral or personal investment necessary to show a lender you’re a low-risk borrower, when assessing their eligibility and qualifications. This is a very rigid, black-and-white, restrictive, obstructive, preventive and deterring method of assessment, which poses a risk to prejudice an applicant and similarly, to jeopardise an otherwise economically stimulating market where no financial assistance is availed, when in fact such assistance could well (and is intended to) be mutually beneficial to both parties to a finance transaction.

Sources of Traditional Financing include equity, debt, debentures, retained earnings, term loans, working capital loans, letter of credit, euro issue, venture funding \textit{etcetera}, based on time period, ownership and control, and their source of generation. Traditional tools providing credit facilities, such as short-term loans or lines of credit, are helpful for businesses with limited needs. Borrowers with greater financial needs, however, seek solutions such as structured finance, asset-based finance, \textit{etcetera}. Common structured finance products include that of syndicated loans, credit default swaps, hybrid securities, \textit{etcetera}.\textsuperscript{26}

Investors (along the likes of angel or seed investors), venture capitalists and private equity investors looking for an equity position and sizeable returns on their investments also fulfil the financing needs

\textsuperscript{21} Ibid.


\textsuperscript{23} Ibid.

\textsuperscript{24} https://smallbizclub.com/finance/working-with-lenders/an-overview-of-traditional-financing/

\textsuperscript{25} Ibid.

of start-ups and established businesses. While angel or seed investors invest in a new venture(s) or a new business or start-up idea, venture capitalists are professional investors who put their money and expertise into businesses which are believed to have long-term growth potential, with the obviated financial returns of such investment.27

Funding from such traditional financial institutions or investors, have generally not presented viable and feasible financing options to small business owners or SMEs. Businesses are not always necessarily willing or able to bear great risks. Moreover, SMEs due to their limited liabilities and smaller levels of collateral, facing problems in securing finance, may not opt for a traditional source of financing.28 Other common problems include that of strict and rigid loan terms; time-consuming, onerous and stringent screening processes; the parting ownership interests in case of equity financing, etcetera. 29

Traditional Finance30 outlines how investors should behave and make decisions. It utilises the concept of the *Rational Economic Man* or R.E.M, which embodies all characteristics of Traditional Finance including:

1. Making rational investment decisions at all times, under all circumstances.
2. Having perfect and complete information about all topics and subjects.
3. Continuously updating probabilities of outcomes throughout any decision-making process.
4. Acting out of self-interest and for-profit maximisation at all times, regardless of any social implications or values. Investors act to maximize utility/satisfaction at every point.
5. Will always delay gratification in the short run to maximise long term value and utility.
6. Investors are assumed to be *risk averse* and that their utility curves31 are concave, meaning that each additional unit of portfolio return that is achieved comes with less utility/satisfaction than the previous one.

In relation to the aforementioned concept of Traditional Finance, this is an ideal-world model which will result in completely efficient markets, which would lead to 100% rational investment solutions and decision making. This, however, is unrealistic and not the *de facto* position of present Traditional

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29 Ibid.


31 In Economics, an indifference curve is the locus of various points showing different combinations of two goods providing equal utility to the consumer. Utility is then a device to represent preferences rather than something from which preferences come, [https://en.wikipedia.org/wiki/Indifference_curve](https://en.wikipedia.org/wiki/Indifference_curve)
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Finance. The R.E.M. assumption creates a sense of convenience for economists and researchers alike, allowing them to more easily explain investor behaviour, qualify and quantify the results of their work; and not requiring the quantification of any measure of irrationality (which by R.E.M. standards should not exist). Viewing markets and investors through only this highly-restricted, R.E.M. lens gives a skewed sense of reality.

The approval process of traditional financing can be lengthy, tedious, complicated and laborious – even more so the greater the risk or the lower the score of credit of the applicant. In addition, hereto, high interest rates are commonly levied to the lender – relative to risk but are often also regarded with the intention to assure greatest returns on investment to borrowers; and this to the disadvantage of the lender. Many applicants, such as small business owners, face repeated rejection before finding a lender willing to give them financing, while many others give up or are so intimidated by the process, they don’t even try the traditional route. This is where applicants having trouble securing traditional funds are at times forced (and rightfully, naturally have the option) look to alternative sources of financing.

In recent times, however, and in stark contrast to historical trends, there has been a shift from traditional finance institutions whereby such institutions have begun adopting measures to better understand the needs of such SMEs to facilitate the further evaluation and tailoring of their own offerings to better suit the needs of SMEs. Several innovative banks are leveraging alternative data (including data on bank account information, e-commerce transactions, invoice data, and customer surveys) generated by the growing social and economic activities taking place online, to support credit scoring.32

An example to this effect includes the FIBEN in Japan and in France, where the bank has begun collecting data on how FIBEN may tailor their credit risk analyses (the major factor impeding the lending process for SMEs) for the advancement of SMEs. With another example being Canada’s banking market leader, ensuring continued investment in innovation to facilitate the rollout of it’s new SME-focused features on its mobile application. Some of these features include the provision of; a financial snapshot dashboard, quick access to Interac e-Transfer and Nomi Insights which allow the bank to gain financial insights on how small business owners are spending and saving.33

Benefits and Risk assessment of going public using an IPO or Rights Issue:

An initial public offering (IPO) and a subsequent Rights Issue seems to be the de facto goal of many companies. Across the GCC, 26 billion US Dollars were raised from IPOs in the last quarter of 2019, representing 96% of the annual GCC IPO proceeds for 2019\textsuperscript{34}. The energy industry led the equity IPO market with the 25.60 billion US Dollar listing of Saudi Aramco on Tadawul\textsuperscript{35} and 23 million US Dollar listing of Musandam Power Company SAOG (Société Anonyme Omanaise Générale) on the Muscat Securities Market\textsuperscript{36}.

Traditional IPOs have been used as a medium for organizations to raise capital from public investors through the issuance of the public share ownership. Before investing in an IPO, it is important to understand the benefits and drawbacks that come along with this traditional form of financing.

The following table documents the benefits, risks and challenges of opening up the capital of a company:

<table>
<thead>
<tr>
<th>Benefits</th>
<th>Challenges and Risks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase in cash in the case of a primary and / or liquidity for shareholders in a secondary placement issue</td>
<td>Relevant costs related to the IPOs or Rights Issue and maintenance of Listed Company</td>
</tr>
<tr>
<td>• The result of an IPO or Rights Issue is a significant and immediate infusion of cash into the company. This cash is typically “earmarked” for specific items described in the IPO disclosure documents, which can be for a variety of purposes.</td>
<td>• IPOs are expensive. Beyond the recurring expenses of a public company’s regulatory compliance, the IPO transaction process comes at a hefty cost.</td>
</tr>
<tr>
<td>• The companies may use an IPO to finance the ‘research and development’, hire new employees, expand infrastructure, reduce debt, fund capital expenditure, acquire new</td>
<td>• Based on the public registration statements of 315 companies, on average, companies incur an underwriter fee equal to 4 - 7% of gross proceeds, plus an additional $4.2 million of offering costs directly attributable to the IPO.</td>
</tr>
</tbody>
</table>


technology or other companies, or to bankroll numerous other possibilities. may face additional complexities in preparing for an IPO.37

- The transaction costs will be even higher if a company chooses to hire a financial reporting advisor, or other specialty groups.

<table>
<thead>
<tr>
<th>Increased visibility, allowing for possible fusions, acquisitions, or mergers</th>
<th>Need to establish and structure investor relations</th>
</tr>
</thead>
<tbody>
<tr>
<td>• If a company aims to continue its growth, it will need increased exposure to potential customers who know and trust its products; an IPO or Rights Issue can provide this exposure as it thrusts a company into the public spotlight. Not only do companies receive a great deal of attention when they decide to go public, but they also receive credibility.</td>
<td>• Market pressures can be very difficult for a company’s leadership who are accustomed to trusting their own instincts and intuition. Founders tend to have a long-term view, with a vision of what their company will look like years from the present and how it will impact the world. The stock market, on the other hand, has a very short-term, profit-driven view.</td>
</tr>
<tr>
<td>• To complete an offering, a company must go through intense scrutiny to ensure what they are reporting about themselves is accurate. This scrutiny, combined with many individuals’ tendencies to trust public companies more, can lead to increased credibility for a company and its products.</td>
<td>• Once a company is public, its every move is scrutinized by investors and analysts around the world, who are generally interested in one question: “Will this company meet its targeted earnings?” If a company meets its target, its stock price will normally increase; if not, its stock price will normally decrease. Founders who would be opposed to constrains placed by short-term public goals should be cautious about going public.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lower reliance on venture capital firms and debt financing</th>
<th>Need for meeting specific standards regarding disclosure of information, including material facts that may affect the pricing of the action</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The potential for increased capitalization through wider market exposure may also reduce the need and reliance upon alternative sources of funding such as venture capital firms.</td>
<td>• Unlike private companies, public companies are required to file their financial statements with the regulatory authorities every year. Compliance with these regulations are both burdensome and costly.</td>
</tr>
</tbody>
</table>

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### Exit Opportunity

- Every company has stakeholders who have contributed significant amounts of time, money, and resources with the hopes of creating a successful company. These founders and investors often go for years without seeing any significant financial return on their contributions.

- An IPO is a significant exit opportunity for stakeholders, whereby they can potentially receive massive amounts of money, or, at the very least, liquefy the capital they currently have tied up in the company.

### Less flexibility in decision making and loss of control

- A major disadvantage of an IPO or Rights Issue is founders may lose control of their company. While there are ways to ensure founders retain most of the decision-making power in the company, once a company is public, the leadership needs to keep the public happy, even if other shareholders do not have voting power.

- Going public means receiving considerable amounts of money from public shareholders. If shareholders feel the company is not operating in a way that will help them make money, they will force the company, through shareholder votes or public criticism, to appoint new leadership.
The following graph documents the decline in the IPO Market of the MENA and GCC regions from Q1 of 2016 – Q1 of 2018:\(^{38}\)

The Emergence of Alternative Finance Solutions: -

Alternative Finance Explained and Explored:

Alternative finance, an initiative introduced by the United Nations Development Programme (UNDP)\(^ {39}\) can broadly be defined as the sources of funding which have emerged outside of the incumbent banking systems and traditional capital markets\(^ {40}\). It is considered as an umbrella term, encompassing a wide range of financial solutions - most notably, that of crowdfunding, peer-to-peer lending and more recently, tokenization. To accurately define alternative finance, we must consider how the term and the solutions have evolved over time to presently introduce a subset thereof, referred to as ‘Alternative Finance Solutions’.

\(^{38}\)https://www.zawya.com/mena/en/markets/story/Saudi_Arabia_leads_IPO_and_REIT_activity_in_Middle_East_in_Q2-SNG_124518921/
\(^{39}\)https://www.undp.org/content/undp/en/home.html
The early 2000s, colloquially dubbed as the ‘era of microlending and peer-to-peer lending’, had witnessed the emergence of platforms such as Kiva, Zopa and Prosper. These platforms are premised on the principle of allowing individuals to lend and borrow money amongst themselves and seek the support of the general public through the donation of small amounts of money. As online communities became more prominent as a part of the advent of ‘Web 2.0’ and as the onset of the Financial crisis of 2008 came around, platforms like Indiegogo and Kickstarter, now global leaders operating as crowdfunding platforms, had introduced new opportunities to source funds for small and medium sized enterprise (SME) campaigns for investors to invest in.

In recent years, the rise in the formation and implementation of alternative finance solutions has been nothing short of extraordinary. It’s speedy and expansive growth cannot be denied, nor overlooked. The rapid ascension of alternative finance in the 2010’s can be characterised by exponential increases in:

1. **Firstly**, in the context of internet access across all global demographics:
   The advent of continuous evolution in providing access to the internet and other digital, online resources has transformed the way in which consumers have engaged with financial institutions and service providers alike. A specific example of this has been seen in countries such as India and regions such as Latin America, where there are higher levels of unmet demand for financial services such as basic banking, modes of payment and money transfer services leading to the rapid uptake of financial technology solutions such as mobile payment offerings;

2. **Secondly**, in the context of the ability of alternative lenders or investors to fill a gap in the market, created by banks and other traditional financial institutions:
   A classic example of this is Funding Gap for SMEs, brought on by traditional banks through the classification of the extension of credit to SME’s as being extremely risky and thus, withdrawing from and avoiding engagement with such businesses;

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42 https://www.kiva.org/
43 https://www.zopa.com/
44 https://www.prosper.com
45 Web 2.0 refers to websites that emphasize user-generated content, ease of use, participatory culture and interoperability for end users. https://en.wikipedia.org/wiki/Web_2.0
46 https://www.indiegogo.com/
47 https://www.kickstarter.com/
48 Jon Frost “The economic forces driving fintech adoption across countries” BIS, Working paper number 38 (2020)
49 A keystone report from the Institution of International Finance has in 2013 outlined 4 key impediment sets that exist against SMEs seeking to finance and raise capital for their businesses. They include: (a) The high cost and difficulty in obtaining information about the creditworthiness of SMEs; (b) The competitiveness and disincentives facing SMEs to remain financially healthy; (c) the state of banks with limited abilities to manage risks; and (d) The barriers that exist for alternative financing providers to finance SMEs. Refer to: Institute of International Finance, ‘Restoring Financing And Growth To Europe's SMEs' (2013) <https://www.iif.com/Press/View/ID/1695/Restoring-Financing-and-Growth-to-Europes-SMEs> accessed 30 April 2020.
3. **Thirdly**, in the context of the global financial crisis of 2008, there was a near-tangible loss of faith in traditional financial institutions, through the after-effects suffered thereinafter by affected persons and entities; and

4. **Finally**, in the context of the banking sector: the development and imposition of regulatory restrictions. In reiteration of that which was stated *supra*, such regulatory restrictions are often regarded to be rigid, restrictive, obstructive, preventive and not adequately fit for purpose of effectively and sufficiently facilitating the necessary, as intended.

A more generalized, yet key driver of fintech adoption is the cost of the incumbent financial service offerings with financial technology having a greater adoption rate in countries where financial services are relatively more expensive, or there is less competition among providers\(^{50}\). This thus results in a higher number of opportunities for new fintech entrants to capitalize on their potential and offer more efficient services while increasing the level of competition with incumbent financial institutions, pressuring them to lower the costs of their financial service offerings\(^{51}\).

Globally, it is well accepted that higher levels of technology play a key role in the evolution of new and newer age alternative financing models, thus, some sources define newer age alternative financing solutions as being technology based financial solutions, catering widely to consumers and business, particularly, small and medium enterprises\(^{52}\) or simply: ‘fintech’. Fintech embodies a newer, more abstract and forward-thinking set of solutions, specifically tailored to cater to the needs of all types and sizes of organizations, not primarily catering to SMEs; and help widen their access to much needed funding.

This, combined with the factors detailed hereunder, have resulted in the rapid emergence of Fintech solutions, such as peer-to-peer lending, crowdfunding and tokenization as being viable alternative financial solutions, providing:

1. Increased availability of data in this digital / information age – particularly in the context of the present, Fourth Industrial Revolution\(^ {53}\);
2. Increased regulatory support, governance and supervision; and
3. Enhanced understanding, adoption and implementation of evolving global best practices and policies.

Additionally, Fintech solutions offer a virtuous range of functionality and features, which are designed and can provide services around the clock and are easier, less costly and more efficient to set up, configure and use. Their rise has made the financial choices of organisations and entities more complex than ever before, including the ability of SMEs to turn to internet-enabled alternative finance solutions to meet their financing needs. The emerging Fintech solutions has demonstrated that technology and

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50 Supra no. 49 (Jon Frost)
51 Ibid.
52 Supra no. 2 (Dinardo)
53 https://www.weforum.org/agenda/2016/01/the-fourth-industrial-revolution-what-it-means-and-how-to-respond/
digitalization can result in better transparency, lower transaction costs by eliminating many of the intermediaries needed to facilitate financial transactions, lower the cost of financing and generally thereby make financial services more inclusive\(^{54}\).

More recently, disruptors in this space are using additional integrated, sophisticated technologies in their make-up and design, such as artificial intelligence, big data and other game-changing capabilities to spur and enhance all of the aforementioned benefits – particularly so in creating greater financial inclusion and improve access to finance for the unbanked populations, by traditionalist finance standards. This fact can be seen through the explosion of more advanced peer-to-peer lending marketplaces and online alternative payment systems which have persevered through and penetrated several harsh business environments of various global regions, including that of the Arab region, to create easily accessible financial products, as well as increasing transparency and cost competitiveness (and cost efficacy) in the finance industry as a whole.

As of 2017, the Fintech disruption had reportedly resulted in 88% of incumbent financial institutions fearing that they would lose money to the disruptive innovation of Fintech companies\(^{55}\). This realisation appears accurate, given the disruption witnessed long before, and since this reported statistic of 2017. Fintech disruption has been in full swing, particularly so following the Global Financial Crisis of 2008 and all sized organisations are seeking alternative financing models to ease the various burdens of and adequately, appropriately and properly address their respective funding needs.

**Commonly used forms of Alternative Finance Solutions:**

<table>
<thead>
<tr>
<th>TYPE OF ENTITY</th>
<th>TRADITIONAL TYPE / SOURCE OF FINANCING</th>
<th>ALTERNATIVE TYPE / SOURCE OF FINANCING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start-ups &amp; Microsized entities (typically, less than 30 employees)</td>
<td>• Friends, Family and the Founders themselves • Credit facilities – i.e. credit cards • Angel investors • Venture capitalists</td>
<td>• Seed funding from acceleration and incubation programs • Crowd funding • Invoice Trading</td>
</tr>
</tbody>
</table>


Alternative Modes of Finance: Overview and Guidelines for the Arab Countries

Globally, the alternative finance market’s impact and role continues to grow and has expanded greatly between 2010 and 2018, with alternative finance platforms facilitating $305 billion in financial transactions in 2018\(^5\). This, however, was a contraction of the alternative finance market volume from $419 billion in 2017, which can be attributed to a sharp decline in alternative finance activity in China due to the imposition of regulations in the previously unregulated market\(^6\).

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57 Ibid
Most alternative financing solutions operating in the Arab region share some of the following common characteristics:

1. They are “digital businesses” operating through online-based platforms;
2. They provide financial services, but they are not banks; and
3. They leverage the scale of online platforms to secure numerous lenders and investors.

Digitization has enabled various new forms of cooperation and participation amongst market participants and which, in turn, has led to new business models, products and service offerings, as well as new forms of relationships with users / customers and employees. Key technologies that enable digital transformation include, among other things, cloud computing, digital identity, DLT, artificial intelligence, machine learning, advanced data processing and analytics; application

programming interfaces, open and modular architecture and digital data management. These advanced technologies can be put to use to foster innovation and benefit the users at large. Digital financial products, including that of digital loans, equity capital through crowdfunding platforms, tokenization and invoice financing have been built upon the fundamentals and foundations of these technologies.

Financial technologies assist in providing ‘Digital Financial Services’ (DFS) to those who need finance. DFSs have unparalleled potential to lower costs by maximizing economies of scale and to increase the speed, security and transparency of transactions. Furthermore, ancillary technological development such as a digital ID has made customer-identification possible, which aids businesses to onboard customers diligently and efficiently; and provides customers with instantaneous access to financial services.

Open banking, in which customers’ data is shared by traditional financial institutions, extends online financial services to customers. Through the use of APIs, open banking provides improved customer experience, new revenue streams and a sustainable service model. Open banking thus provides opportunity and a platform to new business models to operate, which can provide financial services to those in need. Sharing economies facilitate peer-to-peer transactions via digital platforms such as applications on Internet-enabled devices. The use of alternative data sources, big data and machine learning, and complex AI algorithms reduce the cost of making credit decisions and lower operating costs for lenders. Fintech lenders could potentially pass the benefits onto borrowers.

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62 Ibid.
Some of the most common forms of Alternate Finance Solutions are illustrated in the chart below:

Assessment of the market and regulatory landscape in the Arab Countries:

Market overview:
Many governments, globally, have increasingly become aware and active in their search and desire to support start-ups through varied licenses, sandboxes and other implemented regulatory efforts. In many cases, coordination across countries is paramount for mass scale Fintech implementation and efficacy. We have seen this taking place in the launch of the Global Financial Innovation Network (GFIN), which was launched with the intention to provide a framework for cooperation between financial services regulators on Fintech related issues, and also to address various challenges impacting organizations offering financing service products across borders. Another example is the launch of

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66 https://www.thegfin.com/
the API Exchange68 (APIX) - an initiative of the ASEAN Financial Innovation Network (AFIN), a not-for-profit entity that was jointly formed by the Monetary Authority of Singapore69 (MAS), the World Bank Group’s International Finance Corporation70 (IFC) and the ASEAN Bankers Association71. It is a global, open-architecture platform that aims to support financial innovation and inclusion around the world.

Working consistently with the global developments and trends, the governments and regulators in the Arab region have progressively moved ahead to create avenues for growth and innovation in the Arab countries. The proactive approach of numerous regulators, including the Arab Monetary Fund72 and all entities enjoined as members thereunder, as well as the growth in regional markets are just a few reasons for the substantial growth in online alternative finance industry in the Middle East73 over the last few years.9

As of April 2020, 33.2% of the population in the Middle East and North Africa were documented to be active users of the internet74. These numbers, in light of the impact of Fintech on smaller business and by necessary extension, the economy in regions with higher internet penetration rates, illustrates the seemingly tremendous potential that Fintech products innately possess to act as a catalyst for financial inclusion and growth in the Arab region. This statistic, similarly, attests to the fact that the current climate of online alternative finance in the region is delicate, and albeit, is making slow progress in growth, it still is foregoing the wide range of benefits and requires measures to be put in place to capitalise on the potential benefits of online alternative financial solutions.

It is important to note a marked variation in the trends between the various types of funding models and available Fintech solutions which are being adopted.

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68 https://apixplatform.com/landing
69 https://www.mas.gov.sg/
70 https://www.ifc.org/wps/wcm/connect/corp_ext_content/ifc_external_corporate_site/home
71 Ibid
72 https://www.amf.org.ae/en
73 Middle East – Jordan, Bahrain, Syria, United Arab Emirates, Lebanon, Palestine, Kuwait, Saudi Arabia, Lebanon, Qatar, Iran, Israel, Yemen, Iraq.
The Impact of the Changing Landscape:

The policymakers throughout the Arab countries have prioritised the cementing of the strength and vitality of the SME sector. This has been illustrated over the last few years where the online alternative finance sector has grown to become a key mechanism for entrepreneurs, start-ups and SMEs to fund their projects and ideas. Furthermore, in the Middle East, the vast majority of investors interacting with online alternative finance solutions are individuals rather than institutions which made up 11.8% for the region. Institutional participation can be majorly seen in Balance Sheet Business lending wherein they contributed 75% of the entire volume, which in context of the region and type of model.

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Developments in this region are fostering innovation such that the entities operating in the alternative finance market, especially in a new and evolving market are characterised by models which they frequently make changes to.

According to research by the Cambridge Centre for Alternative Finance, in the Middle East almost all platforms adhering to a financial model have altered their business model in 2018. The changes are demonstrated as per the below graph:\footnote{Image source: Cambridge Centre for Alternative Finance, 'Global Alternative Finance Market Benchmarking The Report' (2020) https://www.jbs.cam.ac.uk/faculty-research/centres/alternative-finance/publications/the-global-alternative-finance-market-benchmarking-report/ accessed 9 May 2020.}
The regulatory landscape in alternative financing in the Middle East has been changing dynamically over the last few years, with it being driven by various countries’ efforts to support Fintech more broadly with many markets seeking to be domestic and international leaders in the space. This will continue to be the theme given the number of financially excluded consumers in the Middle East and the potential opportunities for both social impact and commercial projects.

A 2017 research report noted that the Abu Dhabi Global Market (ADGM) and Dubai International Financial Centre (DIFC) in the United Arab Emirates (UAE) are regarded as two of the most prominent financial centres in the Arab region, who have launched regulatory initiatives to support online alternative finance and Fintech. Due to these regulators being one of the first movers as far as regulators go, they have made regulation easier for late adopters and other markets planning to implement regulatory frameworks. A World Bank survey has shown that regulatory benchmarking is a crucial input into regulatory change for alternative finance, and that regulators learn from each other’s successes and failures and adapt to meet local, national level needs. One of the most notable talking points is the use of alternative finance for financial inclusion and in countries like the UAE, Jordan and Qatar, where all these nations have explicitly articulated their desire to financially include overlooked and under supported regions through alternative finance.

A common approach in the region to foster innovation has been the introduction of ‘regulatory sandboxes’ where a number of countries have provided a regulatory framework and set of tools for financial service providers, in order to test innovative products and business models, albeit on a small, limited scale. Lebanon, the UAE and Bahrain are seen as leading the way in the development of specific regulatory regimes for crowdfunding sector with Jordan, Saudi Arabia and Egypt close on their heels in implementing similar bespoke regulations. Overall, perceptions towards the existing regulations have changed notably over the years, with significant positive and negative shifts being seen.

Digital Payments and Payment Gateways:

As highlighted above, the increased availability of data networks, smart phones and mobile communication devices have created an immense need and demand for digital payment and payment gateway solutions. Business enterprises and customers rely on these digital payment methods to facilitate and support alternative financing solution models such as crowdfunding, tokenization,

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etcetera. They also expect transactions to occur nearly instantaneously and securely, hence, we have seen a rise in innovation and development when it comes to technology in this space.

The crowdfunding eco-system requires a robust digital payment and payment gateway platform to facilitate the remittance of payments. Digital payment and payment gateway solutions increase the accessibility and ease with which crowdfunding activities can take place. Secure and universally accepted digital payment gateways can ensure the legitimacy of crowdfunding campaigns and can carry out the necessary due diligence verifications. The due diligence and anti-money laundering (AML) checks at the check-out point of a payment gateway platform can guarantee fraud protection, to best prevent there against and ensure reliable payment flow in crowdfunding campaigns. Tokenization enables and facilitates digital wallets and digital payment solutions to provide a new layer of security for digital payments, without hindering the e-commerce experience. Tokenization is primarily intended to protect users of the digital payment platforms against online fraud, unauthorised access and digital breaches.

In the context of cloud payment environments, Tokenization allows online merchants to securely store a user’s payment details to simplify future transactions by enabling new payment solutions, such as online ‘single-click checkout’ and digital wallets that use near-field communications (NFC). Tokenization ensures compliance and reduces the scope of the Payment Card Industry Data Security Standard82 by minimizing the number of systems accessing sensitive payment information of a user.

Digital Payments – Advantages and Challenges:

- **Advantages**
  - Convenience to users
  - Wide coverage by enabling wider access to a variety of e-payment services
  - Services are cost effective for users and service providers
  - Interoperability across service providers
  - Protects integrity of systems, security of operations and customer protection

- **Challenges**
  - Threat of cyber-attacks such as phishing, cyber espionage, identity theft, merchant fraud, malware, etc.
  - Lack of internet or smart device access across the country
  - The older generation’s preferred reliance on cash transactions
  - Privacy and data protection concerns
  - Know Your Customer / Anti-Money Laundering concerns

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The Digital Payments and Payment Gateway Landscape

The digital payments landscape is steadily growing as new market participants, emerging technologies and changing customer expectations create disruptions among the industry stakeholders. The volume and diversity of alternate payment providers gaining momentum within the non-cash transaction market have grown significantly. BigTech (Technology Giants) and Fintech companies are using their technology to integrate payment methods into user-friendly applications and payment gateways. This includes new entrants to the market such as Google Pay, Facebook, Amazon, Apple Pay and other FinTechs that host innovative digital payment platforms. These platforms use Tokenization to protect their users and simultaneously, so as to ensure cyber security and data protection.

The Worldpay 2020 Global Payments Report indicated that even as global e-commerce continues to grow to an estimated $5.9 trillion by 2023, the digital marketplace is rapidly evolving as digital and mobile wallets transform consumer behavioural patterns and expectations. Globally, the use of digital and mobile wallets was recorded at 21.5 percent of the payment methods used in 2019 and is estimated to grow up to 29.6 percent in 2023.

The Asia-Pacific region continues to dominate the global payments revenue pool, the electronic payments transactions have been growing at a rapid rate of over 15 percent annually. This is more than 2.5 times the rate of the GDP growth for the Asia-Pacific area. This growth is largely owed to the increased adoption of alternate digital payment mechanisms and the strong encouragement of regulators to reduce cash usage. This has led to an emergence of digital payment service providers.

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84 https://en.wikipedia.org/wiki/Big_Tech
85 https://pay.google.com/about/
86 https://www.facebook.com/
87 https://www.amazon.com/
88 https://www.apple.com/apple-pay/
Such as WeChat Pay\(^93\), Alipay\(^94\), Paytm\(^95\), RuPay\(^96\), PhonePe\(^97\), LINE Pay\(^98\), Rakuten Pay\(^99\), GOPAY\(^100\), and others.

**A Look into: Alipay**

Alipay, originally started as an affiliate of the popular e-commerce conglomerate Alibaba\(^101\) in order to serve their financial requirements. It has now evolved to a larger scale as a leader in online and mobile payments with over 1 billion users\(^102\), handling the majority of all online transactions in China. Alipay owes its explosive growth to the reluctance of the Chinese market towards credit card adoption as a payment method, thereby leading to the exponential growth of the mobile payment market to facilitate e-commerce. Alipay has now expanded beyond that of a digital payments provider to become a leading financial services provider. Their entrance into the credit lending market created more opportunities for the platform allowing it to grow into a well-designed credit assessment franchise with a credit-scoring service called Sesame\(^103\). This data-driven product increased the availability of credit to millions of consumers across China and has allowed them access to short loan services such as mortgages, mobile phone contracts or car loans\(^104\).

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\(^94\) https://intl.alipay.com/  
\(^95\) https://paytm.com/  
\(^96\) https://www.rupay.co.in/  
\(^97\) https://www.phonepe.com/en/  
\(^98\) https://pay.line.me/portal/global/about/sign-up  
\(^99\) https://rakuten.today/tag/rakuten-pay  
\(^100\) https://www.gopay.com/en/  
\(^101\) https://www.alibaba.com/  
\(^104\) 'Does China’S Bet On Big Data For Credit Scoring Work?' (Ft.com, 2020) <https://www.ft.com/content/ba163b00-fd4d-11e8-ac00-57a2a826423e> accessed 11 May 2020.
Further expanding on the types of Alternative Finance Solutions:

Crowdfunding:

The concept of crowdfunding stretches as far back as capitalism does, tracing back to the 18\textsuperscript{th} century\textsuperscript{105}. As one of the more famous models of business investment that can be classified as an alternative finance solution, the definition of crowdfunding is still open-ended and under discussion. It has been unanimously agreed in literature, that crowdfunding originated from the broader concept of “crowdsourcing”, which can be defined as: “the act of taking a job, traditionally performed by a designated agent and outsourcing it to a large group of people”. This concept has developed to define crowdfunding by essentially replacing “job” with “loan” or “money”. However, the definition is often manipulated to favour more, not only the core principles, but also encompassing the varying aspects of the newer and more well-known forms of crowdfunding. Thus, to eliminate any bias, a definition must be stripped down to describe only the fundamentals of the term. Crowdfunding could therefore be defined as the process of taking a project or business, in need of investment, and asking a large group of people, usually the public, to supply this investment\textsuperscript{106}. The premise of a crowdfunding model for business investment was traditionally and more commonly found in the use of early-stage funding such as initial public offerings (IPO) for raising finance.

The idea of matching people who need money with the people who have money to invest is not new; what is new is the way this concept of intermediation is facilitated (and made easier) by technology. The difference between crowdfunding and traditional fundraising can be drawn clearly on the following grounds:

<table>
<thead>
<tr>
<th>CONCEPT</th>
<th>CROWDFUNDING</th>
<th>TRADITIONAL FUNDRAISING</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONCEPT</td>
<td>Crowdfunding perfectly blends the features of crowdsourcing and micro-financing, by using various online platforms, to raise funds from the masses, in small amounts.</td>
<td>Traditional fundraising is the technique of arranging funds for executing the business idea using conventional sources such as taking loans from banks, angel investors and venture capital.</td>
</tr>
</tbody>
</table>

\textsuperscript{105} Medium, ‘12 Key Moments In The History Of Crowdfunding (So Far)’ (2017) \textless https://medium.com/@ImpactGuru/12-key-moments-in-the-history-of-crowdfunding-so-far-3f614273d95\textgreater accessed 27 February 2020

\textsuperscript{106} Guidelines for Successful Crowdfunding, 27th CIRP Design (2017) \textless www.sciencedirect.com\textgreater accessed 27 February 2020
# Alternative Modes of Finance: Overview and Guidelines for the Arab Countries

<table>
<thead>
<tr>
<th></th>
<th>CROWDFUNDING</th>
<th>TRADITIONAL FUNDRAISING</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>REQUIRED RESOURCES</strong></td>
<td>It is easier to find investors for the project or idea.</td>
<td>It requires more efforts and resources to persuade the investors to invest in your business.</td>
</tr>
<tr>
<td><strong>CONFIDENTIALITY</strong></td>
<td>The idea/business venture does not remain confidential, as it is visible to all parties on the crowdfunding website or social media.</td>
<td>Confidentiality and secrecy of the idea can be maintained in case of traditional fundraising.</td>
</tr>
<tr>
<td><strong>RISK OF THEFT</strong></td>
<td>There is a risk of the theft of an idea due to the idea being openly available to the wider public.</td>
<td>The idea can remain safe with the funding individuals and organization.</td>
</tr>
<tr>
<td><strong>ACCESSIBILITY</strong></td>
<td>Business can reach a larger number of people in just one click, without any boundaries.</td>
<td>Traditional fundraising allows only a few high net-worth individuals, banks or financial institutions to be contacted to showcase the idea.</td>
</tr>
<tr>
<td><strong>MARKET FEEDBACK</strong></td>
<td>Once the idea has been introduced, it inevitably reaches the wider public, thus there is a greater chance for the business to receive relevant market knowledge through positive and negative feedback.</td>
<td>No such information is provided, as the idea is not disclosed to the general public, and only the investors see the profit potential in the idea.</td>
</tr>
<tr>
<td><strong>INVESTOR CONTROL</strong></td>
<td>The business control and management remain in the hands of the promoters, as the contributors contribute in small sums, so they have no direct say in the business.</td>
<td>The investors own stake in the company, and so they get the right to control the business decisions and appointments.</td>
</tr>
<tr>
<td><strong>INVESTOR MOTIVATION</strong></td>
<td>The contributors, prior to pledging cash mainly focus on the innovative, interesting and thought-provoking idea, that provides returns in various forms.</td>
<td>The investors primarily focus on the idea which has the capacity to generate revenue.</td>
</tr>
</tbody>
</table>
Crowdfunding is being recognized as a *Web 2.0* based phenomenon. Due to the ever-increasing influence and disruptive nature of the internet, crowdfunding has become an integral tool for financial intermediation. The digitization of society is one of the factors that has facilitated the exponential increase in popularity of this form of alternative financial solution.

### A Typical Crowdfunding Structure

The crowdfunding process generally involves the following structure:

1. **INVESTORS/BENEFICIARIES**
2. **CROWDFUNDING PLATFORM**
3. **INVESTORS**

- Operating costs
- Fee
- Return

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107 Web 2.0 refers to websites that emphasize user-generated content, ease of use, participatory culture and interoperability for end users. [https://en.wikipedia.org/wiki/Web_2.0](https://en.wikipedia.org/wiki/Web_2.0)
A general illustration of the process flow of a crowdfunding process is detailed below:

**Process Flow of a Generalist Crowdfunding Campaign**

The fundraisers must first plan their campaign, after which they must determine the crowdfunding platform on which they intend to launch the campaign, taking into consideration the nature of the crowdfunding platform.

Once the fundraisers have paid a fee to the crowdfunding platform, the fundraisers are required to have their financial and credit profile checked and will subsequently be given a credit score. This credit score will allow the platform to match the fundraiser with the investor and create a tailored investment proposal.

It is also important for the fundraisers to spread the word amongst their own close communities as well as advertise the campaign. However, if the fundraisers campaign already has taken off and is attractive, the fundraisers will get approached by investors.

From the investor’s perspective, they must enter create an account on the platform and enter specific details relating to the amount of money they intend to invest as well as the nature of investment proposed to be undertaken by them. The platform shall then show the investor various investment options for the same or similar amount of money, in bulk or smaller ‘chunks’.

Once the fundraisers are in touch with an investor and the parties have agreed the details of the investment, it is key for the fundraiser to keep the investor in the loop and constantly provide updates relating to the progress the fundraiser is making, as the entire success of their campaign depends on the investors.

The investor then also has the choice of recycling the repayment of the investment plus its interest or dividend and reinvesting the amount in another range of potentially successful projects.

Once the fundraisers have successfully developed their product or service and have met certain conditions (according to the agreement with the investor), they must pay a certain return on the investment (in form of interest or other profit entitlement) made or deliver the products or reward, as may have been promised.
There exists a variety of stakeholders that participate in the end to end crowdfunding process, a majority of which are identified below:

1. **Crowdfunder**: backer, donor, investor and, in some cases, private and public institutions;
2. **Beneficiary-investee**: small companies, NGOs, individuals, start-ups, product/project initiative;
3. **Crowdfunding online platform**: a tool able to connect Crowdfunders with the fundraisers, remunerated through commission from both the Crowdfunder and the beneficiaries;
4. **Third party verifier and other service providers**: those parties who support crowdfunding platforms and beneficiaries/investees by providing services including due diligence, legal support, tax structuring, project monitoring.
5. **Sponsors**: those aiding in designing and running crowdfunding campaigns on a pro-bono basis or on a commercial one.

### Types of Crowdfunding:

Over the years, to best meet the need of each type of project, several categories of crowdfunding have emerged, each differing in the manner the user/investor gains a financial return. There are essentially 7 (seven) different forms of crowdfunding, which are shown below, and subsequently further elaborated upon in explanation of each of the types:

<table>
<thead>
<tr>
<th>Sponsoring and reward-based crowdfunding</th>
<th>Donation-based crowdfunding</th>
<th>Real Estate Crowdfunding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project supporters can ‘pledge’ funds for a project in return for a non-financial pre-determined reward. The money provided under this model is not an investment. Instead the project supporters are concerned with the achievement of the applicant’s objectives and often receive a new product at a discount or something with intrinsic or emotional value. Examples of companies that have followed this model and have been massively successful include</td>
<td>The donation-based form is used by individuals or charitable organizations to collect money from a group of people in the forms of donations, with the aim to support charitable projects, in exchange for symbolic rewards, like invitations for special events or public recognitions. The role of the platforms for donation-based crowdfunding is to provide a marketplace where people can ask for donations for their projects, and donors can be confident that the projects are</td>
<td>Real Estate crowdfunding is a type of property investment whereby the funds of many investors are pooled together and used to buy a property or where funds are lent to developers as a loan to finance a property development. Typically, individuals contribute small amounts which can be beneficial for several reasons, such as facilitating a fast way of raising a large amount of money, and means investors want to commit</td>
</tr>
</tbody>
</table>

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players like Kickstarter\(^\text{108}\) and Indiegogo\(^\text{109}\). In the Middle East Region, Zoomaal,\(^\text{110}\) a crowdfunding platform based in Lebanon, which encourages Arab entrepreneurs and creatives, including artists, filmmakers and authors, to submit their project pitches for funding by supporters from all around the world. Supporters can contribute any amount they like to project of their choice, and the start-ups’ founders offer rewards to supporters based on their contributions.

**Key Advantages:**

1. No dilution of control as there is no obligation to roll out equity.
2. Financing not only entitles access to sources of funds, but also helps in building brand image and reputation amongst stakeholders.
3. Provides incentive to the business to perform better than its competitors and grow, as performance entitles them to funds.

creditable causes and the platform will handle the transactions in a timely and professional manner.

An example of such a platform includes “JustGiving”\(^\text{112}\), a global donation-based crowdfunding platform that is headquartered in London,\(^\text{113}\) and which had raised over £30 million GBP for the National Health Service, United Kingdom to aid the COVID-19 pandemic\(^\text{114}\).

Another example is that of YallaGive\(^\text{115}\) - the first licensed online donation and crowdfunding platform in the Middle East which launched a campaign in the MENA region to help rescue wildlife from Australian bushfires, in collaboration with Emirates Nature-WWF\(^\text{116}\) and Aussie-themed sports bar Bidi Bondi.\(^\text{117}\)

smaller amounts can gain access to deals which they wouldn’t otherwise be able to participate in. Once purchased, returns are equitably shared between the individual investors. For a property equity investment, this is typically rental income and any capital appreciation generated by profits in the underlying value of the property. For a property-backed loan investment, this is interest on the lent funds.

In the UAE, Smart Crowd\(^\text{118}\) has successfully managed to create new alternative ways available to them to join the real estate ladder.

**Key Advantages:**

1. Increased accessibility to investors from across the globe.
2. Diversification in currencies from different parts of the world, due to increased global outreach.

\(^{108}\) https://www.kickstarter.com/
\(^{109}\) https://www.indiegogo.com/
\(^{111}\) https://www.justgiving.com/
\(^{114}\) https://www.smartcrowd.ae/
## Key Advantages:

1. No long waiting periods for approval of grants and donations, as is typically the case while providing grants to most NGOs.
2. Less sunk costs are incurred in publicity to attract donors.
3. It helps to build transparency within the organization, as the source of funds are available within the public domain.
4. It enables direct interaction with the donors, thus culminating a more loyal donor base.
5. Lack of complex paperwork, ensuring efficiency and the swift transfer of funds across the globe.
6. Leveraging the risk across geographical and political boundaries, thus - a particular adverse impact of a different country, would not have an overall adverse impact on the project.

<table>
<thead>
<tr>
<th>Peer-to-peer lending (sometimes called crowdlending or marketplace lending)</th>
<th>Crowd-investing or equity-based crowdfunding</th>
<th>Invoice trading</th>
</tr>
</thead>
<tbody>
<tr>
<td>This is a direct alternative to a bank loan with the difference being that, instead of borrowing from a single source, companies can borrow directly from tens, sometimes hundreds, of individuals who are ready to lend funds.</td>
<td>This model - a preferred model for SMEs and start-ups, which encompasses a structure where investments are made in a business, with the return on investment coming eventually and in the form of dividends and appreciations in the value of shares. In general, the business will have to choose the nature of security that may be given to the investors, the price</td>
<td>Invoice trading platforms provide finance for businesses against individual invoices, rather than signing clients up for long term contracts. In this model, the platform connects businesses selling invoices with investors lending against those invoices via an online ‘peer-to-peer’ network. The investors purchase unsettled business invoices at a discounted rate of the <em>prima facie</em> invoice</td>
</tr>
</tbody>
</table>

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120 [https://www.lendingclub.com/](https://www.lendingclub.com/)

loans. After assessing the creditworthiness of a borrower, Lending Club enables borrowers to create loan listings on its website by providing details about themselves and the loans that they wish to obtain. All loans are unsecured personal loans and can range between amounts of $1,000 - $40,000.

The Beehive platform is based in Dubai, UAE and it is the first peer-to-peer lending platform in the MENA region to be regulated by the DFSA. It has raised over 577 million from over 560 business funding requests with a registered investor ecosystem of 12,000.

**Key Advantages:**

1. Higher returns to the investors, given the small gestation period of the projects and easy accessibility of funds.
2. Easy accessibility, based on the sheer fact that there is minimal paperwork involved.
3. Further, stringent background checks or credit score valuations

The businesses need to produce a strong business plan with financial forecasts. This model has serious legal implications, including a possible impact of laws relating to public offer of securities, a study of the class of investors investing, foreign investment regulations, as well as those associated with the corporate governance and management.

Seedrs, UK’s acclaimed equity based crowdfunding platform facilitated over 215 investments throughout 2019 and raised over £280 million on the platform.

Eureeca is another popular crowdfunding platform in the UAE. It is the first global equity crowd funding platform and has an office in Dubai.

**Key Advantages:**

1. Increased cash flow when there is a dearth of cash for most transactions being that of credit nature,
2. It speeds up the working capital cycle, by converting the future receivables into current available cash.
3. No dilution of control of business ownership.
4. No obligation to inform the clients, thus saving time and paperwork.

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122 <https://www.beehive.ae/>
124 <https://www.seedrs.com/125
128 Ibid.
| are not done, thus providing easy and quicker access to funds. |
| High returns to the investors, as any successful crowdfunding campaign attracts a lot of public and media attention. |
| Ensures diversification of the sources of finance. |
| Key Advantages: |
| 1. Provides access to owner’s capital without getting entangled in numerous complexities and formalities, as per the traditional finance model. |
| 2. Minimizes risk by obtaining the finance from a large pool of investors, investing at low levels; thus, spreading the risk. |
| 3. Acts as a marketing tool to attract prospective customers to the product of the firm. |
| 4. Builds a ready network of investors for funding in the future, in cases of business expansion. |
| 5. Builds brand value and increases credibility. |
| 6. Generates free media exposure as any successful crowdfunding campaign attracts a lot of public and media attention. |
| 1. Ensures diversification of the sources of finance. |
| 2. Minimizes risk by obtaining the finance from a large pool of investors, investing at low levels; thus, spreading the risk. |
| 3. Acts as a marketing tool to attract prospective customers to the product of the firm. |
| 4. Builds a ready network of investors for funding in the future, in cases of business expansion. |
| 5. Enables the firm to clear its short term debts swiftly and without getting into a debt trap. |
| 6. Offers protection against bad debts by transferring the liability to collect on the Invoice Trader. |
How does peer-to-peer lending work?\textsuperscript{129}

Peer-to-peer lending is a straightforward process. All the transactions are carried out through a specialized online platform. Some of the key features include\textsuperscript{130}:

1. Risk profiling: an important aspect of peer-to-peer lending as a borrower with low risk profile will get loans with a lower interest as opposed to borrowers with a higher risk.
2. These interest rates define the risk factor associated with lending to a person. Past repayment behaviour, his diligence in making repayments and repayment of past loans may determine his intention and ability to repay\textsuperscript{131}.
3. Greater flexibility with interest rates: If the campaign is popular; investors may compete to lend money to your business and offer better interest rates to secure the deal.
4. Loan sizes can vary greatly so it is possible to cater for a wide range of needs. The minimum loan size is very small, which encourages a wide range of lenders to participate.

Peer-to-peer lending differs from standard business loans in more ways than just receiving loans from a range of investors. With peer-to-peer lending, the platform facilitates the entire arrangement,

\textsuperscript{129} 'Peer-To-Peer Lending - Overview, How It Works, Pros & Cons' (Corporate Finance Institute, 2020) <https://corporatefinanceinstitute.com/resources/knowledge/finance/peer-to-peer-lending/> accessed 15 May 2020.
which means that the platform will conduct the general due diligence of requiring the business’ turnover, profits, trading history as well as filed accounts and how the borrower intends to use the money borrowed\textsuperscript{132}. The loans are generally unsecured and as such the risks are considered to be higher for lenders regardless of the close scrutiny the borrower’s business profile will go through. It is pertinent to note that peer-to-peer lending is an extremely popular alternative to banks for both businesses and investors due to their competitive interest rates and the speed at which they can be set up. \textsuperscript{133}

Peer-to-peer lending is multifaceted and can be broken down into three (3) primary subsets, with each being characterised by a different market segment. These subsets include:

<table>
<thead>
<tr>
<th>Peer-to-peer business lending</th>
<th>Peer-to-peer consumer lending</th>
<th>Peer-to-peer property lending</th>
</tr>
</thead>
<tbody>
<tr>
<td>Herein, credit can be provided to the small business owners who are in the market for business loans but were not able to secure them from traditional lending institutions. This category of P2P lending has cemented</td>
<td>Herein, credit can be provided to a natural legal person who shall repay the principal to the lender with an interest on the loan</td>
<td>Herein, credit can be provided to businesses or individuals who require funding for projects relating to property (such as house flipping or ground-up construction). This branch of P2P lending is often considered to have an inherently lower risk profile in comparison to other P2P options, as the physical property is used to secure the loans as collateral.</td>
</tr>
</tbody>
</table>

\textsuperscript{132} 'Peer-To-Peer-Lending | Funding Options' (Fundingoptions.com) \textless https://www.fundingoptions.com/knowledge/peer-to-peer-lending/\textgreater accessed 15 May 2020.

\textsuperscript{133} https://p2pmarketdata.com/p2p-lending-explained/
Alternative Modes of Finance: Overview and Guidelines for the Arab Countries

P2P LENDING MODEL OR LENDING BASED CROWDFUNDING

Lending-based crowdfunding platforms, a subset of crowdfunding, is often presented as an alternative to traditional banks and finance options provided by the latter. Although lending based crowdfunding platforms do not technically transform risk and maturity, there is an ongoing experimentation with different business models (automated lending, provision funds, secondary markets, etcetera.) which allows platforms to manage risk, play the role of delegated monitor and provide liquidity services\textsuperscript{134}.

The International Organization of Securities Commissions in its working paper on the growth of the crowdfunding industry has illustrated the presence of two main business models governing the peer-to-peer lending market\textsuperscript{135}, namely:

1. **The Notary Model** - This model is where the online platform acts only as an intermediary between the lender and the borrower, matching them to each other and allowing the lender to bid on the loans they want within their portfolio. Once the requisite amount of money is reached, the loan is originated from a partnering bank, as opposed to the online platform themselves. The online platform then issues a note to the lender for the value of their contribution to the loan. This note is considered by many jurisdictions to be a security,\textsuperscript{136} which therefore, shifts the risk of loan non-payment to the lenders themselves and away from the bank originating the loan.\textsuperscript{137} The notary model is particularly popular within prominent crowdfunding platforms such as *Prosper* and *Lending Club*\textsuperscript{138}.


\textsuperscript{136} Chaffee and Rapp, 2012


\textsuperscript{138} Supra 125
2. **Client Segregated Account Model** - This model is where an individual lender is matched to an individual borrower through the intermediary online platform, whereby a contract is set up between the individuals with the platform, being a mere window for the loans. All funds from lenders and borrowers are separated from the platform’s balance sheet and go through a legally segregated client bank account, over which the platform has no claim in the event of the platform’s collapse.

As such, the contractual obligation between borrower and lender still applies in the event of the platform’s failure. The borrower pays an origination fee and the lender, depending on the platform, has to pay an administration fee and an additional fee if they choose to use any automated service the platform may provide.
Insights into CASHe:139

CASHe, which started as a payday lender is now one of India’s most accessible application-based credit lending platform, which allows for the instant underwriting and disbursements of short term personal loans to people who have never held any formal credit history, through means of a smartphone-enabled application. CASHe has revolutionized the short-term personal loan market in India, by creating a one-stop shop for end-to-end solutions such as loan eligibility, application approval and document disbursal, all while eliminating all human interactions140. Currently, CASHe is at the forefront of the significant consolidation of India’s online lending segment141, with it using in-house developed AI and proprietary algorithms facilitating their robust underwriting methods.

139 CASHe, available at: https://www.cashe.co.in/what-is-cashe/, last accessed on 17 August 2020.
140 Ibid.
141 Ibid.
Online Invoice Trading:

This alternative financing solution, which has recently found itself realizing its financing potential, is online receivables finance companies allow small business to monetize outstanding receivables quickly and easily. It is an extremely flexible tool whereby business owners can directly connect their relevant accounting software to the invoice trading platform, thus facilitating easy and efficient transactions.

A key enabler of online invoice trading is the requisite underlying electronic infrastructure including electronic account management software, which the business owners would need to maintain for them to be in constant connection with the relevant banking and payment systems. Another integral enabler is the presence of sufficient protection from appropriate regulation, permitting the sale of receivables, either through synthetic structures or as outright organic sales.\(^{142}\)

As awareness among businesses has steadily grown, so too has the establishment of online invoice trading as a trustworthy, convenient and a relatively accessible source of short-term funds. For instance, Emirates Development Bank provides a Credit Guarantee Scheme (CGS) which supports Small and Medium Enterprises (SMEs) and startups in the UAE.\(^{143}\) This scheme helps SMEs to overcome the financial challenges of accessing funding from conventional banks. One of the solutions provided is invoice discounting.\(^{144}\)


\(^{144}\) Ibid.
This alternative financing solution can further be broken down to include models such as Invoice Factoring and Invoice Discounting. With regards to Invoice Factoring, the lender buys the receivable invoices from the businesses and takes on the responsibility to collect the money on their own. In contrast, Invoice Discounting refers to where the bill of exchange has been paid by the lender at a discounted rate.

Fintech companies such as MarketFinance (previously MarketInvoice)\(^{145}\), Fundbox\(^{146}\) and Finexkap\(^{147}\) are some of the more reputed companies who have seen significant growth over the last years\(^{148}\).

This alternative financing method is utilized by organisations at different stages of their growth, as it is an easy and convenient solution to monetize outstanding receivables, however, this solution acts as a tool to counteract one of the most pressing pain points for small and medium enterprises namely, late or later customer payments. The delegation of handling, monitoring and collection of receivables can be made to the online invoice platforms, considerably freeing up management attention and staff resources of an entity, which can be allocated towards more productive activities\(^{149}\).

This is an extremely attractive method of financing in cases where there is a long and payment business cycle, with a number of the transactions being made in credit, as the businesses often lack transparency about common credit terms and have a gap in the knowledge of what they should demand. A Fintech provider of the invoicing platform allows for the aggregation of data, while facilitating the comparison of appropriate credit terms, which allows the platforms to support businesses by providing recommendations. Such a fintech solution thus, could help shed some light on the relatively opaque B2B credit market.

Some of the other advantages of Online Invoice Trading include:

1. It is a less time-consuming and onerous process, as compared to other sources of financing, such as obtaining a bank loan.
2. Invoice factoring does not increase an enterprises’ debts. It is not an influx of the creditors’ money but the conversion of a particular asset of the firm (receivable invoices) into another form.
3. The risks of delay in payment and collection of receipts is avoided.
4. It requires very minimal documentation.

\(^{145}\) [https://marketfinance.com/](https://marketfinance.com/)
\(^{146}\) [https://fundbox.com/](https://fundbox.com/)
\(^{147}\) [https://www.finexkap.com/](https://www.finexkap.com/)
\(^{148}\) Ibid pg. 20.
\(^{149}\) Ibid
Market Overview:

The largest model by volume in the Middle East was P2P property lending, with it accounting for $556.46 million in 2018, an 827% increase since its first reported regional volume of $60 million in 2017. P2P consumer lending was the second leading model with it accounting for $97.12 million in market volumes in 2018, however this was a decline of 17% from 2017. The other alternative solutions which recorded significant increases in values over the years were P2P business lending with $47.22 million and invoice trading with $44.46 million.

A study of the above evidence that the crowdfunding market in the Arab countries appear to be more focused towards lending based crowdfunding or P2P lending.

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151 ibid
152 ibid
153 ibid
In evaluating the viability of alternate financing solutions in the Arab region, an important factor to consider is the market readiness for such solutions and its socio-economic impact. What is unique about the Arab region is the prevalence of Islamic finance, its adherence to shari’a laws and how this impact alternative forms of financing. Compared to a secular financing system, Islamic finance is based on ethical and socially responsible standards, so as to ensure the fair distribution of benefits and obligations between all parties in a financial transaction. Crowdfunding adheres to these values as it encourages community-based collaboration on projects and opportunities through mutual contributions of ideas and resources. Both secular crowdfunding and Islamic finance view customers

as potential investors that can create investment opportunities, with higher returns, where investors can take either equity or other returns based on the activity. This ensures a fair and socially responsible distribution between shareholders/stakeholders and entrepreneurs.

Islamic or *sharīʿa* compliant crowdfunding will invest in *halal* socially responsible and sustainable products, share the risk of the investment and will not allow any levying of an interest rate there against. The conventional rewards-based and donation-based crowdfunding models are *sharīʿa* compliant as it emphasises social benefit. Equity crowdfunding is similar to the *Musharakah* model as the parties that contribute capital to a business, divide the net profit and loss on a pro-rata basis. The issue arises with secular lending-based crowdfunding or P2P lending, as it is not permitted under *sharīʿa* law to charge any interest rate. In adherence to Islamic finance, a lending-based crowdfunding platform can seek to limit their role to that of an intermediary to bring the entrepreneur and the investor together and avoid levying interest. This model is risky, practically challenging, time and resource consuming and may not be a viable financing solution without the adequate regulatory support - especially if the market is new to alternative finance solutions.

The main challenges for Islamic crowdfunding will be the lack of adequate regulatory support, the lack of a secondary market and ensuring all market players are in full compliance with *sharīʿa* law. Islamic crowdfunding may also struggle with funding innovative projects as it would use the banking concept of financing that requires an underlying asset, which innovative projects may not have. Islamic crowdfunding may also be susceptible to fraudulent crowdfunding campaigns.

Despite the challenges, the market and the relevant regulators should consider that Islamic crowdfunding can play a pivotal role in increasing the accessibility of financing solutions to a wider community and in mobilising and utilising wealth. It can create immense potential for community collaboration that enables the growth of the economy and stimulates innovation. This is further witnessed through the onset of two waves of fintech start-ups adhering to Islamic finance, in the region. The first of which, has comprised of existing conventional fintech start-ups such as Beehive and Ovamba adopting and obtaining *sharīʿa* compliance facilitating strategic partnerships

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155 *Musharakah* is a joint enterprise or partnership structure in Islamic finance in which partners share in the profits and losses of an enterprise. [https://www.investopedia.com/terms/m/musharakah.asp](https://www.investopedia.com/terms/m/musharakah.asp).


with Islamic financial institutions. This wave has allowed for Islamic financial institutions to leverage technological innovations to remain on competitive footing with incumbent financial institutions. The second wave refers to where start-ups have been formed with innate *sharīʿa* compliant characteristics, championing the financial requirements of individuals preferring Islamic financial services. Within the region, examples of such start-ups include the Saudi Arabian Wahed and the United Arab Emirates based OneGram.

**Evaluating Crowdfunding:**

Crowdfunding, as a tool for ‘innovative capital formation strategy and investment possibility’ has both supporters and sceptics\(^{159}\). Globally, the transaction value in the crowdfunding segment amounts to US$ 8,537.3 million in 2020.\(^{160}\)

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The table below broadly outlines the benefits & Risks for crowdfunding:

<table>
<thead>
<tr>
<th>BENEFITS</th>
<th>RISKS</th>
<th>CHALLENGES TO IMPLEMENTATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retains Autonomy of Entrepreneurs</td>
<td>Accounting and administrative challenges</td>
<td>Resale of crowdfunding shares</td>
</tr>
<tr>
<td>Through crowdfunding, entrepreneurs can retain the right to make their own commercial decisions as different types of crowdfunding allow for companies to get funding without accumulating debt or giving away equity. The fund-seekers can access funds with “less strings attached” than with banks or venture capitalists.</td>
<td>Crowdfunding campaigns are characterized by anonymity, geographic distance and information asymmetry between the investors and the entrepreneurs. This creates challenges to ensure accountability, transparency and due diligence across all the ventures.</td>
<td>Reselling crowdfunding shares can be difficult, since there is no established secondary market for such shares and the resale of shares is restricted in the first year after investment. This can discourage potential investors.</td>
</tr>
<tr>
<td>Foster Innovation</td>
<td>Lack of Regulatory Framework</td>
<td>Large number of shareholders</td>
</tr>
<tr>
<td>Crowdfunding works as a social insurance for innovation because crowdfunding allows investors to make small contributions; it spreads the risk of investing in new ventures over a larger population of investors. Social networks of investors create a community around various ventures that can quickly spread awareness and</td>
<td>By design, a crowdfunding platform often matches funders with a fundraiser. This creates regulatory challenges that require a framework to be in place to protect funders and fundraisers. Additionally, countries frequently have differing tax schemes for international platforms and thus, the degree of liability and accountability international platform providers hold for</td>
<td>There are also concerns that dealing with a large number of smaller shareholders will significantly add to compliance costs, as well as pose logistical challenges for business owners.</td>
</tr>
</tbody>
</table>

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show legitimacy to new investors. | identifying risky, incompetent, unethical, or illegal projects are unclear.\textsuperscript{164}.

| Entrepreneurs can test their product concept and their marketability |
| Entrepreneurs Risk Losing Competitive Edge |
| Lack of Trust |

Using crowdfunding entrepreneurs gain market validation and avoid giving up equity before vetting a product concept to market as they can use their crowdfunding campaign as a marketing tool to introduce their product to the market and gain market momentum even before a launch. Campaigners often receive feedback and comments during crowdfunding campaigns about the product and they may use this information to ameliorate the product.

If the business venture is not protected with a registered intellectual property right (i.e. patent) then the venture runs the risk that a competitor with adequate funding can steal the product ideas.

Crowdfunding start-ups often struggle with acquiring the ability to competently ensure the generation of trust from investors. While investors at an early stage often intend to minimise or de-risk their investments by investing in the latter stages of a round of funding, new crowdfunding start-ups struggle with proving their trustworthiness and credibility, thus affecting their timelines in obtaining a lead investor.

A Crowdfunder must, instead aim to build interest in both their platform and their campaigns, so they may effectively garner appropriate attention and interest about their profiles, prior to the commencement of any campaign.

| Emerging Technologies & Benefits therefrom |
| Risks for Investors |
| Choosing the right platform |

The varied options made available through the technological advancements,

Risks that the Investors face arise through varied ends.

There has been a recent and sharp increase in the number of crowdfunding platforms,

\textsuperscript{164} Ibid 48
ranging from payment gateways and APIs, to social media platforms, make it possible to target an international crowd for investment.

<table>
<thead>
<tr>
<th>Economic &amp; Other Project Benefits</th>
<th>Risk of Money Laundering &amp; Terrorist Financing</th>
<th>Realistic targets and deadlines</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crowdfunding provides an economical mode to raise funds. The crowdfunding exercise reduces the requirement for any other middleman, apart from the platform and their associated costs. Further, crowdfunding can help projects raise funds indirectly - For instance, reward crowdfunding is a</td>
<td>Crowdfunding is also susceptible to money laundering risks in a multitude of ways. A project initiator can conspire with potential contributors to invest funds in a fictitious business, under the pretence of a business transaction. A crowdfunding campaign can also be used to finance terrorist activities. The transaction could be structured as a fake project</td>
<td>New Crowdfunder’s need to carefully assess and set realistic targets and deadlines, so as to ensure that their investors are not dissuaded.</td>
</tr>
</tbody>
</table>

Fraud constitutes the biggest threat to crowdfunding campaigns\(^{165}\). Investors also run the risk of creating a locked-in investment and will not be able resell the shares in the business, unless there is a change in the business; and also there is a significant lack of information that the investor would receive from the business. These platforms, however, are to service specialist requirements are not a “one size fits all” medium, thus crowdfunders should conduct thorough and diligent research of each platform’s marketplace, prior to making an educated decision about the right platform to use. Additionally, the right platform choice subsequently allows the crowdfunders to attract regular investors, and also to sustain oneself within one’s budget.

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form of pre-sale and this pre-sale allows an entrepreneur to test his/her product. Crowdfunding helps campaigners gain access to other non-financial resources also, like the skillset of contributors.

<table>
<thead>
<tr>
<th>Diversification of Investments</th>
<th>Limited access to technology and concurrent data protection risks</th>
</tr>
</thead>
</table>
| The investors are now able to spread risk - both in terms of a single defaulting borrower/investee among multiple lenders/ investors and also in terms of lenders/investors having a range of potential borrowers/investees to fund. This option is made available to them even if the investment amounts are smaller. | The internet penetration in the Middle East and North Africa is around 33.2\% \(^{166}\). To champion innovative solutions like crowdfunding, the access and affordability of access are some of the major factors. One issue stemming from the lack of internet access is the inability to subsequently accessing the registered payment systems associated with crowdfunding platforms – i.e. credit cards or PayPal. 

Another issue for crowdfunding platforms to be mindful of is the integrity of data and the implementation of adequate data protection policies to ensure compliance with varied regulatory data protection and |

security requirements to protect the rights of all the relevant stakeholders.\(^{167}\) Similarly, in loan-based crowdfunding\(^{168}\), under certain laws, disclosure of individual credit data, may not be generally permissible, unless the identity of the individual has been sufficiently anonymized.

<table>
<thead>
<tr>
<th>Benefits to economy/ society</th>
<th>Risk Based on Type of Crowdfunding</th>
</tr>
</thead>
<tbody>
<tr>
<td>crowdfunding can provide a boost to economic activity, particularly in relation to SMEs (account for large proportion of employment and added value. It also provides a means of facilitating economic recovery and results in an increase in retail engagement in financial services</td>
<td>Each type of crowdfunding creates its own risks. For instance: equity crowdfunding creates risks when it involves unquoted companies. The main risks associated with this kind of model include that when there is decision-making through platforms, investors have access to investments easily and it may happen that unwary investors may make inappropriate investment decisions, because they underestimated the risks and make insensible valuations. Loan based crowdfunding, however, exposes the demand side to similar risks where fundraisers are often not aware of their own financial means which makes them susceptible to issues around over-indebtedness, credit bureau blacklisting and</td>
</tr>
</tbody>
</table>

\(^{167}\) In the USA, the JOBS Act provides that crowdfunding platforms take steps to protect the privacy of information collected by the investors.  
\(^{168}\) 'Privacy Considerations For Crowdfunding Platforms' (Iapp.org) \(<https://iapp.org/news/a/privacy-considerations-for-crowdfunding-platforms/>\) accessed 5 April 2020
whole host of subsequent penalties. Additionally, concerns related to conflict of laws and other issues arise. Financial risks also apply to donation- and reward-based crowdfunding campaigns where there is a possibility that a venture does not produce its projected goal, in which the funds will have to be returned to investors. Kickstarter, the reward-based platform, reported that 25% of start-up projects failed in the first year, 55% failed by year 5, and 71% failed by year 10\textsuperscript{169}.

<table>
<thead>
<tr>
<th><strong>Systematic Risk Issues</strong></th>
<th>The peer-to-peer lending market is small; accounting for only a fraction of all credit provided to the real economy.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cross Jurisdictional Complexities</strong></td>
<td>Questions are yet to be answered in regard to contract law enforcement across jurisdictions and require further in-depth work and practical application through testing, in order to understand the legal implications of cross-border operations</td>
</tr>
<tr>
<td><strong>Liquidity risks</strong></td>
<td>There is a lack of liquidity in peer-to-peer lending, with relatively few platforms</td>
</tr>
</tbody>
</table>

\textsuperscript{169} A. Fronda ‘Investors Navigate the Risks of Crowdfunding’ World Finance (2015)  
Crowdfunding Landscape – Global Regulatory Positions:

The crowdfunding market is rapidly growing and causing disruptions across the Arab region. Regulations can limit the type of crowdfunding, the participants – including the fundraiser and funder, who can invest and how much they can invest, frequency of investment etcetera. Each of these decisions impact the quantity of available funds to finance innovation. Current national regulations have different approaches on these questions. All these regulations allow multiple crowdfunding efforts and the maximum limits are cumulative over all the different crowdfunding. A few of the major global regulatory developments in this respect are described here.

**The United States of America (USA)**

**Regulating Equity Based Crowdfunding:**

As the popularity of crowdfunding expanded, in 2012, the US Congress passed the Jumpstart Our Business Start-ups Act (“JOBS Act”) and the Security and Exchange Commission (“SEC”) made new regulations to ease various securities restrictions to encourage funding of small business. The JOBS Act and the subsequent Regulation 506(c) under the Securities Act of 1933, the SEC, would allow the general advertising and solicitation for private placements so long as sales were made only to

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“accredited investors”\textsuperscript{172}. Although these regulations did not decisively enable the expansion of the US equity crowdfunding market, these developments paved the way for the future.\textsuperscript{173}

Regulation 506(c) placed a burden on issuers of equity private placements to take reasonable steps, such as reviewing tax returns or bank and brokerage statements, to verify that the investors are accredited. In 2015, the SEC adopted Regulation A (“\textbf{Reg A+}”) under the Securities Act and in May 2016, the SEC’s new equity crowdfunding rules, Title III also known as Regulation Crowdfunding (“\textbf{Reg CF}”), became effective.

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\textsuperscript{172} An accredited investor is a person or a business entity who is allowed to deal in securities that may not be registered with financial authorities. They are entitled to such privileged access if they satisfy one (or more) requirements regarding income, net worth, asset size, governance status or professional experience. In the U.S., the term is used by the Securities and Exchange Commission (SEC) under Regulation D to refer to investors who are financially sophisticated and have a reduced need for the protection provided by regulatory disclosure filings. Accredited investors include natural high net worth individuals (HNWI), banks, insurance companies, brokers and trusts; https://www.investopedia.com/terms/a/accreditedinvestor.asp.

## Summary of US Crowdfunding Regulations

| Title II of JOBS Act\(^{174}\) | • This section lets companies raise money from accredited investors only publicly.  
• Title II allows a company to employ “general solicitation” to market securities offerings provided they follow the rules and guidelines of Rule 506 of Regulation D. Under this new exemption, companies can now use the Internet or other mediums to advertise their security offerings.  
• An ‘accredited investor’ is anyone who has either a net worth of $1,000,000 (your principal residence cannot be included in this calculation), or who made greater than $200,000 a year for the three years leading up to their current securities purchase. Additionally, the company must take “reasonable steps” to verify they are in fact accredited.  
• Any US or foreign entity may avail itself of this provision of the JOBS Act and raise capital. |
| --- | --- |
| Regulation A+ (Title IV of JOBS Act)\(^{175}\) | • Reg A+ allows companies to use equity crowdfunding platforms to raise as much as $50M from both accredited and non-accredited investors.  
• Reg A+ operates with two tiers. Tier 1 allows you to raise up to $20M while Tier 2 allows you to raise up to $50M and each tier has specific requirements.  
• It requires the completion of a disclosure document ‘Form 1-A’ which must be submitted to the SEC for review and comment.  
• Only US and Canadian entities may raise capital under this regulation. |
| Reg CF (Title III of JOBS Act)\(^{176}\) | • Title III is the section of the JOBS Act that lets companies raise money from non-accredited investors publicly.  
• This section permits a company to raise a maximum aggregate amount of $1,070,000 through crowdfunding offerings in a 12-month period and the Rules limit the amount individual investors can invest across all crowdfunding offerings in a 12-month period and requires disclosure of information in filings with the SEC and to investors and the intermediary facilitating the offering.  
• Securities purchased in a crowdfunding transaction generally cannot be resold for one year. |

The stringent impact of these laws can be understood from the 2014 administrative and cease-and-desist proceedings instituted by the SEC against *Eureeca Capital SPC*[^177], an online equity crowdfunding platform connecting foreign issuers with investors.[^178] First, the SEC concluded that *Eureeca* had violated US laws by not taking “reasonable steps to verify that the purchasers of the securities were accredited investors”[^179]. Also, the SEC concluded that *Eureeca*, an unregistered broker-dealer had violated US laws since it solicited investors and participated in key parts of the transactions.[^180]

### Regulating Donation and Rewards-Based Crowdfunding

Donation and Rewards-based Crowdfunding are essentially unregulated[^181], subject only to the general prohibitions on fraud and false advertising that would apply to all commercial transactions. However, even in such crowdfunding models, the funders must be careful to not overpromise what their funders will receive or what the project objective is. Misleading language or incorrectly describing the project can make a project company vulnerable to claims of false advertising, negligent misrepresentation, and fraud as well as lead to liabilities under consumer protection laws.

#### Case of iBackPack[^182]

In May 2020, the Federal Trade Commission reached a settlement with iBackPack’s founder, Doug Monahan, who raised the funds for his project from more than 4,000 supporters starting in 2015. Mr. Monahan, raised $800,000 for the “iBackPack” project on Indiegogo and Kickstarter and is now

[^179]: Ibid
[^180]: Ibid
banned from raising money through crowdfunding again.\textsuperscript{183} The project was supposed to produce a “next-generation backpack” loaded with features including wireless charging for your devices, a stereo system, numerous power cords, and the option for a Wi-Fi modem. But according to the FTC, Monahan allegedly used the money on Bitcoin purchases, ATM withdrawals, paying off his credit cards, and buying advertising for other business ventures.\textsuperscript{184} The FTC’s investigation came in response to hundreds of complaints the agency received from the project’s supporters, who never received a backpack.

**Regulating P2P Lending**

This type of crowdfunding is relatively highly regulated in the US. There exists a multitude of differing models for consumer banking regulations\textsuperscript{185} and as a result, many of these regulations may apply to a P2P lending. Consumer credit, whether bank-originated or otherwise, is subject to an extensive web of federal and state laws, and participants in consumer credit markets are subject to the authority of numerous federal and state regulators.

Some of the applicable legislation includes:\textsuperscript{186}

2. Electronic Fund Transfer Act of 1978
3. Electronic Signatures in Global and National Commerce Act,
4. Equal Credit Opportunity Act,
5. Fair Credit Reporting Act, the Fair Debt Collection Practices Act, the Federal Trade Commission Act, the Gramm–Leach–Bliley Financial Modernization Act, the Servicemembers Civil Relief Act, and the Truth in Lending Act

The web of federal and state law regulates all aspects of the credit life-cycle, including advertisements and solicitations, underwriting, agreements and disclosures, payment terms, and debt collection practices. Federal and state laws also prohibit credit discrimination and unfair or deceptive acts or practices.\textsuperscript{187} Other bodies of law that regulate relationships between financial institutions and


\textsuperscript{184} Ibid


consumers, in example: privacy and data security and anti-money laundering laws would also apply.\(^{188}\) In addition to consumer credit regulations, the funding side of P2P lending platforms is subject to SEC regulation. In November 2008, the SEC issued a “cease and desist” order to P2P lending platform Prosper Marketplace Inc.\(^ {189}\) (“Prosper”), indicating that notes issued by Prosper were unregistered securities.\(^ {190}\)

**United Kingdom**

**Regulating Investment based Crowdfunding**

The United Kingdom Financial Conduct Authority (UK FCA) defines ‘investment-based crowdfunding’ as a mechanism ‘where consumers invest directly or indirectly in new or established businesses by buying investments such as shares or debentures’.\(^ {191}\) The equity based crowdfunding platforms or investment based crowdfunding platform (CFP), are regulated as an activity of arranging deals in investments or deciding with a view to transactions in investments. Further, entities must take the greatest of care to ensure that consumers are vetted in advance of investing to determine whether they are ‘restricted’, ‘sophisticated’ or ‘high net-worth’ investors. Those investors who fall into the ‘restricted’ category (which will be the majority of retail customers) are to be limited to investing only a small percentage of their total net assets in crowdfunding products.\(^ {192}\) Entities should verify that customers realise the risks if they do not take regulated advice. Finally, the FCA sets a cap (which is not CFP specific) on the total value of equity that may be offered to the public without the publication of a formal prospectus. The publication of such a document would likely be cost inefficient for crowdfunding platform and thus represents a soft cap on the total value of funds that can be raised in any given round of CFP fundraising.\(^ {193}\)

UK crowdfunding has received a boost from the Enterprise Investment Scheme tax shelter, which has offered increasingly generous tax incentives to UK-resident individual taxpayers to invest in young companies in technology. In 2015, over £1.5bn was subscribed to EIS-qualified investments, a substantial chunk of which was sourced through crowdfunding media.\(^ {194}\) Authorised entities are obliged by the FCA to have vetting procedures in place, as well as to have the necessary processes for

\(^{188}\) Ibid.
\(^{189}\) [https://www.prosper.com/](https://www.prosper.com/)
\(^{190}\) Ibid,
\(^{193}\) Ibid
making customers aware of the restrictions and to oblige them to make a specific declaration that they have understood and accepted the restrictions before proceeding to purchase an investment product.

More recently, in 2019 UK has published its policy statement on Loan-based (‘peer-to-peer’) and investment-based crowdfunding platforms. As a result of new rules and laws, platforms have become well-governed and competing effectively for business; investors have clear and accurate information about the investment risk and are appropriately rewarded for it.

Regulating Donation based & Reward based Crowdfunding

Donation and reward-based platforms are usually outside the scope of authorisation from the UK FCA. These platforms, however, may have compliance requirements arising out of how payments are processed or if any reward offered starts looking like a return on investment (for example, a profit share from a successful creative enterprise). The Payment Services Regulations 2017 (the ‘PSRs 2017’) creates a separate authorisation and registration regime which for the purposes of providing ‘payment services’ in the UK. The relevant payment services, as transposed in the PSRs 2017 include, amongst other things, services relating to the operation of payment accounts (for example, cash deposits and withdrawals from current accounts and flexible savings accounts), execution of payment transactions, card issuing, merchant acquiring, and money remittance. The Directive focuses on electronic means of payment including direct debit, debit card, credit card, standing order, mobile or fixed phone payments and payments from other digital devices, as well as money remittance services. Notably, does not apply to cash-only transactions or paper cheque-based transfers.

Several mandatory rules of consumer contract law appear to be applicable on reward-based crowdfunding. First, founders offering their products as rewards are likely to find that funders will enjoy non-waivable rights to a refund after delivery of goods or commencement of a service, if they are unhappy with the quality of what they receive. The most extensive such entitlement is the unconditional ‘right to cancel’ under the Consumer Contracts (Information, Cancellation and...

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196 As per UK FCA, donation based crowdfunding includes people giving money to enterprises or organisations they want to support while pre-payment or rewards-based crowdfunding includes people giving money in return for a reward, service or product (such as concert tickets, an innovative product, or a computer game). Refer https://www.fca.org.uk/entities/authorisation/when-required/crowdfunding
Additional Charges) Regulations 2013 (the ‘CCRs’) 101 which implement the EU’s Consumer Rights Directive. The CCRs grant consumers purchasing under a distance sales contract an unconditional right to cancel within 14 days of receipt of the goods, whereupon the supplier must reimburse the amount paid by the consumer200. There may also be similar, albeit more restricted, mandatory cancellation rights available for longer periods under the Consumer Rights Act 2015, or the Unfair Trading Regulations 2008 (the ‘UTRs’).201 These legal positions make reward-based crowdfunding a less attractive form of crowdfunding in the UK.

**Regulating Loan Based Crowdfunding or P2P Lending:**

In June 2019, the UK FCA unveiled new regulations governing P2P lending which became effective on December 2019202. As has been the legal position always, such P2P lending platform require authorization from the FCA to operate. However, the new regulations, with an intent to protect the fundraiser and funder, includes strong emphasis on the requirement of transparency and the availability of information upon platform providers’ websites, particularly relating to the risks and rewards involved in P2P lending.203 P2P lending platforms will need to carry out an “appropriateness assessment” that considers a client’s knowledge and experience of P2P lending before the platform can accept a new investment, thus restricting self-certification by investors.

Some of the additional highlights include204:

1. Introducing more explicit requirements to clarify the governance arrangements, systems and controls that the platforms need to have in place to support the outcomes they advertise. These new rules focus particularly on credit risk assessment, risk management and fair valuation practices, especially for platforms with more complex business models.
2. Strengthening rules on plans for the wind-down of P2P platforms.
3. Applying marketing restrictions to P2P platforms, designed to protect new or less experienced investors. We have also clarified the practical implication of these new rules as they apply to P2P agreements.
4. Introducing a requirement that an appropriateness assessment (to assess an investor’s knowledge and experience of P2P investments) be undertaken, where no advice has been given to the investor. We have also provided guidance on what the assessment should include.

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201 Ibid.
5. Setting out the minimum information that P2P platforms need to provide to investors

**Key Takeaways on the Regulations – What should they address?**

Upon a review of the regulatory positions among the leading jurisdictions in the crowdfunding and P2P Lending segments, some key observations on the aspects that should be addressed under a regulatory framework may be noted. The observations themselves relate to the crowdfunding models that may require supervision, requirements for the various players in a crowdfunding system – the funder, the fundraiser and the platform as well as other requirements for the eco-system.

**Specific Platform-related Considerations:**

From the leading regulatory positions and also based on similar international positions, it may be deduced that donation-based and reward-based crowdfunding is not regulated by financial regulators. Accordingly, these are not subject to separate licensing regimes. In contrast, P2P Lending and equity-based crowdfunding are generally present as ‘higher-risk’ activities and hence, are often subject to specialised licensing models. However, even in the absence of specialised licensing regime, the requirements on accurate and complete disclosures, consumer protection principles under local consumer protection laws, specialised approvals for the done in donation-based crowdfunding or any legal principles surrounding sale of goods may continue to apply.

In specific relation to P2P lending platforms and investment-based crowdfunding, the general principles that may be noted on authorisation and licensing are as follows:

1. The regulator would grant specialised authorisation / approvals to the operator of a crowdfunding platform, with the category of the license itself depending on the nature of activity;
2. In the absence of any bespoke legislations, the platform itself may require licenses under existing legislations applicable for ‘arranger’ or ‘broker’ of deals;
3. Authorisation of a platform should: (i) indicate whether it is for a lending-based or investment-based platform, and (ii) be made by reference to product categories and investor types, i.e. institutional or retail investors.
4. The assessment of an operator should be based on criteria prescribed by the financial services regulator. These criteria should focus on the platform’s:
   (i) safety;
   (ii) soundness;
   (iii) proposed systems;
   (iv) controls, and

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(v) personnel.

5. The assessment of the operator should be tailored to the platform type, as well as product categories and investor types.

Policymakers should be conscious of the risks arising from platform failure which could arise due to financial distress of the platform operator, fraud, cyber-attack or IT infrastructure system failure. Furthermore, as a part of licensing model, the specific operational model of the platform\textsuperscript{206} as well as the understanding of custody of client assets must be studied and approved. The level of risk posed by platform failure will depend on the activities of, and services undertaken by, the platform, such as whether the platform holds or receives client-money or undertakes payment services.

To address these risks, the regulator may ensure the following matters are also are taken into consideration during the licensing and ongoing supervisions\textsuperscript{207}:

1. The operator may be required to have capital adequacy requirements having regard to the level of risk posed to the investors and the businesses. Also, alternate prudential measures like insurances, guarantees \textit{etcetera}, may also be considered;
2. Platforms should be required to maintain such systems and controls that are necessary for their business. These systems should identify, manage, track, mitigate and report risks within and to their business, including operational risk, cybersecurity, protection of personal data and the risk that the platform may be used in the furtherance of financial crime or for illegal activities including fraud;
3. The regulators should assess senior management to satisfy themselves of experience and qualification as well as the effectiveness of its oversight and control. This could be as part of its usual supervisory function, a thematic industry-wide review or as a result of any specific concerns.
4. Platforms should be prohibited from outsourcing critical functions where to do so would (i) materially impair the ability of a regulator to monitor the platform’s compliance with its regulatory obligations or (ii) result in the platform becoming a “virtual entity”. These critical functions include management and risk functions of the platform.

\textsuperscript{206} Some crowdfunding platforms utilize nominee structures where the platform holds the assets of the investors and exercise rights arising out of such assets on behalf of the investor. This structure is particularly common in investment-based crowdfunding. Similarly, in lending-based platforms, the platform may be involved in servicing the loan throughout its life-cycle, i.e. arranging for the reception and transmission of interest payments and collecting overdue loans.

5. Platforms should be required to identify, manage, mitigate and report conflicts of interest that arise between the platform and a client, or between clients of the platform. This may be done by balancing the potential risk of conflicts with the benefits of allowing the investment.

6. Platforms may be required to adopt a certain level of transparency with consumers regarding the platform’s own operations. This includes: (i) basic details about the platform, i.e. its legal name, contact details and regulated status, (ii) the platform’s conflicts of interest policy, (iii) how client-assets and money are safeguarded (if relevant), (iv) how clients can make complaints, (v) how the platform earns its revenue (particularly with a view to identifying any conflicts of interest), and (vi) the nature and extent of the due diligence it undertakes in respect of borrowers/issuers.

**Special Considerations for Investors & Projects**

Crowdfunding in essence aims to expand the access to finance by facilitating investment for projects. The key beneficiaries of such a model are SMEs who now manage to get access to retail and cross-border investors. Investors using investment-based platforms should understand that these investments could result in loss of capital. To ensure investor protection a myriad of measures may be adopted, both in relation to the investors as well as the projects.

**Business Conduct Mandates for businesses:**

In a crowdfunding model, especially those which create a cross-border environment for investment, it is important and helpful to set certain general overarching principles to shape the customer protection framework. To this end, the following policy measures may be considered:

1. Platforms should be required to pay due regard to the interests of their customers, treat their customers fairly and communicate with clients in a way that is fair, clear and not misleading.\(^2\)\(^0\)\(^8\)

2. The platform must also make sufficient disclosures relating to the risks arising out of such investments – whether it be investment based or lending based. Specifically, in case of lending-based crowdfunding, platforms must disclose to the investors:
   a) the general risk of investing in a loan;
   b) the details of the loan being offered and the borrower including loan’s features (including applicable interest rate, duration of the loan, repayment conditions) and the borrower (including the creditworthiness of the borrower, details of the loan, \textit{etcetera}).\(^2\)\(^0\)\(^9\)

\(^2\)\(^0\)\(^8\) Ibid
\(^2\)\(^0\)\(^9\) Ibid
In contrast hereto, in many countries, offers of securities or equity instruments to public attract capital market regulations. Accordingly, the issuance of securities to the public triggers an obligation to publish a prospectus. However, various exemptions exist to this rule, depending on the category of investors as well as amount of fund raise. In relation to crowdfunding, the requirement to have elaborated prospectus (as may be necessary for an IPO) may be cumbersome, particularly so since many of the fund-raising companies will be SMEs. However, disclosure requirements should not be fully excluded and hence, jurisdictions should be conscious of striking the right balance between investor disclosure and ensuring that the costs of compliance by issuers are not so cumbersome that the marketplace is stifled. A recurring theme in many regimes is the introduction of a specific exemption which raises the prospectus threshold for offers which meet certain conditions, including investor disclosures/ risk warnings. Jurisdictions should also consider the right form for disclosures specifically to retail investors. In example hereof: In the European Union, the Key Information Disclosure documents for insurance-based investment product transactions, must be a maximum of 3 sides of A4-sized page of paper and must provide information on the product, its risks and possible returns, potential costs, and complaints procedures along with any other applicable information.

Additionally, and depending on the nature of investments, it may be necessary to limit the access to such products to certain identified class of investors. Further, where both institutional and retail investors invest via platforms, platforms should not be permitted to maintain structures that would result in higher-quality investment opportunities being made available to one class of clients, i.e. institutional investors. Another important consideration would be to ensure that the “suitability” of the products offered to the retail investors is assessed by the crowdfunding platform. A critical risk mitigation measure, such tests allow retail investors with little experience or knowledge of investing easier access to potentially risky investments.

Other Considerations of Ecosystems:

In addition to the specific rules and regulations relating to crowdfunding platform and disclosure requirements, the regulators should consider implementing laws regulatory frameworks addressed to issues which are related to crowdfunding including market abuse, payment processing, 

210 Ibid.
213 Ibid
214 From an investor-confidence and market-integrity perspective, maintaining a high standard, including adopting disincentives to market abuse, seems an important principle.
cybersecurity, IT governance, data protection, anti-money laundering and counter-terrorism financing\textsuperscript{215} \textit{etcetera}.

**Crowdfunding Landscape in the Arab Region:**

This section will explore the regulatory regimes for crowdfunding platforms across many countries of the Arab region.

A brief reference guide to the legal position among a few of the Arab countries is tabled below:

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>REGULATORY AUTHORITY</th>
<th>REGULATION</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>UAE</td>
<td>Dubai Financial Services Authority (DFSA)</td>
<td>DFSA GEN Module creates regulated activity of ‘Operating a Crowdfunding Platform’</td>
<td>- Lending Based Crowdfunding</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Equity Based crowdfunding</td>
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<td></td>
<td></td>
<td></td>
<td>- Property Based Crowdfunding</td>
</tr>
<tr>
<td></td>
<td>Financial Services Regulatory Authority (FSRA)</td>
<td>Private Financing Platform (PFP) Regime</td>
<td>- Lending Based Crowdfunding targeted at professional investors only</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Equity Based crowdfunding targeted at professional investors only.</td>
</tr>
<tr>
<td>Central Bank of UAE</td>
<td>No formal regulation on crowdfunding.</td>
<td>Central Bank of UAE had released the draft regulations for loan-based crowdfunding for consultation.</td>
<td></td>
</tr>
<tr>
<td>Banking Law, 2018</td>
<td>A crowd-funding platform may require a license from the Central Bank if it is “arranging” credit facilities and the platform could potentially also still fall outside the regulatory regiment when arranging a peer-to-peer financing which, as a</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\textsuperscript{215} Customer due diligence checks should be tailored to a risk-assessment performed by the platform using guidance set by the financial services regulator. Guidance should be based on the factors that may be taken into account when formulating an appropriate customer due diligence process. More enhanced due diligence could be applied subsequently based on risk factors, such as size of transactions, source of funds, \textit{etcetera}.
<table>
<thead>
<tr>
<th>Country</th>
<th>Regulatory Authority</th>
<th>Regulations and Guidelines</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bahrain</strong></td>
<td>Central Bank of Bahrain</td>
<td><strong>CBB Rulebook Volume 5 – Financing Based Crowdfunding Platform Operator</strong>&lt;br&gt;<strong>CBB Module - Markets and Exchanges Module</strong>&lt;br&gt;The CBB also modified the Markets and Exchanges Module introducing regulations for equity-based crowdfunding. Platforms are required to be licensed as operators of P2B Conventional Financing-based Crowdfunding Platforms’ to operate Loan-based crowdfunding (conventional and shari’a compliant).&lt;br&gt;All forms targeted only at expert and accredited investors.</td>
</tr>
<tr>
<td><strong>KSA</strong></td>
<td>KSA Capital Market Authority (CMA)</td>
<td><strong>Regulation is in draft stage and has not yet been implemented.</strong>&lt;br&gt;Only crowdfunding model applicable in the Saudi financial marketplace is the equity crowdfunding model. The experimental permits granted by the CMA to crowdfunding entities must meet regulatory requirements, which are based on shari’ā (Islamic) codes.</td>
</tr>
<tr>
<td><strong>Oman</strong></td>
<td>Oman Capital Market Authority</td>
<td><strong>Regulation is planned and has not yet been implemented.</strong>&lt;br&gt;Presently, an equity based, or loan based crowdfunding model, is subject to any compliance and regulatory requirements under Oman’s Banking law and Central Bank regulations. A new Securities Law that is expected to be issued in</td>
</tr>
</tbody>
</table>
### Alternative Modes of Finance: Overview and Guidelines for the Arab Countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Regulator/Authority</th>
<th>Status</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jordan</td>
<td>Central Bank of Jordan</td>
<td>Regulation is in planning and has not yet been implemented.</td>
<td>The first quarter of 2020(^{216}), which seeks to implement a regulatory framework aimed at legalizing crowdfunding as a means for small and medium enterprises to raise finance for their operations and growth. Pursuant to this, a dedicated SME Exchange will be created.</td>
</tr>
<tr>
<td>Egypt</td>
<td>Central Bank of Egypt</td>
<td>Regulation is in planning and has not yet been implemented(^{217})</td>
<td></td>
</tr>
<tr>
<td>Lebanon</td>
<td>Capital Markets Authority</td>
<td>Capital Market Authority ‘Decision Number 3’ (^{218})</td>
<td>In 2011, the LCMA issued a decree regulating equity-based crowdfunding including requiring platforms to submit feasibility studies forecasting hefty minimum capital requirements to get a license. Adding to this, the regime sets minimum requirements for fundraisers and funders to invest. The regime in Lebanon is characterized by heavy minimum requirements and a focus on customer identification and verification as part of anti-money laundering checks. Crowdfunding operation must also demonstrate compliance with several systems</td>
</tr>
</tbody>
</table>

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An analysis of the texts of the legislations that have been introduced in the UAE and Bahrain will exhibit considerable similarity in the compliance requirements expected of the platforms. Considerable similarities may be noted between the PFP Framework applicable in the Financial Free Zone of ADGM, UAE and the license available in the DIFC, UAE. Both rules includes a focus on disclosure of risks, pre and post-funding due diligence of the entities raising funds, the creation of an optional exit facility to give investors the ability to sell their participations to other investors on the same platform, placing controls to ensure that this only permits trades between existing clients and does not become a trading platform or business in its own right.

While the above is regime applicable to equity based and lending based platforms, rewards and charity-based fundraising could also be restricted by laws regulating the raising of donations in the UAE. Islamic crowdfunding platforms require additional permissions from Higher Council of Ulemas as well as comply with standard shari’a contracts as regulated by the BAM and MCMA. This draft proposes a cap on amount of funding as well as a ceiling on the contribution per investor.

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interest based on shari’a laws which may pose a hurdle to a plain vanilla debt based crowdfunding platform.
In the framework adopted by the Central Bank of Bahrain, minimum capital requirements as well as limits on maximum fund raise are imposed. and limits accessibility to only. As in the case of DIFC and ADGM regulations, disclosure norms and compliance regime are strict with detailed compliances expected in relation to anti-money laundering laws.

In the Kingdom of Saudi Arabia, the crowdfunding companies have to undergo a series of analyses by the Financial Technology Laboratory, which investigates the reliability of the used tech. The two largest crowdfunding companies in SA have already undergone the process and acquired their licenses. The two are Scopeer and Manafa Capital.

**Manafa Capital**

Manafa is the first working model of an equity crowdfunding platform which was successfully launched and licensed by KSA CMA. Manafa was proven successful because it yielded four successful campaigns and has satisfied the maximum limit for all proposed investments. Some of the successful equity crowdfunding campaigns conducted on Manafa include Albait, Filcron, Esracabin and Which. However, until now, none of the SMEs funded through Manafa has distributed any dividends, due to their high growth rate. The four campaigns in question sought funds to expand an already existing business, not a start-up, which substantially minimized the risk. For an investor, start-ups enterprises are high risky investments and to lower this risk the KSA CMA imposes a minimum limit of 1,000 Saudi Riyals per investment opportunity. On the Manafa platform, investors make their decisions independently and investments start at 1,000 Saudi Riyals. Manafa, as the crowdfunding platform, facilitates and ensures the validity of the information shown on the platform.

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222 Small and medium sized businesses with paid-up capital not exceeding BD 250,000 that can raise funds through the crowdfunding platform.
Tokenization as a Mode of Fundraising:

The emergence of DLT\(^\text{227}\) and blockchain technology\(^\text{228}\) and the perceived multiplicity and diversity of its uses has created new avenues of fund-raising. As a general-purpose technology, blockchain-based systems touch upon diverse policy domains. Given their public mandate to oversee technologies affecting markets and society more generally, governments have begun to act to regulate the by-products of the nascent technologies\(^\text{229}\). A major contribution of blockchain and DLT is the ability to ‘tokenize’ assets. The Tokenization of assets, securities and other resources, on distributed ledgers or the issuance of traditional asset and securities classes in tokenized form, is a core part of DLT revolutionary potential. While tokenization is a widely use and colloquially referred terms, there is no legal or regulatory definition introduced by any regulators or regulatory institutions around the world and. However, based on the OECD\(^\text{230}\) Blockchain Policy Series paper,\(^\text{231}\)

> “Tokenization is the process of digitally representing an existing real asset on a distributed ledger. The Financial Stability Board defines Tokenization as the representation of traditional assets – i.e. financial instruments, a basket of collateral or real assets – on DLT. Asset Tokenization involves the representation of pre-existing real assets on the ledger by linking or embedding by convention the economic value and rights derived from these assets into digital tokens created on the blockchain.”

The Crypto Valley Association of Switzerland in its report \(^\text{232}\), describes the process of tokenization of any assets in the following steps:

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\(^\text{228}\) Blockchain was the first fully functional DLT and is a subcategory/type of DLT. Max Thake, “What’s the difference between blockchain and DLT?”, Medium, February 8, 2018, [https://medium.com/nakamo-to/whats-the-difference-between-blockchain-and-dlt-e4b9312e75dd] accessed on 1 March 2020.


1. **Step one**: real or digital assets “move” to the blockchain, meaning smart contracts\(^{233}\) (lines of code) are written to represent ownership and ownership rights and under what conditions and how those are enforceable;

2. **Step two**: tokens are created to represent the means and amount of ownership or participation stake in these assets;

3. **Step three**: subject to certain rules, tokens can be bought and sold on token trading exchanges. Tokens enable people to gain ownership, invest and trade Assets and financial instruments previously unavailable to them

Given the peer-to-peer model of blockchain as a technology, tokens can be transferred between two parties without the need of an intermediary, as indicated by the diagram below:

An ecosystem for Tokenization shall require the following important aspects to be met:

1. A shared and mutual understanding of the nature and purpose of tokens;
2. Acceptance as mode of funding- in its varied forms;
3. Management controls and clarity on authority;
4. Defined use and purpose in the ecosystem;
5. Accessibility to tokens and tokenized products; and
6. Understanding of legal requirements, compliance issues and implications.

\(^{233}\) Smart contracts are “self-executing” contracts or applications that run exactly as programmed without any possibility of downtime (i.e. the blockchain is never down, it is always running), censorship, fraud or third-party interference.
### Who are the Cryptocurrency Tokenization players?234

<table>
<thead>
<tr>
<th>Role</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cryptocurrency User</td>
<td>A cryptocurrency user is a natural person or legal entity who obtains coins</td>
</tr>
<tr>
<td></td>
<td>to use them (i) to purchase real or virtual goods or services (from a set</td>
</tr>
<tr>
<td></td>
<td>of specific merchants), (ii) to make P2P payments, or (iii) to hold them</td>
</tr>
<tr>
<td></td>
<td>for investment purposes (i.e. in a speculative manner).</td>
</tr>
<tr>
<td>Miner</td>
<td>Miner is a person who participates in validating transactions on the blockchain</td>
</tr>
<tr>
<td></td>
<td>by solving a “cryptographic puzzle”. the process of mining relates to</td>
</tr>
<tr>
<td></td>
<td>cryptocurrencies that are based on a PoW consensus mechanism. A miner</td>
</tr>
<tr>
<td></td>
<td>supports the network by harnessing computing power to validate transactions</td>
</tr>
<tr>
<td></td>
<td>and is rewarded with newly mined coins (i.e. through an automatic</td>
</tr>
<tr>
<td></td>
<td>decentralized new issuance).</td>
</tr>
<tr>
<td>Cryptocurrency exchanges</td>
<td>Cryptocurrency exchanges are persons or entities who offer exchange</td>
</tr>
<tr>
<td></td>
<td>services to cryptocurrency users, usually against payment of a certain</td>
</tr>
<tr>
<td></td>
<td>fee (i.e. a commission). They allow cryptocurrency users to sell their</td>
</tr>
<tr>
<td></td>
<td>coins for fiat currency or buy new coins with fiat currency.</td>
</tr>
<tr>
<td>Trading platforms</td>
<td>In addition to cryptocurrency exchanges, so-called “trading platforms” also</td>
</tr>
<tr>
<td></td>
<td>play an important role in the exchange of cryptocurrencies (and, most</td>
</tr>
<tr>
<td></td>
<td>notably, allow cryptocurrency users to buy coins with cash). Trading</td>
</tr>
<tr>
<td></td>
<td>platforms are market places that bring together different cryptocurrency</td>
</tr>
<tr>
<td></td>
<td>users that are either looking to buy or sell coins, providing them with</td>
</tr>
<tr>
<td></td>
<td>a platform on which they can directly trade with each other (i.e. an “eBay”</td>
</tr>
<tr>
<td></td>
<td>for cryptocurrencies).</td>
</tr>
<tr>
<td>Over the Counter Trading Facilities</td>
<td>Over-the-counter (OTC) or off-exchange trading is done directly between two</td>
</tr>
<tr>
<td></td>
<td>parties, without the supervision of an exchange. The OTC facilities act</td>
</tr>
<tr>
<td></td>
<td>as principals facilitating the liquidation of the cryptocurrencies to</td>
</tr>
<tr>
<td></td>
<td>cryptocurrencies or fiat currencies.</td>
</tr>
<tr>
<td>Brokerage Facilities</td>
<td>Brokers may deal in or manage the crypto assets for the clients- and in</td>
</tr>
<tr>
<td></td>
<td>certain cases facilitate in arranging deals for trading for the clients.</td>
</tr>
<tr>
<td>Wallet providers</td>
<td>Wallet providers are those entities that provide cryptocurrency users digital</td>
</tr>
<tr>
<td></td>
<td>wallets or e-wallets which are used for holding, storing and transferring</td>
</tr>
<tr>
<td></td>
<td>coins. In reality, there are several types of wallet providers: (a)Hardware</td>
</tr>
<tr>
<td></td>
<td>wallet providers that provide cryptocurrency users with specific hardware</td>
</tr>
<tr>
<td></td>
<td>solutions to privately store their cryptographic keys ; (b)Software wallet</td>
</tr>
<tr>
<td></td>
<td>providers that provide cryptocurrency users with software applications</td>
</tr>
<tr>
<td></td>
<td>which allow them to access the network, send and receive coins and locally</td>
</tr>
<tr>
<td></td>
<td>save their cryptographic keys; (c) Custodian wallet providers that take</td>
</tr>
<tr>
<td></td>
<td>(online) custody of a cryptocurrency user’s cryptographic keys.</td>
</tr>
<tr>
<td>Coin Offeror / Coin Inventor</td>
<td>Person who invents and offers the coin</td>
</tr>
<tr>
<td>Custodians</td>
<td>Some Wallet providers have partial control of the assets, with the ability</td>
</tr>
<tr>
<td></td>
<td>to execute sign transactions on behalf of the customers, or block or</td>
</tr>
<tr>
<td></td>
<td>reverse asset keys on behalf of the client with instructions. However, the</td>
</tr>
<tr>
<td></td>
<td>custodian typically do not have full control to initiate a transaction on</td>
</tr>
<tr>
<td></td>
<td>behalf of a client.</td>
</tr>
</tbody>
</table>

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**New classes of assets created by Tokenization:**

Tokens are cryptographically secured and avail the benefits from the inherent characteristics of DLTs on which they are built such as transparency, security and immutability of the ledger given its distributed nature, depending on their nature, tokens may have varied nature:

<table>
<thead>
<tr>
<th>Class</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Utility Tokens</strong></td>
<td>These tokens are designed to be used for a particular purpose, usually within the application/platform for which they are developed. The most common use of a utility token is as a payment option for purchases within the platform. Utility tokens are released by a company to provide their users with a mechanism to pay for a new company product or service, which has most probably been developed on the blockchain technology.</td>
</tr>
<tr>
<td><strong>Security/Equity Tokens</strong></td>
<td>Security tokens are deemed to work in the same manner as traditional securities. Security Tokens act as a stock or share of the company, which is given to the buyer once the initial coin offering ends. By purchasing security tokens of a company/project, you get certain rights along with sharing in the company stocks. Security tokens are different from utility tokens in that they are limited by specific federal laws and rules of stock trading. Such tokens, by nature, can also be accessed outside of the platform on which they are developed. The value of security tokens may rise or fall according to the project’s performance, similar to stocks, which is not the case with utility tokens.</td>
</tr>
<tr>
<td><strong>Asset Tokens</strong></td>
<td>Certain tokens that are backed by a real asset, such as gold, real estate or bonds, are called asset tokens. These tokens represent the value of real assets and can be used for buying/selling the assets that they back. This improves the trading of physical assets on digital platforms.</td>
</tr>
<tr>
<td><strong>Cryptocurrencies</strong></td>
<td>A currency token acts the same way as a real currency and is used for the same purpose, for payment of purchases. A classic example is Bitcoin, which is a type of digital currency that can be used for buying and selling things with online/offline merchants who accept these coins. Currency tokens can also be traded for other cryptocurrencies and fiat currencies and can be sent to other users through a digital wallet.</td>
</tr>
</tbody>
</table>

**Distinction of tokens based on the Blockchain:**

In addition to the above classes the tokens may also be categorised in the categories of (a) native; and (b) non-native tokens, explained further below.

- **Native tokens** - As the name suggests, these tokens are native to the blockchain and give direct exposure to blockchain protocols themselves. Examples include *Bitcoin, Ether, NEO* and *Steem.*
• **Non-native tokens**- Such tokens derive their existence from another blockchain eg- ERC 20. Such tokens are typically issued via Initial Coin Offerings (ICOs) and most utility tokens can be classified under this category.

**Airdrop:**
The importance of the network in blockchain-based projects is such that some ICO issuers have resorted to "airdrops", the free distribution of tokens issued through random allocation or based on specific criteria. An airdrop involves the free distribution of native tokens by issuers to existing or new users of their platform, before or concomitantly with the ICO offering. The main purpose of airdrops is to kick-start the creation of a community of token-holders before or together with the ICO, or to boost the network effects of already created networks. In many cases, tokens distributed in airdrops are distributed randomly through the use of smart contracts which send these free tokens to active wallets. In some cases, airdrops can raise financial consumer protection considerations, when used by scammers who trick users into disclosing their private wallet keys in order to receive free tokens. Anecdotal evidence suggests that airdrops may also be used as an alternative way to provide access to tokens in countries where ICOs are banned.

**The First Case in Point – ICOs:**

In the initial years of development tokenization, ICOs were frequently utilized for fundraising purposes. ICOs were a relatively new way to fund start-ups and projects, but similar to an IPO, ICO has been used as a way for a start-up or an established company to raise capital, and a vehicle of investment for potential investors. The growth of ICOs can be noticed by the number of ICOs offerings either at the pre-ICO stage by taking part in private pre-sales or by funding the expenses of an ICO Venture capital (VC) investment in blockchain-related projects.

The ecosystem of ICOs comprises of digital exchange venues; trading platform operators; digital wallet providers; increasingly emerging financial and technical advisors; participants in regulated markets where tokens are underlying or referenced assets (i.e. derivatives, exchange-traded funds); investment funds or other collective schemes investing in tokens (i.e. hedge funds – reportedly heavily involved in the ICO market); custodians and regulators.

In accordance with the OECD Report, *Initial Coin Offerings (ICOs) for SME Financing*[^236^], ICOs consist of the creation of digital tokens by start-up companies (i.e. young MSME) and their distribution to investors in exchange for fiat currency or in some cases, cryptocurrencies like *Bitcoin* or *Ethereum*.


ICOs are enabled by the use of DLTs, such as the blockchain, which facilitate the exchange of value without the need for a trusted central authority or intermediary (i.e. government, bank) and allow for efficiency gains driven by such dis-intermediation. ICOs involve, by design, a platform comprising a network of participants who purchase and hold tokens. This network and the wider ICO ecosystem are central to the success of ICO-funded ventures, enabling the creation of network effects. Network effects allow for potential value creation by the network that is being formed automatically and by default, in every ICO with the mere participation of token holders in the offering. Such value resides primarily with those ICO participants who subscribe with the aim of using the platform or service offered on the platform, or with investors who have a dual role as both investors and users of the platform.

As highlighted by the *European Chamber of Commerce* in Hong Kong, some of the major benefits of ICOs for SMEs are as follows:

1. **Cost efficiencies** - ICOs facilitate the exchange of value without the need for a trusted central authority or intermediary (government, bank) which allows for efficiency gains. Automation and the use of innovative applications enabled by the use of DLTs can create further efficiency gains in addition to those driven by disintermediation. In theory, these efficiencies can be shared by SMEs and investors alike, potentially translating into lower funding costs when compared to public offerings, depending on the specifics of each offering.

2. **Unlimited investment pool** - In addition to cost savings, financing through ICOs offers SMEs and entrepreneurs direct access to an unlimited investor pool.

3. **Inclusive SME financing** - The unrestricted access to funding through an ICO by any company, coupled with the inclusive environment of networks created by subscribers to such offerings, foster inclusiveness during the fundraising and beyond. The fact that tokens are dividable, and

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subscribers can buy fractions of newly-issued tokens allows for considerable flexibility in the participation of those wishing to limit their exposure according to their risk appetite.

4. **Speed of Conducting the offering** - ICOs are faster to implement when compared to other public offerings, at least in the current state of the cryptocurrency market. This, however, cannot be exclusively attributed to the benefits of the technology employed, as it is also due to the limited disclosure requirements and due diligence performed in many of the current ICOs. These practices, however, have a detrimental effect on the credibility and viability of the project and on investor protection. From a technical perspective, tokens issued in ICOs are cryptographically secured and, given that they are based on the blockchain, benefit from the characteristics of DLTs, such as immutability, permanence, transparency and security.

5. **Value of network** - ICOs have the potential to create economic value that goes beyond the value of the company and the product/service that is developed on the back of funds raised. Network effects created in ICOs by the mere participation of subscribers in the newly-built network is an important value creator and a comparative advantage of ICOs when compared to traditional methods of financing.

6. **Ownership is not necessarily conferred** - ICOs have the potential to overcome some of the impediments to the financing of early stage SMEs in an innovative way. Depending on how token offerings are structured, companies can raise risk capital without necessarily conferring ownership rights. In other words, the entrepreneur can publicly raise finance without risking dilution.

**A comparison between ICOs; IPOs and Crowdfunding:**

ICOs are commonly seen as similar to IPOs, however, a major difference between the two financing mechanisms lies in the rights attributed to participants of the offering. IPOs give shareholders ownership rights in the company, rights in the future cash flows of the company (through dividends) and voting rights depending on the type of the shares issued. Rights assigned to token-holders vary between different offerings but, in their majority, ICOs do not confer ownership rights. This can be a major advantage to entrepreneurs who wish to raise financing but do not wish to give away a part of their ownership, which is one of the main impediments to the use of public equities by SMEs (Nassr and Wehinger, 2016). At the same time, the governance of blockchain-based structures may be challenging for token-holders, particularly in the absence of voting rights.

In an ICO, a company, usually in early development stage, provides a “token” or “coin” denominated in a cryptocurrency to investors in exchange for their capital investment.238 The business models of

entities using ICOs are diverse and so is the basis on which the tokens are valued. Tokens may constitute a share in the company, a voucher for investors to benefit from the firm’s project or product in the future or may not give any right or value at all. 239 This diversity has made it challenging to apply the existing regulatory framework to all ICOs, and regulators have instead decided to regulate them on a case by case basis. Specifically, where the tokens constitute a share in the company, the regulations associated with public offer of securities will be particularly relevant.

Valuation and pricing in IPO offerings are performed by underwriters and is based on the application of corporate finance theory on the company financials. Valuation and pricing of tokens is challenging given the absence of any performance metric, the complexity in value creation and attribution in networks, and the difficulty in applying standard corporate finance theory on blockchain-based networks. The difficulty valuing ICO tokens is very much linked to the difficulty in defining tokens. If tokens were to be defined as currency, their valuation could be somehow similar to cash or cash alternatives; if defined based on their utility value, they would represent the price of the service at any point in time; if considered equity securities, the company's enterprise value would need to be modelled and the price of the security derived from such model. The economics of the issuance (number of tokens, offering price, structure of the token offering) need to be defined and disclosed to potential participants upfront, to allow for the valuation of the tokens, however, this is not always assured given the absence of disclosure requirements in most ICOs.

On the other hand, ICOs have been described by market participants as "crowdfunding on the blockchain". Indeed, ICOs with tokens used as a means of exchange for the future use of a product/service that is yet to be developed are similar to reward-based crowdfunding, as in both cases the companies pre-sell a product or service that remains to be built. Comparing equity-based crowdfunding to ICO offerings is less straight-forward, given that the majority of ICOs do not confer equity ownership or participation in future revenue streams of the issuing company. Unlike crowdfunding, where an online crowdfunding platform is required for the campaign to be launched, ICOs do not rely on an intermediary. The vested interest of the online platform through which the tokens are issued has implications in the disclosure of offerings. In the event of an ICO offering without specific disclosure requirements, the ICO whitepaper contents may be published without any prior due diligence or validation by a third party. On the other hand, the vested interest of the crowdfunding platform to ensure its credibility implies a minimum control in the contents of crowdfunding disclosure to ensure the quality of documentation.

239 Ibid.
Seven key criteria for the differentiation of ICOs, IPOs and crowdfunding:

<table>
<thead>
<tr>
<th>Purpose (investor view)</th>
<th>ICO</th>
<th>IPO</th>
<th>Crowdfunding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Return on investment, ownership secondary</td>
<td>Return on investment, ownership and voting power</td>
<td>Realize idea, gain rewards and/or early access</td>
<td></td>
</tr>
<tr>
<td>New business venture with white paper as business concept</td>
<td>Established business with proven assets (i.e. user base)</td>
<td>New business venture with concrete product/service idea</td>
<td></td>
</tr>
<tr>
<td>Currently unregulated (in most jurisdictions)</td>
<td>Regulated by financial authorities</td>
<td>Restrictions on investors allowed to take part in funding</td>
<td></td>
</tr>
<tr>
<td>Supporters expecting return on investment</td>
<td>Institutional and private investors</td>
<td>Supporters expecting rewards and/or early access</td>
<td></td>
</tr>
<tr>
<td>Small to medium size, strongly depending on specific ICO</td>
<td>Large to medium size, depending on exchange market</td>
<td>Small size, suitable for realizing idea or first prototype</td>
<td></td>
</tr>
<tr>
<td>High transferability with minimal transaction costs</td>
<td>High transferability, medium to high costs for intermediates/exchanges</td>
<td>Low transferability due to rewards and/or access, P2P platform fees might apply</td>
<td></td>
</tr>
<tr>
<td>High, currently limited investor protection or legal obligations</td>
<td>Medium, depending on exchange market regulations</td>
<td>Medium, limited regulations but ROI not key purpose</td>
<td></td>
</tr>
</tbody>
</table>

Issues Associated with ICOs - The Fall of ICOs:

A lot of promising companies with good initial seed rounds struggled to raise money despite having good projects. ICOs were very popular with investors as they can be very profitable, but historically there have been a number of significant issues with ICOs. A study conducted by Statist Group in New York found that 81% of ICOs are scams, and only 8% of ICOs progress to trade on the market (another area we cover as ICOs we host get listed on our
Furthermore, an additional 6% of ICOs were found to have failed, which means they raised money but not as much as required. Some of the major risks associated with ICOs are summarised below:

**RISKS: ICOs**

<table>
<thead>
<tr>
<th>Regulatory uncertainty</th>
<th>Lack of Transparency &amp; Accountability</th>
<th>Issues related to the structuring of token offerings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presently, there is no proper regulatory framework in most countries associated with ICOs and the possible supervision thereof. The lack of clarity around the regulatory framework applying to the offerings and the tokens issued, regulatory uncertainty exists around the underlying distributed ledger technology and its digital applications, on the basis of which ICOs occur. This extends on a cross border level since marketing and issuance of tokens will arise, especially in the absence of coordinated activity by regulators.</td>
<td>Unregulated ICOs, the absence of disclosure requirements for ICOs exacerbates information asymmetries already present in early stage SME financing due to the lack of prior financial information or performance track record of start-ups. The absence of standardized disclosure requirements and the fact that whitepapers are not verified or vetted does impede proper risk assessment of the investment by investors and exposes them to unidentified or</td>
<td>A primary issue always remains on what is the nature of the offering and whether the same amounts to public offer of securities. Further, valuation and pricing of tokens is challenging. The structuring of token issuances can give rise to conflicts of interest by the issuer. The ability of entrepreneurs to receive tokens issued through an ICO on the back of a concept that has not been executed and without having taken any personal financial risk in the venture could create such misalignments of interest. In the absence of lock-up period requirements, the lack of any &quot;skin-in-the-game&quot; on the part of</td>
</tr>
</tbody>
</table>

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241 Ibid.
<table>
<thead>
<tr>
<th>Investor protection</th>
<th>Corporate governance</th>
<th>Operational and business risks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Many ICO offerings may not be considered as an appropriate investment for retail investors who do not necessarily have the financial skills or knowledge required to undertake high-risk investments. Investors may lack the technical and financial literacy skills in addition to financial literacy skills. In the absence of a clear regulatory framework applying to the token issuance, the rights of investors to obtain redress and compensation are also unclear and potentially limited due to the legal uncertainty. Risk of fraud is high in ICOs.</td>
<td>Lack of governance structures at the issuer level and the network level creates an extra source of risk for both issuers and investors. Corporate governance issues affect token-holders in the absence of voting rights assigned to tokens issued in some offerings, or through the potential unbalanced or even unfair allocation of tokens (i.e. heavy discounts in pre-sales for the exact same risk taken) and the absence in some offerings of anti-dilution protection. Most structures would not have a (in)formal board structure or any other oversight mechanism over management.</td>
<td>Operational risks of DLT-based applications, such as scaling, network stability, coding errors, and uncertainty of settlement finality, are transposed to ICOs and depend on the protocol used. - Token issuance and trading are also exposed to cyber-attacks, with a number of recorded incidents of hacking and cyber-attacks, exposing SMEs and investors to losses and reducing the credibility of ICOs. SMEs and start-ups are particularly vulnerable to cyber-attacks as they lack the cyber security strategies and the budget required for such risks to be effectively mitigated.</td>
</tr>
</tbody>
</table>

Money Laundering Risks

| Know Your Customer or Business (KYC/B) and Anti-Money Laundering (AML) are a major area of concern for ICO offerings, and current requirements may be inadequate. Depending on the case, there may be no requirement for ICO issuers to identify and verify the identity of participants in the ICO, including for compliance with AML/CFT requirements. ICOs may unintentionally contribute to and participate in money laundering or financing of terrorism by allowing investors to invest funds that have not gone through AML/CFT control checks. |
| Segregation of assets by custodians is another issue in ICOs, as it is difficult to understand whether investor funds are kept in pooled or segregated accounts. Trading platforms used for secondary trading of tokens, as well as crypto-exchanges to which investors resort for conversion of tokens into other crypto or fiat, may lack normal disciplines in protecting investor assets held for trading and settlement. |
| People invest in ICO’s with speculative goals in mind. This highly speculative feature of ICOs is contributing to very high volatility in the prices of tokens traded on specialist trading platforms. These platforms are not subject to financial supervision. Daily price fluctuations of tens or even hundreds of percentage points are not unusual. The tradability of many tokens is moreover limited, meaning that it is relatively simple for malicious parties to manipulate prices. The tokens themselves may have no market and hence lack liquidity. |

Resultantly, the regulators like the SEC have made it very clear that the US markets will not allow this type of flagrant abuse of existing securities laws. Lawsuits, subpoenas, shutdowns, and fines have been issued to pretty much every player in the space, from exchanges to issuers to advisors, lawyers, and promoters. Instead, there has been a natural progression towards adoption of securities laws and other sector specific legislations.

Money Laundering Scams: ICO

ICOs were marred with constant scams and lack of traceability for bringing in regulatory actions. Some of the biggest scams in the ICOs included examples like iFan and Pincoin248 where a Vietnamese cryptocurrency company (Modern Tech) launched an ICO for its Pincoin token, raising

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247 Ibid.
$660 million from approximately 32,000 people. The company first ran the Pincoin ICO, promising constant returns to investors; and then launched another token, iFan (a social network token for celebrities). Pincoin investors first received cash from their investment and then the team began paying out rewards to Pincoin investors in iFan tokens. Eventually the founders disappeared with investors receiving no returns. Similarly, **Onecoin**\(^{249}\) which was touted to be a Ponzi scheme promoted as a cryptocurrency by Bulgarian-based offshore companies **OneCoin Ltd** and **OneLife Network Ltd**. US prosecutors have alleged the scheme accumulated approximately $4 billion in funds worldwide. In China, law enforcement officials recovered 1.7 billion yuan (US$267.5 million) while prosecuting 98 people.

### ICO SCAMS BY NUMBERS\(^{250}\)

<table>
<thead>
<tr>
<th>ICO Scam name</th>
<th>Amount of money scammed ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pincoin and iFan</td>
<td>660,000,000</td>
</tr>
<tr>
<td>Plexcoin</td>
<td>15,000,000</td>
</tr>
<tr>
<td>Bitcard</td>
<td>5,000,000</td>
</tr>
<tr>
<td>Opair and Ebitz</td>
<td>2,900,000</td>
</tr>
<tr>
<td>Benefit</td>
<td>2,700,000</td>
</tr>
<tr>
<td>Bitconnect</td>
<td>700,000</td>
</tr>
<tr>
<td>Confido</td>
<td>375,000</td>
</tr>
<tr>
<td>REcoin and DRC</td>
<td>300,000</td>
</tr>
<tr>
<td>Ponzicoin</td>
<td>250,000</td>
</tr>
<tr>
<td>Karbon</td>
<td>200,000</td>
</tr>
</tbody>
</table>

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As per a research published in 2018\textsuperscript{251} by \textit{Satis Group} on ICOs held in 2017, found that a minimum market capitalization of $50 million and the tokens of which were expected to eventually go into active trading. Of such projects, ICOs were then further divided into two categories:

1. “Failed to List”, which contained ICOs that were considered to be either (i) scams, (ii) had failed or (iii) had gone dead, and therefore, they had all failed to list and trade at all; and

2. “Succeeded to List”, which consisted of those considered as either (i) dwindling, (ii) promising or (iii) successful, but with all three sub-groups going on to trade on cryptocurrency exchanges.

As per the research, alarmingly, almost 80% of ICOs of 2017 had turned out to be scams. A further 4% of projects had failed, 3% had gone dead and only 15% of the total had gone on to trade on an exchange.

\textbf{The alternative - IEOs: Initial Exchange Offerings}

An Initial Exchange Offering, commonly referred to as an IEO, is a fundraising event that is administered by a crypto exchange. In contrast to an ICO where the project team themselves conduct the fundraising, an IEO means that the fundraising will be conducted on a well-known exchange’s

fundraising platform, where users can purchase tokens with funds directly from their own exchange wallet. As the token sale is conducted on the exchange’s platform, token issuers have to pay a listing fee along with a percentage of the tokens sold during the IEO. In return, the tokens of the crypto start-ups are sold on the exchange’s platforms, and their coins are listed after the IEO is over. As the cryptocurrency exchange takes a percentage of the tokens sold by the start-up, the exchange is incentivized to help with the token issuer’s marketing operations. IEO participants create an account on the exchange’s platform where the IEO is conducted. The contributors then fund their exchange wallets with coins and use those funds to buy the fundraising company’s tokens.

**BINANCE IEOs**

In early 2019, Binance (a leading cryptocurrency exchange platform regulated Malta Financial Service Authority) conducted the crowdsale for BitTorrent (BTT) tokens raising a whopping $7.2 million in just the first fifteen minutes of sale opening. Another successful project on Binance’s Launchpad platform was Fetch AI raising its hard cap of $6 million in just 22 seconds.

In early January 2020, however, the US Securities and Exchange Commission (SEC) released an investor alert warning to would-be investors about the risk involved with IEOs. The SEC stated that IEOs may be conducted in violation of the federal securities laws and lack many of the investor protections of registered and exempt securities offerings. Other areas of focus include: whether a platform that offers them is a securities platform or a broker-dealer and whether investors can buy into IEOs conducted by companies that are based overseas.

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253 Ibid.
A tabular representation of comparison of ICO, IEO, IPO and STO is shown below:

<table>
<thead>
<tr>
<th></th>
<th>IEO</th>
<th>ICO</th>
<th>STO</th>
<th>IPO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sale location</td>
<td>Exchange website</td>
<td>Token issuer website</td>
<td>Security token platform</td>
<td>Purchase from authorized selling group</td>
</tr>
<tr>
<td>Crowdsale counterparty</td>
<td>Exchange</td>
<td>Token issuer</td>
<td>Security token issuer brokered through STO platform</td>
<td>Authorized selling group</td>
</tr>
<tr>
<td>Project screening</td>
<td>Exchange</td>
<td>None</td>
<td>Probably none</td>
<td>None officially but the VCs in the private funding stage would have done some due diligence</td>
</tr>
<tr>
<td>AML/KYC</td>
<td>KYC-ed users of exchange</td>
<td>Token issuer to KYC each participant</td>
<td>STO platform will KYC users</td>
<td>The selling group will KYC users</td>
</tr>
<tr>
<td>Marketing</td>
<td>Token issuer can tap on the exchange’s reach and users. Joint marketing with exchange</td>
<td>Token issuer has to market to individual investors. Though the platform might be able to provide extra marketing</td>
<td>Token issuer has to market to individual investors. Though the platform might be able to provide extra marketing</td>
<td>The issuing company will have do the marketing</td>
</tr>
<tr>
<td>Exchange listing</td>
<td>Immediate, Included in IEO fees</td>
<td>Not immediate. Listing fees to be negotiated with each exchange</td>
<td>Depends. If the selected STO platform also is an exchange, then it is likely immediate</td>
<td>Immediate on a selected stock exchange</td>
</tr>
<tr>
<td>What investors get?</td>
<td>Utility tokens</td>
<td>Utility tokens</td>
<td>Security tokens representing equities</td>
<td>Shares that are not tokenized</td>
</tr>
</tbody>
</table>

**Crypto Exchanges and Custodians:**

Crypto trading platforms or Crypto Exchanges are the trading platforms that facilitate the secondary trading of crypto assets. They can also be market makers that take transaction commissions for their services or charge fees as a matching platform. Cryptocurrency exchanges have become integral to the crypto-asset ecosystem. Like crypto-assets, the rise of cryptocurrency exchanges poses significant impact on consumer protection and money laundering threats; hence, prompting necessary regulatory and supervisory intervention.
Similarly, in case of custodian reference to the “holding” of participant crypto-assets is in the context of the underlying technology and typically refers to control over the private key that provides the ability to transfer the crypto-asset.

Occasionally, crypto exchanges may also perform functions that are more typically performed by intermediaries, custodians, transfer agents and clearing houses. Where an exchange holds participant assets, a key consideration for regulatory authorities is how such assets are held and safeguarded. This includes consideration of what arrangements are in place in the event of a loss, including a loss due to theft from, or the bankruptcy of the crypto exchanges.

Many of the operational models’ crypto exchanges involve custody (i.e., holding, controlling and safekeeping) of participant assets, which may include crypto-assets and/or fiat currency or funds.

**Key Regulatory Considerations for Crypto Exchanges:**

In accordance with *IOSCO*, the following should be the regulatory considerations for regulators intending to issue guidelines and framework for secondary trading markets:

- The establishment of trading systems, including securities exchanges, should be subject to regulatory authorization and oversight.
- There should be ongoing regulatory supervision of exchanges and trading systems, which should aim to ensure that the integrity of trading is maintained through fair and equitable rules, that strike an appropriate balance between the demands of different market participants.
- Regulation should promote transparency in trading.
- Regulation should be designed to detect and deter manipulation, fraud and other unfair trading practices.
- Regulation should aim to ensure the proper management of large exposures, default risk and market disruption.254

**Key Regulatory Considerations for Custodians and similar market intermediaries:**

In accordance with *IOSCO*, the following should be the regulatory considerations for regulators intending to issue guidelines and framework for custodians and market intermediaries:

a) There should be minimum entry standards for market intermediaries.

b) There should be initial and ongoing capital and other prudential requirements for market intermediaries, that reflect the risks that the intermediaries undertake.

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c) Market intermediaries should be required to establish an internal function that delivers compliance with standards for internal organization and operational conduct, with the aim of protecting the interests of investors and their assets; and ensuring proper management of risk, through which management of the intermediary accepts primary responsibility for these matters.

d) There should be procedures for dealing with the failure of a market intermediary in order to minimize damage and loss to investors and to contain systemic risk.

**Decentralized Financing Platforms:**

Decentralized Finance or “DeFi” refers to the ecosystem comprised of decentralized financial applications that are being developed on top of blockchain systems. This involves the use of decentralized networks and open source software to create multiple types of financial services and products. Such platforms typically develop and operate financial decentralized applications on top of a transparent and trustless framework, such as permission-less blockchains and other peer-to-peer protocols.

Currently, the three largest functions of DeFi are:

- Creating monetary banking services, backed by the issuance of stablecoins;
- Providing peer-to-peer or pooled lending and borrowing platforms; and
- Enabling advanced financial instruments, such as decentralized crypto exchanges, tokenization platforms, derivatives and predictions markets

**Regulatory concerns with DeFi platforms:**

(a) The Decentralized Finance ecosystem is made up of many different actors and subsectors, some of which don’t exist in traditional finance. While a large majority of participants include lenders looking to loan out assets, borrowers looking for quick access to those assets and exchanges that can act as a medium for lenders and borrowers, there are a number of other important facets and solutions. These include peer-to-peer marketplaces, the tokenization of real-world assets (such as real estate and art), prediction markets, staking and collateral, alternative savings with interest earning mechanisms; and even, insurance.

(b) Some of the most prominent issues can arise with regard to smart contracts, user error, market volatility, lack of insurance on loans and potential failure of the price mechanism - all of which require regulatory oversight.

(c) The Decentralized Finance platforms, while similar in operation to crypto exchange and multi-lateral trading facilities, lack a fundamental element of taking custody of crypto assets and
acting as an agent for the consumers. The platforms by nature are open-ended and lack the fundamental requirements of being qualified as intermediaries.

(d) As such, issues in relation to collateralization in case crypto-asset custody may arise, wherein the tokens/crypto assets are collateralized against the existing tokens/crypto assets; hence, giving rise to concerns of market volatility and price manipulation.

(e) In absence of appropriate regulations and mechanisms on interoperability of blockchain the DeFi ecosystem, greatly increases risks to investor money and resultant drain of finances on the broader economy.

**Securities Token Offerings (STOs) and Fundraising:**
Security/Asset tokens include tokens issued for shares, participation certificates, bonds, collective Investment Schemes, derivatives, titles representative of property and more. A security token offering (STO) is an event during which a company offers its security tokens to investors. STOs are often believed to have evolved from the need to eliminate the regulatory uncertainty surrounding initial coin offerings (ICOs) and the use of blockchain tokens as securities. STOs often perform a similar function to conventional initial public offerings (IPOs) in that they provide a means by which companies can sell securities to investors to raise capital.

**Funding instruments: crypto fundraising vs. traditional fundraising**

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STOs have been tested in various ways, although the technology has made it possible for the security token offerings to be advantageous in the following:

1. Access to low capital investment opportunities- Conventional IPOs rely on complex systems involving numerous intermediaries. The costs associated with offering conventional shares, bonds or other securities to the public in order to raise capital are prohibitive for smaller companies. STOs, on the other hand, are largely automated, so costs are low. By using STOs, small and mid-sized companies and start-ups target to potentially gain access to capital markets at a much lower cost.

2. Low investment costs- Security tokens are sold directly by the issuing companies – normally in collaboration with a registered bank. This means you do not need to pay brokerage fees to a stockbroker.

3. Purchasers can hold their tokens- Purchasers can hold the private keys for your private wallet. The purchasers do not need a custodian bank to hold the securities and your assets are fully segregated. In this way, security tokens provide many of the benefits of physical securities certificates which the purchasers can hold themselves.

4. Greater regulatory security than ICOs- STOs provide greater investment security than ICOs because issuing companies aim to meet regulatory requirements (such as know your customer regulations) when issuing their security tokens. Unlike blockchain coins which typically only have a utility value, security tokens normally represent legally binding contracts.

**Market Overview**

According to PWC in 2018, the capital raised by companies by way of STOs was $442 million, encompassing a total of 28 Security Token Offerings. While ICO’s also observed twice the growth in 2018 as compared to 2017, by 2018 STOs were increasingly the mode of fundraising - therein surpassing the traditional ICOs. The increased attention towards STO’s was contributed to factors including regulatory aspects and the shifting trends towards the tokenization of assets.

As per a study conducted by Blockstate, the number of Security Token Offerings increased from 35 in 2018 to 55 in 2019, with the finance and banking sector holding the most projects. The total funding raised increased to $452 million in 2019.


256 Every user on a blockchain network has a set of two keys. A private key, which is used to create a digital signature for a transaction, and a public key, which is known to everyone on the network.


In a subsequent report by PWC, Switzerland and the Crypto Valley Association, Switzerland, 2020 identified 380 token offerings that raised a collective of $4.1 billion. The report reveals that while STOs did not register much growth in the second half of 2019, their general scope and relevance continues to strengthen. The report further points out that major institutions, including the Bank of China and the Austrian Government, have started issuing tokenized assets like securities, bonds, and loans. 259

Types of Security Tokens

Most jurisdictions have limited the definition of security tokens to mean the tokens which exhibit the characteristics of securities under the definition of the applicable securities regulations and more often than not, are regulated by the capital markets authorities of the said jurisdiction.

1. **Equity tokens/ share tokens** - The tokens which mirror the behavior of a share and investors can participate in the voting process of a company, receive a share of their profits, receive dividends, and exercise the rights as shareholders of an entity.

2. **Tokenized Fund Units** - These tokens will act like the units of the funds and shall entitle the token holders the same dividend and profits and rights to exercise, as that of a unit holder.

3. **Asset Tokens** - These types of tokens are dependent on real-world assets such as land, art, or even property and equipment. Asset-backed tokens are common in real estate projects, as well as


infrastructure related activities- and may entitle the holders the right to timeshare, profits and title in some cases.

4. **Debt Tokens/ Tokenized bonds**: Debt tokens and tokenized bonds act as loans on the company and entitle the creditors with the same rights as regular debentures, bonds and debt instruments.

**Standard Legal Process for A Security Token Offering:**

While different jurisdictions have different requirements for issuance of security tokens predominantly a security token offering can be split into the following stages:

1. Identification of token structures
   a) Transferability of the tokens;
   b) The class of securities that the tokens may qualify under:
      i. shares and comparable products;
      ii. bonds and other forms of securitized debts; and
      iii. any other securities giving the right to acquire or sell any such transferable securities or giving rise to a cash settlement

2. Assessment of any applicable exemptions: Most jurisdictions provide companies with an option of opting for exemptions from statutory filings and registrations:
   a) Offers are limited to qualified investors or within a certain limited number of unqualifies investors (typically maximum of 50-200);
   b) The nominal value of the offering is within a stipulated range (up to certain amount of investment)

3. In the event the exemptions are applicable: then, depending upon the nature of regulations, an entity may not be required to file statutory filings and pursuant to the exemptions- offers the securities through private placement rounds to the selected and eligible investors.

4. The event the exemptions are not applicable, and the entity is deemed to be making a public offer pursuant to the applicable legislations: then, the entity shall have to follow the following procedure.
   a) Identifying the underwriters and book running lead managers for acting as intermediaries between the issuing entity and the investors;
   b) Seeking appropriate approvals for intention to offer securities to the public. (as required by the applicable regulation)
   c) Registration of the prospectus and the private fillings as required by the applicable jurisdiction for the public offering.
   d) Filling of Red Herring Prospectus with the capital markets regulator.
   e) Price discovery and issue of securities on recognized and regulated exchanges;
   f) Allotment of shares and updating of registers of the entity.
CASES OF SECURITY TOKEN OFFERINGS IN THE ARAB REGION AND BEYOND:

1. In March 2019 - SGH Global, a New-Jersey-based company the owner of two gold and silver mines in Peru, announced and conducted a $100 million security token offering (STO) sale targeting investors in the UAE and wider Middle East.

2. *World Bank’s Bond-I* – In 2018, the World Bank launched bond-i (blockchain operated debt instrument), the world’s first bond to be created, allocated, transferred and managed through its life cycle using distributed ledger technology. The two-year bond raised $110 million, on World Bank’s development activities in a transaction fully managed using the blockchain technology. The World Bank mandated - Commonwealth Bank of Australia (CBA) as arranger for the bond on August 10.

3. *Blockstack PBC*- In 2019, Blockstack became the first company in USA to be qualified by the US Securities and Exchange Commission (SEC) for security token offering. The token offering was qualified by the SEC under Regulation A+.

4. *Franklin Templeton*- In September 2019, Franklin Templeton made a preliminary SEC filing to start a blockchain-based mutual fund for government securities. In the filing, the company said ownership of the fund’s shares will be recorded on the Stellar blockchain network, along with the traditional recording by the transfer agent.

5. *Bitbond*- Bitbond’s STO was concluded in July 2019 raising over €2.1 million. The Bitbond Token was the first issuer to receive approval of a prospectus by Germany’s security regulator – BaFin.

6. Last year, BaFin also approved the first cross-border security token offering (STO) for *ParkinGO*, ParkinGO will issued digital securities on the token issuance platform *STOKR*, based in Luxembourg.

**Tokenisation of Various Classes of Securities:**
As per the analysis conducted by Crypto Valley Association, Switzerland the below asset classes can be tokenized with appropriate provisions and applicable laws.

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1. **Shares**- Tokenizing shares requires that the Articles of Association (AOA) of the issuing company to contain specific provisions or issuance of shares tokenized format. It also requires that the Issuing Company adopt internal regulations, which will formalize the manner in which the tokenized shares will be issued and transferred on the blockchain, how the shareholders can get back their tokenized shares once they have lost access to the tokenized shares (i.e. loss of private key) and how a token holder will be recognized as a shareholder of the Issuing Company. Depending upon the nature of the offering, the offering may be made by way of private placement, exempt offers or public offerings.

2. **Participation certificates**- Participation certificates are typically non-voting rights associated with capital, giving only economic prerogatives to their holders. The Articles of Association (AOA) of a company may provide for participation capital divided into specific amounts and issued in the form of participation certificates. Participation certificates are issued against a capital contribution, have a nominal value and do not confer voting rights.

3. **Bonds**- In order to raise capital, companies may issue debt in the form of bonds. When a bond is issued, the lender or the Bond Holder intends to receive, at the maturity date, the capital lent to the issuing company (principal) along with the interests. The Bond Holder has a claim in repayment against the Issuing Company. The price of a bond is determined by two major variables such as the coupon it pays i.e. the “bond yield”, as well as the issuers’ risk. In this scenario, both the bond instrument and the bond yield can be tokenized.

4. **Fund Units and Collective Investment Scheme Units**- In case of fund and collective investment schemes (CIS) the capital is raised from investors for the purpose of collective investment, whereby such assets are managed for the account of the investors, typically by a third-party fund manager. In cases of funds and CIS, the units of participation and rights associated with it can be tokenized. Similarly, in a fashion similar to the bonds, the rights to dividends can paid in tokenized forms.

5. **Derivatives of Securities**- Derivative financial instruments are contracts that derive their economic value from the fair value of an underlying asset as a benchmark. Assets such as equities, bonds and commodities or reference rates such as currencies, interest rates and indices may be provided as underlings. Derivatives can be either a fixed, swap or option. In case value of token depends economically on another underlying asset and forward transactions, tokens can qualify as derivatives.

**Tokenization of Movable and Immovable Property:**

If one were to look at tokenization of movable and immovable properties in absence of security tokens, as discussed above, there are fundamental loopholes in absence of appropriate legislations and industry specific processes.
**Immovable Property:** The tokenization of immovable property, such as a co-ownership rights of real estate is contentious in itself. The registration process is formal in most Arab countries and requires a contract between the buyer(s) and seller(s), which must be executed as a title deed. Therefore, an informal transfer of the token does not lead automatically to the transfer of the ownership or co-ownership right(s) of property (real estate). It cannot be guaranteed that the token and the co-ownership right could be transferred at once (simultaneously / jointly) within one transaction. In many cases the models related to tokenization have been tried in respect of tokenization of immovable assets, involving securitization of assets by way of security tokens of the holding company. Companies or funds can be the owner of the immovable property and potential investors can buy or subscribe for shares and/or participation certificates which can be tokenized. In addition, tokenized loans or bonds are basically feasible to allow a buyer to purchase real estate.

Most jurisdictions, however, are still struggling with the concepts of fractionalization of properties and as such, the fractional ownership by way of tokens is yet to successfully implemented – still rendering the real estate market illiquid.

**Movable Property:** Rights in *rem*, such as the ownership of a classic car or a collection of art can neither be represented by a title, nor traded in traditional markets by way of tokenization. The ownership relationships could be represented in a decentralized register. In cases of movable properties, in absence of laws governing the transactions, if it is the clear intention of the parties to transfer ownership of a property held by a third party or a part thereof by transferring a token, the transfer of the token can be seen as the expression of an informally concluded agreement to transfer possession. The transfer of the token can at the same time play the role of notification to the party with direct possession; that party knows that possession of the token is now on behalf of the new owner and that the object may, in principle, only be delivered to that new owner.

For example, warehouse receipts representing agricultural commodities deposited in authorized warehouses can be tokenized and traded or financed in a blockchain without requiring any movement of the assets themselves. The tokenization of the warehouse receipt allows a buyer or financial institution to purchase or take a security interest in the token to finance the SME producer in manners not possible without DLT, with the ultimate holder of the token obtaining access to the physical warehoused goods. Tokenization of warehouse receipts can also allow a lender to finance pre-warehousing and pre-tokenization agricultural processes, by allowing the lender to take a security interest in the original crop inputs and their proceeds, including harvested crops, warehouse receipts, token, and the proceeds of the sale or financing of the token on a blockchain, ultimately providing innovative and secure ways to finance SME production and business activities.
International Framework on Virtual Financial Assets:

One of the most important contributions of tokenization is the creation of a new class of asset – “cryptocurrency”. Cryptocurrencies such as Bitcoin, are secured via cryptography\(^\text{265}\) using an ingenious system of public and private digital keys. International forums and organization have tried to develop definitions of this new class of digital asset.

International Forums

1. **International Monetary Fund (IMF)\(^\text{266}\) and World Bank:**

The IMF recognizes virtual currencies as digital representations of value, issued by private developers and denominated in their own unit of account. It recognizes that virtual currencies are digital representations of value, but differ from other digital currencies, such as e-money, which is a digital payment mechanism for and denominated in fiat currency.

The World Bank classified cryptocurrencies as a subset of digital currencies, which it defines as “digital representations of value that are denominated in their own unit of account distinct from e-money, which is simply a digital payment mechanism, representing and denominated in fiat money\(^\text{267}\)”.

2. **FATF Guidelines on Virtual Currency:**

The Financial Action Task Force (FATF) in its report of 2014\(^\text{268}\) defined ‘Virtual Currency’ as “digital representations of value that can be digitized exchanged and function as: (1) a medium of exchange; and/or (2) a unit of account; and/or (3) a store of value, but do not have legal tender status (i.e. when tendered to a creditor, are a valid and legal offer of payment) in any jurisdiction.” It further stated that virtual currency is distinguished from fiat currency (which is the coin and paper money of a country that is designated as its legal tender) and is customarily used and accepted as a medium of exchange in the issuing country. It is distinct from e-money, which is a digital representation of fiat currency used to electronically transfer value denominated in fiat currency. E-money is a digital transfer mechanism for fiat currency, i.e. electronically transfers money that has legal tender status.

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\(^{265}\) Cryptography is the technique of protecting information by transforming it (i.e. encrypting it) into an unreadable format that can only be deciphered (or decrypted) by someone who possesses a secret key


Interestingly, the 2014 report also defined Convertible (or open) virtual currency to mean the ones which are equivalent value in real currency and can be exchanged back-and-forth for real currency and included Bitcoin as an example thereof. Further, the report defined Non-convertible (or closed) virtual currency as the ones intended to be for a particular virtual domain or world under the rules governing its use, which cannot be exchanged for fiat currency.

So far as the activities related to the virtual currencies are concerned - the subsequent version of the FATF report published in 2015 and 2019 also included the virtual asset service providers to mean:
(a) natural or legal person who exchange between virtual assets and fiat currencies;
(b) exchange between one or more forms of virtual assets;
(c) transfer of virtual assets;
(d) safekeeping and/or administration of virtual assets or instruments enabling control over virtual assets; and e) participation in and provision of financial services related to an issuer’s offer and/or sale of a virtual asset.

Leading Countries:
The USA and Switzerland were the first countries to initiate the legitimization of tokens. In 2017, both USA and Switzerland introduced guidelines for issuance and regulations of various token classes.

1. UNITED STATES OF AMERICA

In accordance with Framework for “Investment Contract Analysis of Digital Assets” as released by the US Securities and Exchange Commission (SEC “Guidance”), the term "security" includes an "investment contract," as well as other instruments such as stocks, bonds, and transferable shares. A digital asset should be analysed to determine whether it has the characteristics of any product that meets the definition of "security" under the federal securities laws.

Howey Test

As per the Guidance, the U.S. Supreme Court's Howey case have found that an "investment contract" exists when there is the investment of money in a common enterprise with a reasonable expectation of profits to be derived from the efforts of others. The "Howey test" applies to any contract, scheme, or transaction, regardless of whether it has any of the characteristics of typical securities. The focus of the Howey analysis is not only on the form and terms of the instrument itself (in this case, the digital asset) but also on the circumstances surrounding the digital asset and the manner in which it is offered, sold, or resold (which includes secondary market sales).

The Applicable Law in USA To Digital Assets – Securities Offering

Section 5 of the US Securities Act of 1933 (the “Securities Act”) requires that all securities offered for sale be registered with the US Securities and Exchange Commission (SEC), unless an exemption applies. Further, it requires “that the issuer disclose a variety of information to investors in connection with the registration requirement.” The Securities Exchange Act of 1934 (the “Exchange Act”) imposes ongoing disclosure requirements. Further, both it and the Securities Act prohibit issuers from defrauding the public and impose liability for any misstatement or omission of material facts. The registration, disclosure, and antifraud provisions apply only to the sale of instruments that qualify as a security. The analysis of tokens under US securities law thus begins with the definition of the term security. Section 2(a)(1) of the Securities Act and Section 3(a)(10) of the Exchange Act generally define security as any note, stock, bond, debenture, evidence of indebtedness, certificate of interest, or participation in any profit-sharing agreement, transferable share, investment contract, or instrument “commonly known as a security. The registration, disclosure, and antifraud provisions apply only to the sale of instruments that qualify as a security.

In July 2017, the SEC released a report in which it used the Howey test to determine that a blockchain-based token qualified as a security and required registration under Section 5 of the Securities Act. In the USA, token issuers may therefore be subject to state securities laws and that state regulators have many of the same concerns as their federal counterparts.

Other Regulations:

Token issuers in USA are also governed by the state specific laws which may impact the way the tokens are characterized and determined to be a security. For instance, on 4 January 2018, the Texas Securities Commissioner issued an emergency cease-and-desist order for BitConnect to stop offering any securities for sale in Texas until BitConnect registered with the Texas Securities Commissioner or received an exemption under the Texas Securities Act.

The Howey test is highly fact dependent and highly flexible, as determined in the litigated matter of the US Securities and Exchange Commission (SEC) v. C.M. Joiner 271Leasing Corp: The reach of the [Securities] Act does not stop with the obvious and commonplace. Novel, uncommon, or irregular devices, whatever they appear to be, are also reached if it be proved as a matter of fact that they were widely offered or dealt in under terms or courses of dealing, which established their character in commerce as "investment contracts."

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Commodities Law:
In 2015, the Commodity Futures Trading Commission (CFTC) of USA had determined that virtual currencies, including decentralized virtual currencies, fall within the definition of commodities and may therefore fall within the ambit of the CFTC’s regulatory oversight.

Money Services Business Laws:
- Regulation under the Federal Bank Secrecy Act
The Financial Crimes Enforcement Network of the US Department of the Treasury (FinCEN) enforces the Bank Secrecy Act (BSA) and its implementing regulations. The BSA and its regulations “subject financial institutions and money services businesses (MSBs) to a wide range of anti-money laundering obligations,” including registration, filing suspicious activity and currency transaction reports, and collecting and maintaining customer information and transaction records. MSBs include those entities that provide money transmission services.

- Regulation under state money transmitter laws
Most states also regulate the sale of virtual currency—potentially including tokens—as money transmission, the sale of stored value, or the sale of payment instruments. Each state maintains a different statute, with different definitions of money transmission, stored value, and payment instruments.

Case Study: Telegram Offering:
Telegram was founded in 2013 by Russian brothers Nikolai and Pavel Durov, who previously started Russian social networkVKontakte, often referred to “Facebook of Russia.” Telegram has been launched as a messaging platform likeFacebook Messenger, WhatsApp or WeChat and is known as an easy place to create group chats and for its focus on encryption and privacy, protecting conversations from being viewed by outsiders.272

Telegram Group Inc. and its wholly-owned subsidiary TON Issuer Inc. began raising funds in January 2018 to finance the companies’ business, including the development of their own blockchain, the“Telegram Open Network” or“TON Blockchain,” as well as the mobile messaging application Telegram Messenger. Telegram sold approximately 2.9 billion digital tokens called “Grams” at discounted prices to 171 initial purchasers worldwide, including more than 1 billion Grams to 39 purchasers in the United States. Telegram promised to deliver the Grams to the initial purchasers upon the launch of its blockchain by no later than October 31, 2019.

What was Telegram Open Network (TON) or TON Blockchain?

At the core the TON blockchain of Telegram was intended to be a scalable and flexible blockchain architecture which would facilitate (a) **storage**- distributed file-storage technology for storing arbitrary files, with torrent-like access technology and smart contracts used to enforce availability; (b) **proxy**- a network proxy/anonymizer layer used to hide the identity and IP addresses of TON nodes; (c) **services**- a platform for third-party services of any kind that enables smartphone-like friendly interfaces for decentralized apps and smart contracts, as well as a World Wide Web-like decentralized browsing experience; (d) **DNS**- service for assigning human-readable names to accounts, smart contracts, services, and network nodes; (d) **payments**- a platform for micropayments and a micropayment channel network.

All these services could be integrated with third-party messaging and social networking applications, uniting the centralized and the decentralized means. 273

The ecosystem that was promised by Telegram was that the TON Coins issued to the purchasers by ways of the coin offering could be exchanged by Telegram users and called ‘Grams’. The Grams were intended to serve as the principal currency for the in-app economy on Telegram, and, like any other cryptocurrency, that would be available for external use. Further, Telegram’s existing ecosystem will be promised to offer ways of buying the TON coins (Grams) eventually, and various services to spend them on.

As per the whitepaper of Telegram274 (supposedly leaked275) the purpose of the TON Coins was to act as a Cryptocurrency which will be used as:

1. Commission paid to TON nodes for processing transactions and smart contracts;
2. Stakes deposited by validators to be eligible to validate transactions and generate new blocks and coins;
3. Capital lent out to validators in exchange for a share of their reward;
4. Voting power required to support or oppose changes in the parameters of the protocol;
5. Payment for services provided by apps built on the platform (TON Services); Payment for storing data securely in a decentralized way (TON Storage);
6. Payment for registering blockchain-based domain names (TON DNS) and hosting TON-sites (TON WWW);
7. Payment for hiding identity and IP addresses (TON Proxy);

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8. Payment for bypassing censorship imposed by local ISPs (TON Proxy).

The technical whitepaper subsequently released in February 2020 described in greater details the TON Blockchain’s block format, validity conditions, virtual machine invocation details, smart contract creation process and cryptographic signatures.\(^{276}\)

**TELEGRAM and SEC- The court battle:**

On October 11, 2019 the SEC announced that it has filed an emergency action and obtained temporary restraining order against two offshore entities conducting an alleged unregistered, ongoing digital token offering in the U.S. and overseas that has raised more than $1.7 billion of investor funds.\(^{277}\)

As per the petition filed by the SEC with United States District Court Southern District Of New York\(^{278}\), SEC alleged that the offering was occurring in violation of the registration provisions of the federal securities laws of the United States. As per the petitioners SEC “Grams are securities because the Initial Purchasers and subsequent investors expect to profit from Telegram’s work: the development of a TON “ecosystem,” integration with Messenger, and implementation of the new TON Blockchain. Grams are not a currency because, among other things, there are not any products or services that can be purchased with Grams. Rather, there is an expectation on the part of investors that they will profit if Telegram builds out the functionalities it has promised.”\(^{279}\)

**Arguments on Public Offering:**

It was argued by SEC that once the Grams are delivered to the Initial Purchasers, they will be able to resell billions of Grams on the open market to the investing public. Telegram and/or its affiliates will facilitate these sales on digital-asset trading platforms. Once these resales occur, Telegram will have completed its unregistered offering with billions of Grams trading on multiple platforms to a dispersed group of investors. Further it was alleged that Sections 5(a) and 5(c) of the US Securities Act require that an issuer of securities like Telegram register its offers and sales of securities with the SEC. Telegram failed to file a registration statement and planned to sell billions of Grams to investors without providing them the type of basic information about the nature of the investment being offered, information that is included in hundreds of registration statements that are filed with the SEC every year. SEC argued that the in the event Telegram completed the offering, the same will be deemed to have circumvented the registration requirements under the US Securities Act.

\(^{278}\) Securities and Exchange Commission v. Telegram Group Inc. And Ton Issuer Inc., 19 Civ. 9439 (PKC) ECF.
\(^{279}\) *Ibid* Page 2, point 3
Teachings from the Telegram case:

In response to SEC’s petition, Telegram asserted that the SEC’s failure to establish clear guidelines for token issuers has led the agency to compensate with meritless and constitutionally vague SEC enforcement actions.280

Telegram contested that its private placement on TON Coins was towards “highly sophisticated, accredited investors” and was conducted pursuant to “valid exemptions to registration under the federal securities laws” and Grams were not intended to be securities when they are created at the time of launch of the TON Blockchain281. Telegram alleged that “the term “investment contract,”” is open-ended: while the Supreme Court [of USA] interpreted it in Howey, the application of Howey to digital assets raises unique issues that require more specific guidance to avoid trapping the unwary. But to date [of the filed response], the SEC has failed to provide consistent and meaningful guidance on whether and how it will regulate cryptocurrencies like Grams. Moreover, the SEC never provided fair notice that it believed Telegram’s actions had violated and would violate the federal securities law, even as it knew Telegram was expending significant time and resources, including investor funds, to prepare to launch the TON Blockchain and Grams.”

Therefore, the determination of whether a token can be qualified as a security token or a utility token can be determined on the factors of:

1. Nature of asset and form;
2. Token creation purpose, mode of distribution and secondary markets;
3. The intermediated activities. 282

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281 The offering was made pursuant to the exemptions to registration contained in Rule 506(c) of Regulation D (for U.S. purchasers) and Regulation S (for foreign purchasers) under the Securities Act of 1933.
2. **SWITZERLAND**

In February 2018, the Swiss Financial Market Supervisory Authority FINMA had set out how it intends to apply financial market legislation in handling enquiries from ICO organisers. The guidelines also defined the information that FINMA requires to deal with such enquiries and the principles upon which it will base its responses, creating clarity for market participants.\(^{283}\)

The FINMA guidance specified that ICOs were not to be governed by any specific regulation Switzerland. Although, equity and debt capital-raising, deposit-taking and the activities of financial intermediaries were to be controlled by existing laws that protect creditors, depositors and investors and which ensure that financial markets function properly.

In a departure from what was the norm at the time to identify the tokens into the category of Security or Utility, the FINMA introduced its own nomenclature- (a) Payment tokens; (b) Utility tokens (c) Asset tokens:

| 1. **Payment tokens**- synonymous with cryptocurrencies and have no further functions or links to other development projects. Tokens may in some cases only develop the necessary functionality and become accepted as a means of payment over a period of time. |
| 2. **Utility tokens** are tokens which are intended to provide digital access to an application or service. |
| 3. **Asset tokens** represent assets such as participations in real physical underlying, companies, or earnings streams, or an entitlement to dividends or interest payments. In terms of their economic function, the tokens are analogous to equities, bonds or derivatives. |

So far as the raising of funds by way of the said tokens and the associated risks with money laundering are concerned- the entities issuing and engaging in activities are required to the comply with the Swiss Anti-Money Laundering laws.

Further, as far as public offering of shares is concerned- the same involves filing a prospectus with FINMA and undertaking the necessary anti-money laundering checks on purchasers.

Under the Swiss Law\(^{284}\)- Securities are standardised certificated or uncertificated securities, derivatives and intermediated securities that are suitable for mass standardised trading, i.e. they are publicly offered for sale in the same structure and denomination, or are placed with more than 20 clients, insofar as they have not been created especially for individual counterparties. Tokens can be treated as

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\(^{283}\) FINMA Guidance 04/2017 “Regulatory treatment of initial coin offerings, 29 September 2018

securities if they – in their economic function – (i) represent an uncertificated security are (ii) standardised and (iii) suitable for mass standardised trading.

Further, issues and public offerions of securities generally do not require an authorization from FINMA. However, in the following cases issues and/or public offerions of security tokens require a licence: (a) Underwriting and offering tokens constituting securities of third parties publicly on the primary market; (b) The creation of derivative products; (c) collective investments schemes.

Regulatory Landscape - In Arab Countries:

Regulators globally are reviewing their own legal structures and determining the approach that they may adopt towards the varied nature of digital assets. Within the GCC, the ADGM (in UAE) and the Central Bank of Bahrain (CBB) have been frontrunners in the adoption of regulations in this space. Some countries like Algeria and Morocco have banned any and all activities involving cryptocurrencies.

3. United Arab Emirates:

Securities and Commodities Authority of UAE:

In October 2019, the Securities and Commodities Authority of UAE launched a draft of the regulations on crypto assets. Pertinently, the key definition is relating to ‘Crypto Asset’- which functions as a medium of exchange, store of value, unit of account, representation of ownership, economic rights or rights access of utility of any kind, which is capable of being electronically transferred. The major sub-sectors under Crypto Assets include – ‘Commodity Tokens’ (which are non-Security Tokens) and Security Tokens. Further the Crypto Asset Exchange has been defined to mean a platform or facility for the trading, conversion and/or exchange of Crypto Assets in return for other Crypto Assets, fiat currency, Securities and/or Commodities, which applies non-discretionary trading and/or order matching rules, or which brings potential buyers and sellers together (regardless of whether any resulting transaction is executed on the platform).

The views adopted by SCA and the consultation appear to show a keen interest to look towards adoption of such assets in the UAE.

Abu Dhabi Global Market:

The FSRA, the financial regulator in the financial free zone of ADGM publicly supported the development of certain digital assets, through the amendments to its rules and regulations285. The

285 Guidance Regulation of Virtual Asset Activities’ (as amended and updated on February 24, 2020) (“ADGM Virtual Asset Guidance”), the “Guidance - Regulation of Digital Security Offerings and Virtual Assets under the Financial Services and Markets Regulations’ (as amended and updated on February 24, 2020) (“ADGM ICO Guidance”), and
ADGM regulations or framework (“ADGM Framework”) has classified Digital Assets into: (i) Digital Securities; (ii) Virtual Assets; (iii) Fiat Tokens; (iv) Derivatives/ Funds of Digital Assets; and (v) Other Digital Assets. Interestingly, even though the concepts surrounding each of these categories have been included, the FSRA has attempted to fit each of them within their existing framework, as much as possible. For example, FSRA has clarified the following positions:

1. **Digital Tokens**: if the ‘digital’ or ‘virtual’ tokens have the features and characteristics of a ‘Security’ under Financial Services and Markets Regulations 2015 (FSMR), then such tokens shall be deemed as Securities and may be referred to as ‘Digital Securities’. Generally, for a token to be deemed to be a Security, it should exhibit the characteristics or features of a Share, Debenture or, Units in a Fund.

2. “**Virtual Assets**” have been defined as “a digital representation of value that can be digitally traded, and functions as: (a) a medium of exchange; and/or b) a unit of account; and/or c) a store of value, but does not have legal tender status in any jurisdiction. A Virtual Asset is: (a) neither issued nor guaranteed by any jurisdiction and fulfils the above functions only by agreement within the community of users of the Crypto Asset; and (b) distinguished from Fiat Currency and E-money.”

3. **Fiat Tokens**: ‘Fiat Tokens’ (which is based on the term ‘Stable Coins’ that is widely used in the market) mean “a fully backed 1:1 fiat token” - backed only by the same fiat currency it purports to be tokenizing. Fiat Tokens are to be treated as a mechanism for storing value (i.e., e-money) and is to be treated as a digital representation of Fiat Currency. This concept is similar to the definition of ‘E-money’ under the FSRA regulations.

4. Any “**Derivative and Collective Investment Funds of Virtual Assets, Digital Securities and Utility Tokens**” would be regulated under the FSMR, as a ‘Specified Investments’.

Though most of the above types of digital assets were included within the existing definitions, the ADGM Framework specifically introduced two (2) new types of digital assets – ‘Utility Tokens’ and ‘Virtual Assets’.

“**Utility Tokens**” are tokens which can be redeemed for access to a specific product or service, typically provided using a DLT platform, these tokens do not exhibit the features and characteristics of a regulated investment / instrument under the FSMR. Unless such Utility Tokens are provisioned as Virtual Assets (which are permitted to be used within the ADGM), spot trading and transactions in Utility Tokens do not constitute regulated activities.

“Guidance – Regulation of Digital Securities Activity (as amended and updated on February 24, 2020) (“Digital Securities Guidance”)"
Offer to Public:

In general, whether an initial coin offering (“ICO”) is to be regulated under FSMR will be assessed by FSRA on a case-by-case basis. Notwithstanding the foregoing, the ICO Guidance has expressly clarified that any issue of any Digital Securities (Security Tokens) will have to comply with the requirements for Offers of Securities that fall under Sections 58 to 71 of FSMR and Chapter 4 of the Markets Rules (“MKT”) which include without limitation the requirement to issue to detailed Prospectus. Further, if a digital/virtual token being offered is assessed to exhibit the (economic and legal) features and characteristics of a Security, the FSRA will deem the digital/virtual token as a ‘Security’ pursuant to Section 58(2)(b) of FSMR. Under the FSMR, for undertaking an offer of securities through an exempt offer\(^{286}\) (or a private placement), the FSRA will review the Exempt Offer documentation. Additionally, issuers of fiat tokens for the purposes of facilitating or effecting payments are treated as a money service business and hence, need to hold a Financial Services Permission (FSP) for the regulated activity of Providing Money Services.

Regulated Activities: As per the latest guidance by ADGM\(^{287}\) it considers the exchanges facilitating the trading of tokens to be a part of the regulated multi-lateral trading facilities operating out of ADGM. Additionally, any market intermediaries (i.e., broker-dealers, investment managers, custodians) and primary/secondary market operators dealing in Digital Securities and/or their Derivatives, will require the prior permission and approval from the financial regulator, as recognized investment exchanges or recognized clearing houses operating out of ADGM. Depending upon the nature of activities of market intermediaries, they may be required to seek appropriate approvals for dealing in or managing virtual assets.

4. **BAHRAIN:**

Central Bank of Bahrain:

In Bahrain, the Central Bank of Bahrain (“CBB”) introduced a Crypto Asset Module (“Bahrain CRA Module”) in the Capital Markets volume of its Rulebook. The Module contains the rules concerning trading, dealing, advisory services and portfolio management services in accepted crypto-assets as a principal, agent, custodian or crypto-asset exchange, within or from the Kingdom of Bahrain. In a deviation from ADGM, the Central Bank of Bahrain created completely different categories of tokens that come under the umbrella of “Crypto Assets” - defined as: “virtual or digital assets or tokens

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\(^{286}\) ‘Exempt Offer’ as defined under MKT Rules 4.3

operating on a blockchain platform and protected by cryptography. Tokens are broadly of four types: Payment tokens, Utility tokens, Asset tokens and Hybrid tokens.\textsuperscript{288}

1. **Payment tokens (Exchange tokens):** Payment tokens (synonymous with cryptocurrencies) are virtual currencies which are intended to be used, now or in the future, as a means of payment for acquiring goods or services or as a means of money or value transfer. Payment tokens give rise to no claims on their issuer and are usually decentralized. The most prominent example is Bitcoin.

2. **Utility tokens:** Utility tokens are tokens that are intended to provide access to a specific application or service but are not accepted as a means of payment for other applications.

3. **Asset tokens:** Asset tokens represent assets such as a debt or equity claim on the issuer. Asset tokens promise, for example, a share in future company earnings or future capital flows. In terms of their economic function, therefore, these tokens are analogous to equities, bonds or derivatives. Tokens which enable physical assets to be traded on the blockchain also fall into this category.

4. **Hybrid Tokens:** Hybrid tokens are those that have features of one or more of the other three types of tokens."

**Offer to Public:**

Bahrain has not provided special clarification or guidance in relation to the offer or issue of Crypto Assets. Nonetheless, the current framework relating to the offer of securities to the public is of significance in relation to the offer of ‘Asset Tokens’, which are tokens representing assets such as a debt or equity claim on the issuer. In accordance with Article 81 of the Central Bank of Bahrain and Financial Institutions Law ("\textbf{CBB Law}")\textsuperscript{289}, no person may issue any securities in the Kingdom unless otherwise permitted by the CBB. Furthermore, under the Offering of Securities (OFS) Module contained in Volume 6: Capital Markets of the Rulebook, the CBB has provided clarity on an offer of “securities”. The CBB’s approval will, therefore be required, irrespective of whether the offer of products is regarded as a public or private offer. As per the provisions of the rulebook, an offer of ‘securities’ and marketing thereof, can be undertaken only with the approval of CBB. Such an offer of securities can only be carried out by financial institutions that are appropriately licensed, authorized or exempted by the CBB. Furthermore, in accordance with the OFS Module, the offer of securities shall be deemed to be a private placement provided that\textsuperscript{289}:

1. It is only made to accredited investors\textsuperscript{290};

\textsuperscript{288} Glossary of Defined Terms of the CRA Module by CBB
\textsuperscript{289} OFS 2.4.2 of the CBB Rulebook.
\textsuperscript{290} Accredited investors are defined in the Rulebook as: Individuals who have a minimum net worth (or joint net worth with his or her spouse) of $1m, excluding that person’s principal place of residence; Companies, partnerships, trusts or other commercial undertakings which have financial assets available for investment of not less than $1m; or
2. It is for a minimum investment of $100,000; and
3. It is limited to a take up by less than 100 accredited investors.

The offer of securities will be regarded as a public offer if the above conditions for the private placement are not satisfied. In such a case, the offer will have to comply with the requirements of the public offering in Bahrain.

**Regulated Activities:** The CBB suggests that all the people marketing or undertaking activities within or from Bahrain, which is comprised of regulated crypto-asset services, are required to obtain a license from the CBB. Regulated crypto-asset services include one or more of the following activities –

1. Reception and Transmission of order;
2. Execution of orders on behalf of clients;
3. Dealing on own account;
4. Portfolio management;
5. Crypto-asset custodian;
6. Crypto-asset exchange; and/or
7. Investment advice.

However, be advised that the following activities do not constitute regulated crypto-asset services:

1. the creation or administration of crypto assets;
2. the development, dissemination or use of software for the purpose of creating or mining a crypto asset; and/or
3. a loyalty programme.

**Sandbox and other Fintech initiatives:**

A number of governments across the Arab region are realising the potential of Fintech and have accordingly introduced initiatives to enhance the state of alternative finance and enable entrepreneurs to implement their Fintech solutions. One such initiative is a regulatory sandbox, which is a framework that creates a controlled virtual space wherein the development, testing and refining of financial technology is facilitated and encouraged in a safe, measured and pragmatic manner. This environment relieves some of the usual regulatory and financial requirements on the start-ups, mature entities and financial services incumbents’ offerings allowing them to test and refine their offerings while mitigating the risks to customers, businesses and the wider financial system as a whole.

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Governments, supranational organizations, central banks or other national monetary authorities and state organizations whose main activity is to invest in financial instruments (such as state pension funds).
There has been the development of sandboxes in a number of Arab countries over the last 4 years. Some of the major sandbox regimes are summarised in Annex A of this report.

Another initiative is the introduction of ‘Fintech Funds’ which are designed for Governments to directly or indirectly support Fintech start-ups in the Arab region. The following are some of the funds open to and accessible by Fintech start-ups:

1. **The Central Bank of Egypt** has established a fund worth $57 million which it shall use to invest in Venture Capitalists focused on Fintech start-ups or co-invest with partner Venture Capitalists\(^{291}\).

2. **The Abu Dhabi Catalyst Partners** in collaboration with ADGM announced a fund with capital of $1 billion in April 2019. It is backed by the Mubadala Investment Company and focuses on originating investment opportunities around asset management, specialty finance and financial infrastructure\(^{292}\).

3. **The DIFC Fintech Fund** is a government led initiative with capital funding of $100 million and was announced in March 2019. The focus of this fund is to establish, grow and upscale start-ups and growth stage entities with a presence in or access to the MEASA markets\(^{293}\).

4. **The Al Waha fund of funds** was launched in June 2018 with capital funding of $100 million from which $35 million is committed to a series of venture funds, which directly invest in companies from the MENA region (Technology, Fintech or Smart Cities solutions)\(^{294}\).

5. **The Global Fintech Fund** is a venture led by Bahrain and was launched in October 2018, with capital funding of $100 million, which was to be used to invest in Fintech opportunities in the US, Europe, Southeast Asia and member states of the GCC\(^{295}\).

Additionally, there is the establishment of Fintech accelerators and incubators in countries such as the UAE, Saudi Arabia and Bahrain, namely:


\(^{293}\) Ibid

\(^{294}\) Ibid

\(^{295}\) Ibid
1. **DIFC Fintech Hive** – The DIFC Fintech Hive was launched in 2017 and seeks to foster and promote innovation in the region and bring cutting-edge financial services technologies to the MENA region. Within the Hive, a dynamic 12-week accelerator program is offered where startups can test and develop their solutions under the mentorship of representatives from leading banking and insurance institutions, such as: HSBC, Visa, Microsoft, Emirates Islamic Bank and more. It is pertinent to note that cohorts are selected according to local industry needs with the incumbent financial institutions being heavily involved in the makeup of each cohort.

2. **Bahrain Fintech Bay** – The Bahrain Fintech Bay, since its inception in 2018, seeks to “accelerate local early-stage Fintech companies to the next growth stage of commercialisation and expedite partnership opportunities; attract foreign Fintech companies to establish their regional head-offices in Bahrain and facilitate their go to market in the GCC; as well as accommodate Fintech companies to accelerate their customer acquisition and scale their product and services offering through the bay’s partner ecosystem.”

3. **Monsha’at (KSA)** – Monsha’at was established in 2016 with the objective of organising, supporting, developing and sponsoring the SME sector, in accordance with global best practices. Monsha’at aims to increase the establishment of specialised financial service companies in KSA and help facilitate the growth of the role these companies will play in the financial development in KSA. The accelerator program also intends to identify investment opportunities for establishments and work on transferring and localising related technologies to enhance productivity.

The above-mentioned measures can go a long way in identifying technologies which may have a significant impact on alternative finance solutions. By providing a channel that enables innovators to

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engage with regulators, to better understand the regulatory framework and regulatory requirements, innovation offices can help reduce regulatory uncertainty. Through early engagement with innovators developing new products, services and business models, they can advise and inform on the relevant consumer protection and related safeguards required. Innovation offices can, thus, encourage new entrants and promote both innovation and competition, in turn promoting financial inclusion.
Guidelines and Recommendations for the Arab Countries
Guidelines and Recommendations to Support Crowdfunding and P2P Lending Ecosystems:

Regulators should develop policy adoption measures depending on the stage of development of the ecosystem:

The mechanism of crowdfunding and P2P Lending may be in varying stages of development across different countries, leading to differing policy measures by the regulators. They may be in any one of the following three stages:

a. **Early or seed stages of development** – The stage where the use of infrastructural set up (including internet penetration and development of technological payment systems), as well as investor awareness may be in their nascent stages. In this stage, the regulators should facilitate an ecosystem where the support structures necessary for efficient growth of the crowdfunding models may be suggested. The focus, in such scenarios, should be to boost the growth of crowdfunding by improving the market-readiness for such technologies to grow.

To facilitate the creation of a suitable ecosystem, the regulators should not just improve the technological set-up, but also regulate any supporting functionalities (like payment gateways, payment processing, APIs, and digital wallets), to ensure investor protection. Measures may be adopted not only to improve investor awareness of the new avenues created by technology, but also to the risks posed by them.

b. **Growth Stage** – The stage where the crowdfunding/P2P projects have started operations, though the market involvement is still in its early stages.

At this juncture, the regulation of crowdfunding itself is of key significance, in addition to oversight over the supporting functionalities. Active engagement between the regulator and the industry is important. Regulators should encourage industry networks that may develop and improve standards, including those concerning fair marketing practices, disclosure of selection mechanisms (to increase transparency regarding the filtering and selection of projects on the platforms) and transparency concerning fees charged by the platform. Independent research institutions, both private and public, can provide data on market developments, industry maturity, success rates of projects and campaign strategies. The government authorities could facilitate these efforts by organizing regular meetings between government representatives, industry representatives and relevant researchers.

It is also important to support national and regional crowdfunding associations in developing codes of conduct and self-regulation. Increasing the capacity of regulators is important when there is no bespoke regulation on crowdfunding or P2P lending. Regulators should be informed about
the different types of crowdfunding that are growing in their respective countries and other methods of alternative finance adopted. For example, if the increase in the type of crowdfunding is reward-based or donation-based – the financial regulator may not be required to be involved, however, regulatory oversight would still be necessary to ensure that:

i. Strong consumer protection, data protection and cybersecurity/resilience legislations/governance regulations are in place;
ii. The donations and charities are being contributed or channelled for legal operations; and to license charities/agencies;
iii. The funds so contributed are being utilised for the rightful purpose.

In P2P lending and investment-based crowdfunding, it may be possible to include such operators under the existing regulations as ‘intermediaries’ facilitating the licensing of such platforms. Such measures may ensure that the regulator has supervision of the activities undertaken through such platforms, as well as the investor classes investing through such platforms.

c. **Mature Stage** – Where the crowdfunding/P2P projects are being actively utilised by investors.

i. The development of a regulatory framework is an important milestone in the creation of a mature crowdfunding ecosystem. A regulatory framework should seek to provide a dynamic and flexible approach to crowdfunding legislation, while still being stable to strengthen investor confidence and sustainable business models for the platforms.

ii. The crowdfunding regulation should have a robust regulation; especially so where the type of crowdfunding falls within the riskier segments, like: crowd-investing or crowdlending. If the crowdfunding regulation is part of the existing securities regulation or financing regulations, the platforms will often have to deal with regulation that is not aimed at them, but at other parts of the financial sector. Additionally, such regulations should provide clarity about the role of the regulators, as well as the extent of coverage of the license (including rights and obligations of a platform).

iii. Crowdfunding platforms can be brought under a licensing regime, i.e. with local authorities. Licensing would include supervision and monitoring good industry standards; together with adoption of a mandatory requirement to acquire the knowledge to operate a platform. Lending-based crowdfunding may require capital requirements, depending on the volume of credit. The license should be subjected to reporting requirements, i.e. on anti-money laundering activities.

iv. The regulation should contain a set of transparency rules to be adhered to by the platforms on the ownership and legal status of the platform. Possible conflicts of interest should be considered when the owners or team members finance projects on their platforms. There should be a transparent fee structure and a clear process when a platform no longer exists. The platform should provide open disclosure and information on possible risks.
v. It is possible to limit the use of the crowdfunding framework to certain services and products. These service and product restrictions can relate to business processes of the platform, project limitations, investor limitations and investment vehicle limitations. A balance, however, needs to be maintained between limiting the scope of the crowdfunding regulatory framework and enabling the industry to grow dynamically.

vi. It is also necessary to ensure adequate project monitoring. Platforms should be required to carry out the necessary due diligence of each project, including: background checks on project owners, reviewing the creation of companies using the platform, or in verifying the identity of the recipient of a loan - especially if it is a private individual.

vii. Project monitoring should also include ensuring projects comply with all disclosure requirements and that the promotion of the crowdfunding campaign is not misleading. Project monitoring responsibilities imposed on platforms, however, should not lead to platform liability if the project fails economically.

viii. The Platform operator should also have additional responsibilities associated with risk identification and management, business continuity (particularly with the intent of protecting investors and business in case of a wind-down by a platform), human resource management, restrictions with outsourcing critical functions, identifying and reporting of conflict of interest.

ix. The regulatory framework should ensure adequate investor/creditor supervision. The platform must supervise the investment/lending process and ensure the implementation of caps or limits. It must manage the entire financing process, including the completion of financing and over-financing.

x. It must provide a process for managing customer enquiries and a dispute resolution process. It is necessary to distinguish between the limited liability of the platform and the full liability of the issuer. If a platform operates within the crowdfunding framework, it should be necessary to limit the platform's liability. Ultimately, the onus is on the crowd to decide on the feasibility of projects and should, hence, bear the risk of project failure.

*Principled recommended actions for implementing frameworks to support Crowdfunding Ecosystems:*

An analysis and review of the international developments globally and the regional developments may propose certain key recommended actions that may be considered by governments and regulatory bodies, while implementing and enforcing frameworks to support Crowdfunding Ecosystems.

*Recommendations:*

a. Establish a bespoke regulatory framework that seeks to approach crowdfunding legislation dynamically and flexibly. It is key to note that Arab countries are at varying stages of advancement in terms of creating regulatory frameworks. While developing and creating a regulatory framework, regulators should seek a risk-based, proportional oversight approach, as consideration needs to be had
of the level of supervision applicable and required in each jurisdiction. The sophistication of each regulator and the relevant market players need to be considered, in order to develop a suitable and applicable regulatory regime. The depth and frequency of regulatory oversight will largely depend on the risks introduced through the service by the relevant service providers.

b. Coordinate with and seek guidance from the benchmarks and experiences of other Arab countries, as well as countries globally, that have successfully crafted and enacted a regulatory framework, allowing for the lowering of regulatory barriers for all crowdfunding; and simultaneously achieving increased market competitiveness.

c. In addition to the specific rules and regulations relating to crowdfunding platforms and disclosure requirements, the regulators should consider implementing laws addressed to issues which are related to crowdfunding, including market abuse, payment processing, cybersecurity, IT governance, data protection, consumer protection, anti-money laundering and counter-terrorism financing etcetera.

d. The regulatory framework strengthens the ecosystem of alternative financing. It should be possible to create a regulatory framework that can facilitate testing, not only new alternative finance solutions, but also solutions that may improve existing alternative finance models. Encouraging regulatory sandboxes and working closely with Fintech innovators can give regulators insight on the new possibilities brought about by technology, as well as gauge whether a particular technology suits its market. Furthermore, this can also provide a direction to the regulators on sectors that may require initial and urgent attention. Another important benefit of such an approach is in identifying the improvements brought about by newer technologies, like blockchain and tokenization. In addition to sandbox environments, governments may also be involved in funding projects and/or initiating accelerator or incubator programs.

e. The detailed rules of regulators should be laid down in the rules of the regulatory authorities to allow the regulatory authority flexibility to adapt to the market fluctuations. These rules may include, for example: thresholds, reporting obligations or exemptions. The crowdfunding regulation should be harmonized trans-nationally and ideally regionally. The rules for harmonization should include definitions, concepts, thresholds and types of investment vehicles that can be used on crowdfunding platforms.

f. If the current regulatory framework is characterised by an extremely fragmented environment regarding licensing, transparency, information, project monitoring and investor supervision requirements, initiatives must be taken to ensure coherence and harmonization.

g. Implement a strong governance model to address concerns or queries concerning the functionality of Crowdfunding initiatives.
h. Ensure the implementation of a framework highlighting the general overarching principles to ensure customer and investor protection.

i. Create a mechanism to identify poor market conduct, together with subsequent measures to rectify and mitigate market abuse. This framework should be established to cover at the minimum: fraud and the dissemination of false or misleading information, in relation to investments or loans offered through a crowdfunding platform.

j. Implement a mechanism facilitating open and cooperative dealings between regulators and relevant stakeholders.

k. Encourage the involvement and oversee the creation of expert groups on crowdfunding, tasked with the collection, exchange and discussion of methods to best support crowdfunding at a national and regional level. Further, ensure the integration of more than just crowdfunding, such as industrial networks, consultants, universities, fintech start-ups and other stakeholders, to allow for a well-rounded ecosystem as a whole.

l. Establish a database of best practices, platforms and industry data for all crowdfunding stakeholders. Further, improve and strengthen public sector use cases, to build awareness and set examples for all stakeholders on how to utilise crowdfunding. This building on existing regional initiatives also serves the fast-tracking of the development of political frameworks for crowdfunding.

m. Undertake activities to collaborate with regional and international players to develop regional actors and support access for international actors. Allowing such a collaborative ecosystem shall, in turn, facilitate the recognition and development of new niches and local capacities.

**Principled recommended actions for the implementation of frameworks to support P2P Lending Ecosystems, including recommendations from the Organization for Economic Coordination and Development “OECD”:**

An analysis and review of the developments of the regulatory regimes from the respective OECD Countries may be studied to highlight certain key recommended actions that may be considered by governments while implementing and enforcing appropriate frameworks to support P2P Lending Ecosystems.

These recommendations have been developed as best practices, in order to specifically address the following categories which the regulators should be mindful of while implementing frameworks to regulate P2P Lending, namely; (1) Platform requirements; (2) Investor Protection and Business Conduct; (3) Market Integrity and Financial Crime; (4) Regulatory Engagement.
Recommendations:

1. **Platform requirements:**

(a) The financial services regulator should facilitate the creation of a bespoke regime for the authorization and licensing of the operators of lending based crowdfunding platforms, whilst requiring such operators to be assessed in accordance with the following five criteria:

(i) safety;
(ii) soundness;
(iii) proposed systems;
(iv) controls; and
(v) personnel.

The regulator should ensure that the assessment of the operators is tailored to the product categories offered, as well as the types of investors being catered to.

(b) The financial services regulator should ensure the implementation of appropriate minimum prudential standards, such as: minimum capital requirements for lending-based platform operators, while simultaneously permitting flexibility in the form of alternatives to capital (i.e. insurance or guarantees) and varying capital requirements depending on the nature and scale of the activities undertaken by the platforms.

(c) Platforms, as part of their overall risk management framework, should be required to maintain such systems and controls, which should identify, manage, track, mitigate and report risks within and in relation to their business. The financial service regulator should, as part of their supervisory functionality, conduct periodic *ad hoc* assessments to ensure compliance and adequacy of platforms’ systems and controls.

(d) The financial services regulator should, as part of their supervisory functionality, publish guidance on the relevant skills, knowledge and experience for senior management of platforms to adhere to, while in in control of the activities of the platform and when periodically conducting *ad hoc* assessments to ensure the adequacy of training of senior management.

(e) Platforms should be required to retain records of the contracts they enter into, all transactions they are a part of, as well as all the services offered through their platform activities. The regulator should implement provisions guiding platforms as to the types of records which are to be retained, in addition to requiring the platforms to retain such records for a minimum period of time, which shall permit the regulator to monitor, audit and supervise the platforms’ compliance with the regulatory regime.
Platforms should be required to make certain information about the platform available to their clients, including but not limited to:

(i) Basic details of the platform, such as: its legal name, contact details and regulated status;
(ii) Details on how and to whom clients can make complaints – admonishing such Clients of this right;
(iii) How the platform earns its revenue, with a view to identifying any, if any, conflicts;
(iv) The nature and extent of the due diligence undertaken by the platform in respect of its borrowers/issuers; and
(v) The fees and costs the clients are expected to incur in association with borrowing/lending over the platform.

The regulator may additionally elect to direct the manner in which the platforms make available such information, in that it should be easily accessible and written in a clear and concise manner.

2. **Investor Protection and Business Conduct:**

(a) Platforms should be required to provide risk warnings to investors regarding the nature and the key risks of a loan, as well as to how the platform has assessed the risk. The financial services regulator should ensure the imposition of thorough investor protection tools, one of which, should be the disclosure of a comprehensive list of information to the investor for the investor to have sufficient information to make a reasonable assessment and informed decision regarding the likelihood of repayment, as well as to understand the general risk of investing in a loan, together with the full disclosure of details of such a loan offering.

(b) The financial services regulator should ensure that the risk warnings made to investors are tailored to the loans being offered, but should ensure that such warnings are generic to an investor group, specifically making a distinction between retail and institutional investors.

(c) Additionally, the financial services regulator may provide guidance on the overarching principles to be followed by platforms in making risk warnings, but should ideally avoid prescribing the exact wordings for platforms to use, other than for certain specific fundamental risks which the regulator may wish to standardize across the industry’s platforms.

(d) Platforms should be required to disclose a commensurate level of information based on each investor type, with such information being outcome-based, with the outcomes being subject to
the review of the regulator so as to ensure that higher-quality loan opportunities are not being made available to a higher class of investors, to the detriment of the other classes.

(e) The financial services regulator should set certain categories/classes of investors, based on factors including: investor knowledge and experience, which could be defined in accordance with existing financial services categorization approaches (if existing and appropriate). Further, the platforms should be required intermittently assess the categorization of the investor, to ensure for the correct application of tailored investor protection measures.

(f) The regulator may elect, at its discretion and upon the identification of poor investment behaviours, to implement caps on an investor’s investment amount. In doing so, however, the regulator must be mindful of the technical and operational build of the platform in question, so as to allow for adaptation.

(g) Platforms should be required to disclose clearly to investors the level of due diligence that has been performed.

(h) Platforms should be required to put agreements in place with their clients, setting out the relationship between the platform and the client. Such agreements should set out at the minimum the key terms, including:

(i) the parties;
(ii) the nature and duration of the relationship;
(iii) a description of the services provided;
(iv) fees and costs to the investor, i.e. interest payments on loans;
(v) any rights to complain; and
(vi) appropriate risk warnings.

(i) The platforms which act as intermediaries between lenders and borrowers should be required to have decided means of enforcement of loans on behalf of the platform’s investors and any implications thereof, together with the costs of enforcement, which should be outlined to the relevant borrowers and lenders.

3. **Market Integrity and Financial Crime:**

A market abuse or similar framework should be implemented to at least cover fraud and the dissemination of false or misleading information, in relation to loan offerings.
4. **Regulatory Engagement:**

   (a) Platforms should be subject to a general obligation to deal with regulators in an open, transparent and cooperative way; and should disclose to the regulator appropriately anything relating to the platform of which the regulator would reasonably expect notice of.

   (b) Regulators may wish to implement the requirement for regular reporting of key metrics, to facilitate the identification of systemic risks and additionally *ad hoc* reporting on specific eventualities.

**Guidelines and Recommendations to facilitate Tokenization Projects:**

1. **Initiating the process of governance and regulations around tokenization:**

   Greater clarity around the regulatory and supervisory frameworks applied to tokenized assets and markets will be a fundamental stepping-stone as to their safe development and use. At the national level, the implementation of necessary regulatory changes would greatly support the development of token security platforms without the use of the traditional banking system, for the settlement of securities, nor the various current post-trade intermediaries for their delivery, including custody account keepers and a central depository. These developments have become necessary, since traditional financial regulation is designed to require the use of intermediaries, who provide a guarantee to investors as financial market professionals; whereas blockchain is designed to offer this security precisely through its decentralized mode of operation technology.

   These changes, when combined with guarantees adapted to this new technology, will allow for the financial system to take full advantage of the benefits resulting from the possible disintermediation offered by the blockchain. The market for intermediation services on digital assets is, however, growing at a vast pace, as there are many participants organizing the relationship between the different blockchains, trading platforms and investors. It is, therefore, possible that the market will organize itself in a similar way, as for all types of financial instruments, with the rise of actors offering a full range of services to investors.

**Implementation of Laws:**

If the implementation of regulatory changes at the national level were to be considered, three potential avenues could be pursued, namely:

i. **Application of Existing Regulations:** Many regulators worldwide have, prior to taking a definitive stance on regulation, tried to bring it under the umbrella of existing laws. Arab
nations can consider taking a similar approach for assessing the application of current regulations.

- **Retrofitted Regulation:** the amendment of current legislations in which obstacles to the development of security tokens were identified; and

- **New Regulation/ Regime:** the creation of an *ad hoc* regulation for tokenization and associated activities, in order to take into account the specificities of the blockchain and its decentralized nature.

### The Regulation of Entities:

Given the lack of maturity within the market, such regulatory requirements are difficult to identify or amend; and equally difficult to create if there is no appropriate benchmarking and requirement analysis.

**License Approach:** The Arab nations can choose to introduce new categories of licenses for undertaking tokenization-based activities. Such an approach shall require the capital market regulators and central banks to issue and authorize the appropriate categories of licenses, depending upon the purpose of tokenization. For instance, the issuance of cryptocurrencies as a payment mechanism shall be regulated and supervised under the auspices of Central Banks and monetary authorities. Similarly, the issuance of tokenized securities shall be regulated and supervised under the auspices of by the appropriate capital markets regulator.

**Guidance Approach:** An alternative approach could consist of the implementation of a mechanism at a national level, allowing the appropriate and competent authorities to waive certain requirements imposed by regulations, as well as those identified as incompatible with the blockchain environment, so long as the entity benefitting from such exemption complies with the core principles of the regulations and is subject to increased supervision by the regulatory authority. Such a mechanism would furthermore require the implementation of a governance process, encouraging the national competent authorities to engage in intra-authority discussions to further harmonize their practices. Such a mechanism would suspend, with appropriate guarantees, the regulatory obstacles to the emergence of token security market infrastructure projects that would be able to be developed in a secure environment, without modifying the existing regulations; and which could take place at a later stage, once the ecosystem has matured, through reliance on the expertise that the national competent authorities would have gained from the guidance of companies.

#### 2. Sector Specific laws

In order for the tokenization models to be successful, it is imperative that the sectors which come under the purview of tokenization models are broadened with a retrofitted legislative approach, to make way for the proper functioning of tokens. Some of the primary examples of the sectors include:
1. **Real Estate**: this sector shall require specific guidance in relation to the utilization of tokens for time share, fractional ownership and title ownership.

2. **Securities**: as discussed above, tokenization of securities shall require appropriate laws and regulations to be passed by the capital markets regulator for public or private offering of securities.

3. **Commodities**: the tokenization of commodities shall require appropriate regulations for derivation of appropriate price index and trading of commodities in tokenized form. Further, specific regulations may be required for monitoring price manipulation and market volatility.

4. **Movable Assets**: In absence of any laws recognizing ownership and economic rights by way of tokens, it shall be essential for the regulators to recognize transactions by way of tokenization, at par or within the applicable contract regulations, in order to appropriately capture the understanding and terms between the parties.

5. **Rewards**: Bestowing of rewards by way of tokenization shall have to be overlooked by the registrars of the companies, through means of accounting reporting in order to appropriately assess the payment of such rewards and the purpose of such rewards.

6. **Payment**: one of the most important use-cases of tokenization shall be the use of tokens as a form of payment. Specifically, in such cases, depending upon whether the tokens are native or non-native, the appropriate compliance may be governed and supervised by the appropriate financial regulator or registrar of companies.

3. **Compliance with AML/KYC(B) and tax related laws**

At the national level, different institutions regulating and supervising virtual assets should aim for a coordinated approach covering all different facets of such activity (i.e. payments, investments, taxes, accounting, AML/CFT compliance, law enforcement and crime prevention). Considering the cross-border nature of tokens issued through STOs, it should be noted that the legal status of tokens could differ from one country to another, depending on the specifics of how the particular law has been implemented in each nation. The actual classification of tokens as financial instruments is the responsibility of each individual country, with it differing depending on the manner of national implementation of the law, together with the preceding information and evidence provided to that country.

The regulators should facilitate AML, KYC/B and other regulations that are at the center of any financial institution’s obligations when it comes to client service. In token-related business, interactions are more direct, expeditious and irreversible; and as such, operational measures to comply with regulations will have to be adapted, potentially becoming more upstream, factorized, and standardized. Institutions need not reinvent the wheel, but they must instead collaborate with new actors, such as tech startups, KYC/B utilities, or blockchain analytics software vendors to implement...
new operational measures; and in doing so, demonstrate their compliance to the regulators as they continue to operate in the digital space.

In the near future, KYC/B processes are likely be realized by a specialized KYC/B utility, encoded in a self-sovereign digital identity and used by customers each time they enter into a relationship with a new financial institution. Provided that they have consent from the customer, financial institutions will transfer the reference to this identity down the value chain, so that other institutions know with whom they are dealing, such as a crypto exchange transferring the identity to a bank. This will speed up the on-boarding process, reduce the overall cost of KYC/B compliance and simultaneously enable speedier and more direct interactions that are fundamental to the token.

Taxation is another major factor that will be affected and must be considered. Financial institutions that are responsible for processing tax will have to adapt their information systems and processes to compute and deduct certain tax schemes, such as: withholding tax. Part of that processing might be automated and encoded in a smart contract; and as long as the tax authorities do not accept payment of tax in cryptocurrencies, financial institutions will remain in the taxation ecosystems.

For high risk transactions, enhanced due diligence and additional background investigations on the source of the funds and wealth, as well as the beneficial ownership thereof, must be completed to rule out potential ties to criminal activities or terrorism funding. The competences and resources of financial intermediaries in this regard, however, are limited. Transaction monitoring is based on a plausibility check of the information provided by the customer, as well as public blockchain analysis services. Where a financial intermediary has reasonable grounds for suspecting money laundering, a report to the Money Laundering Reporting Office (MLROS) must be submitted.

Existing regulation may need to be applied on new actors (i.e. a trusted third party guaranteeing the accuracy of information at the onboarding of the asset on-chain and safeguarding the asset) and/or new requirements may be needed to be added (i.e. covering the interoperability between DLTs, the interaction or gateways linking the on-chain and off-chain environments). New risks that may arise for the application of DLT technologies (i.e. associated operational risks, risks related to digital identities) will also need to be appropriately supervised.

2. Global compatibility and multi-jurisdictional acceptance

With legislative and regulatory frameworks differing from jurisdiction to jurisdiction, financial institutions must ensure tokens remain compliant both in the issuer’s as well as in the investor’s respective jurisdictions (e.g. a UAE seller and Japanese buyer). There is not a “one size fits all” solution when it comes to legal qualification of tokens. Individualist circumstances must be considered holistically in each individual case as to how tokens can enjoy a global acceptance. The regulators should implement measures to prevent the non-compliance of investments by customers from
jurisdictions with which a token they offer or give access to. This is especially true for multinational institutions that have a global reach.

We expect that with the spread of tokenization there will be new actors, new roles and new services. A decentralized financial system does not guarantee one without financial institutions, however, such institutions must be forward thinking and appropriately prepared to be more capable of embracing the token economy. Traditional players will have the opportunity to meet the new demands of a token economy, be it the provision of platforms for storing tokens, or potentially acting as trusted intermediaries for when the blockchain alone does not suffice. Those that do not rise to the challenge will struggle in the face of fierce competition for an exciting new, tokenized world.

3. **Ensuring data and cybersecurity**

Tokens may raise specific technology and cyber security risks, because of their very nature and the fact that DLT is still a nascent technology, largely untested in financial markets. Consequently, it is important to remember that any system, network or functionality that are (or reasonably appear) safe today, might become more vulnerable to technological risks over time.

While the DLT innately possess of a higher degree of cybersecurity thanks to cryptology and consensus among multiple nodes, the entire ecosystem does have some possible weak points at its edges, which must be properly identified and secured. One of them lies in the management of the wallets and private keys that control them, potentially being at threat of a man-in-the-middle attack or an advanced social engineering act to steal private keys. Not only shall the financial institutions consider implementing proper security measures to secure the whole value chain when they run or interact with blockchain platforms, but they might also need to consider proposing a new kind of service to their customers, for instance: to securely store their wallets and keys. With this in mind, institutions need to carefully plan for cybersecurity at different levels, ranging from network and infrastructure, through to systems and applications, all while considering the opportunity of differentiation through advanced cybersecurity prevention.

Increased transparency has the potential to protect individuals. Personal data storage on the blockchain will allow people to own and maintain personal data, granting and rescinding access and enabling it to be used, shared, or deleted as necessary. Each user has complete transparency over what data is being collected and how it is processed. Disintermediation would simplify the process of authorizing access to personal data, which would streamline processes and increase efficiency.

While opting-out is generally the only way to relinquish continued access to data, the improvement of the existing permission dialog in mobile applications, access control policies will be stored on the blockchain where the user has rights to modify them or revoke access to previously collected data.
4. Consumer Protection

With wider use of tokenized securities raises potential financial consumer protection and market conduct issues - the management of which will be essential to safeguard investors' interests and ensure a fair and orderly market for tokenized assets. Recourse and redress in case of damage due to a technical issue, theft or non-existent real asset backing the tokenization is only some examples of such investor risk exposure involved. Market integrity issues can arise stemming from the immaturity of the market, the potential lack of governance, monitoring and controlling mechanisms; combined with a lack of information around tokenization. Risks to market integrity can damage market confidence and raise the possibility of consumer and investor loss.

Institutions need to consider an infrastructure that will provide both technical and economic solutions to their business models, while also considering the effect it will have on downstream systems. Finally, if the new platform cannot integrate with legacy systems, institutions may face a partial re-platforming of their information system.

5. Platform integration

Depending on the business model chosen, a variety of different operating models may be implemented. As one of the main components of the new operating models, the blockchain platform will have to choose which platforms they will integrate, work or collaborate with. This decision will depend on the regulation they must adhere to, the type of products or services they will offer to their clients; and other factors pertaining the platform itself, an example being: its product strategy or its potential regarding the type and size of the user community.

Financial education efforts would be indispensable for the protection of investors in tokenized markets, particularly given the potential for increased participation of retail investors in such markets. Tokenized markets will require an appropriate understanding of technological aspects, over and above standard financial knowledge, for the informed participation of investors in such markets. Indicatively, tokenized assets are typically secured by the investor’s private key, where the loss of the private key may result in loss of the entire investment. The assessment of the suitability of tokenized assets for each individual consumer and/or investor is another example of a consideration in such markets, considering the individual needs, circumstances and/or risk tolerance levels of each participant in tokenized markets.
Principled recommended actions for implementing frameworks to support Tokenization Projects:

An analysis and review of the international developments globally and the regional developments may propose certain key recommended actions that may be considered by governments while implementing and enforcing strategies and frameworks to support tokenization projects.

Recommendations:

(a) Establish a regulatory framework that seeks to dynamically and flexibly approach tokenization legislation. Additionally, coordinate with and seek inspirations from the benchmarks and experiences of other international jurisdictions, which have successfully crafted a regulatory framework allowing for the lowering of regulatory barriers for tokenization market participants and offerings, while simultaneously increasing market competitiveness.

(b) Facilitate the establishment of a database of best practices for processes and procedures for the minimalistic sharing of the information held by tokenization projects under consent of the data owner, only for verification and authentication.

(c) Ensure the implementation of regulatory requirements that promote financial, consumer and investor protection, market integrity and competition; which also seeks to guard against build-up of systemic risks and to ensure a fair and orderly market for tokenized assets.

(d) Implement mechanisms facilitating open, transparent and cooperative dealings between regulators and relevant stakeholders.

(e) Encourage the involvement and supervise the creation of expert groups on tokenization, tasked with the collection, exchange and discussion of best practices support the growth of tokenization projects at a national and regional level. Further, given the inherent global nature of decentralised networks enabled by DLTs regulatory gaps would need to be examined both at national and cross-jurisdictional basis.

(f) Implement mechanisms to educate and ensure greater clarity around the regulatory and supervisory frameworks applied to tokenized assets and markets. This shall act as a very important stepping-stone to their safe development and use.

(g) Ensure the constant updating of regulations and relevant guidance to ensure applicability to new actors and in implementing new requirements (i.e. covering the interoperability between DLTs or
the interaction or gateways linking the on-chain and off-chain environments). Further hereto, the rise of new risks for the application of DLT technologies (i.e. associated operational risks and risks related to digital identities) will also need to be appropriately regulated and supervised.

(h) Undertake initiatives, at the national level, to harmonise the different institutions regulating and supervising virtual assets and to further promote a coordinated approach covering all different facets of such activity (i.e. payments, investments, taxes, accounting, AML/CFT compliance, law enforcement and crime prevention).

(i) Facilitate and strengthen financial and technological education efforts, focusing on disseminating appropriate information and ensuring understanding of these aspects. These initiatives would be invaluable for the protection of investors in tokenized markets, especially given the potential for increased participation of retail investors in such markets.
Annex A: A Summary of Fintech Sandboxes in the Arab Region

(a) The United Arab Emirates – The UAE has been at the forefront of the Fintech revolution within the Arab region. This is evidenced by the fact that the UAE has the highest number of investment deals and established Fintech start-ups in the region\(^{298}\). Within the UAE itself, the ADGM and DIFC financial free zones have launched their respective versions of a regulatory sandbox.

i. ADGM RegLab – The ADGM RegLab was launched in 2016 and allows start-ups or existing regulated entities to test and develop their Fintech solution for up to 2 years within their controlled environment before commercially launching same, subject to the success of the testing. The participants must develop an innovative solution that can materially contribute to the financial services sector in the UAE, and which is hopeful to extend to the entire Arab region. The FSRA (ADGM’s regulatory authority) assess each participant’s risk and implements a set of regulatory controls which helps the participants alter their solution to make it more viable to be integrated with banking data and functionality, via the core banking digital sandbox environment. YallaCompare, an online financial products and insurance comparison website as a member of the third cohort raising $8 million in 2019\(^{299}\).

ii. DIFC Innovation Testing License - Launched in May 2017, participants operate in a controlled and restricted environment, without being subjected to full regulatory requirements for a period of 6-12 months, with a possible extension to a 24-month period. The DFSA (DIFC’s regulatory authority) works with each accepted applicant to determine the waivers, modifications and rules that will apply to the respective applicant. Some of the criteria for being eligible for an ITL license include:

a. the offering of an innovative financial service activity;

b. the stage of testing with customers or an industry; and

c. the applicant’s roll out plan once the license expires.

iii. Securities and Commodities Authority (SCA UAE) – SCA’s FinTech Regulatory Sandbox Guidelines were launched in September 2018. These guidelines aims to:

a. create an environment attractive to capital markets;

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b. using innovative systems;
c. being a channel for engagement with FinTech firms;
d. improving the regulatory framework;
e. contributing to economic growth; and
f. mitigating risks associated therewith.

(b) **Jordan** – The Central Bank of Jordan in 2018 introduced a Fintech regulatory sandbox to act as an incubator for entrepreneurs and innovators, while encouraging competition, efficiency and security in respect of money transfers. The sandbox was also created to avoid jeopardising the integrity and stability of the financial services system.

c. **Bahrain** – Bahrain’s Central Bank introduced its Fintech sandbox in 2017 and since then, it has inducted two cohorts with them respectively focussing on KYC, AML, CFT and innovative banking and financial solutions, the issuance of crowdfunding regulations for both conventional and shari’a-compliant services. The CBB has supported the integration of applicants’ products with more than 11 banks in Bahrain. Its graduates include:
   a. *Wahed*, a leading Islamic Fintech start-up;
   b. *ArabianChain*, a public blockchain start-up; and
   c. *Rain*, a shari’a-compliant cryptocurrency exchange operating legally across the GCC[^300].

(d) **Saudi Arabia** – The Saudi Arabian Monetary Authority (“SAMA”) had launched its regulatory sandbox in 2019 with the aim of accepting two cohorts each year from the time of its inception, with a particular focus on P2P payments[^301]. The Sandbox is designed for applicants to test new digital solutions in a live environment, with a view to deploy them nationwide in the future. The sandbox also directly ties in with the KSA’s 2030 Vision which endeavours to reinforce economic growth, financial inclusion and investment activities.

(e) **Egypt** – The Central Bank of Egypt had introduced its Financial Technology Application in 2019, to pave the way for faster and easier access to new financial solution, while embedding compliance within the Fintech ecosystem at its infancy stage. Their first cohort was accepted in late 2019 and focuses on e-KYC applications.

(f) **Kuwait** – The Kuwaiti regulatory sandbox was launched in 2018 and has to date aimed to work with applicants on products/services in the electronic payments space. The process can be outlined as including 4 stages, namely:

[^301]: Ibid.
a. Application;  
b. Evaluation;  
c. Experimentation; and  
d. Accreditation.

(g) **Oman** – The Information Technology Authority of Oman had launched a blockchain focused regulatory sandbox, in partnership with Blockchain Solutions and Services, with the goal of cementing blockchain-based partnerships between the government and businesses within the Sultanate.
Annex B: Compilation of Short Surveys for the Guidance Note on Tokenization and Alternative Finance Solutions in the Arab Region

* The responses to the surveys have been contributed by 5 regulators:
(a) Capital Market Authority of Saudi Arabia (“CMA (KSA)” or “CMA”)
(b) Abu Dhabi Global Market, Financial Services Regulatory Authority, UAE (“FSRA”)
(c) Securities and Commodities Authority, UAE (“SCA (UAE)” or “SCA”)
(d) Banque du Liban, Lebanon (“BDL”) and
(e) the Central Bank of Bahrain (“CBB”).

1) Are there any legal and/or compliance requirements in your jurisdiction for a standard technological configuration applicable to all types of ‘security tokens’?

![Graph showing responses to legal requirements for standard technological configuration]

**Analysis:** Whilst ADGM, a financial free zone located within the UAE, has a bespoke regulation for Digital Securities, it has specified that it does not prescribe any technological configuration in relation to digital/virtual tokens (including security tokens) used within the ADGM regime. Further, a federal level regulation is yet to be implemented by SCA (UAE) which, as per the survey response, is under process. Similarly, CBB and CMA (KSA) are contemplating the promulgation of a framework for the issuance and trading of security tokens. CBB has specified that, until the framework is implemented by the CBB, the issuance of security tokens is illegal.
2) Have any Securities Token Offerings (STO) been completed in your country?

Responses to completion of any Securities Token Offerings (STO)

- Yes: 5 responses
- No 'STO' offerings yet: 0 responses
3) Are there any differences in the regulatory approach to a security token offering, as compared to the regulatory compliance for an Initial Public Offering (IPO) or of securities?

<table>
<thead>
<tr>
<th></th>
<th>YES</th>
<th>NO Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMA</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>FSRA</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>FSRA’s October 2017 guidance confirmed that its regulatory approach in relation to any Security in the ADGM would be consistent, whether the Security is digital or non-digital and hence in consonance with the IPO.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCA</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>SCA has clarified that the ICO Regulation depends on principle-based approach for Offering Rules and other rules and regulations issued by SCA. Further, the explanatory guide attached with the ICO Regulation, shall clarify how to implement the Regulation and gives details when required.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BDL</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>STO has not been regulated as of the date of survey.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CBB</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>The CBB is deliberating on the approach it will adopt towards issuance of security tokens.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ANALYSIS:** Specifically, as per the said response, most of the survey participants have not contemplated and introduced distinctions between the regulation of initial public offerings and security token offerings. Whilst the majority of participants are contemplating the introduction of regulations for the offering of security tokens, none of the participants have mentioned a potential approach thereto. Going forward, a specific approach may be required by the regulators for the classification and treatment; as well as the regulation of security tokens.
4) What are the marked differences that you as a regulator have noted in a Security Token Offering (STO) approval process, as compared to an Initial Public Offering (IPO)?

**Differences - STO and IPO Approval**

- **CMA**: Not Applicable
- **FSRA**: The approval process for an Offer of a Security is the same, whether the Security is a Digital Security or otherwise.
- **SCA**: Shall require the definitive record of ownership in the relevant Securities be held by way of an electronic or digital network or database. SCA may further require that any Security Tokens issued are subject to restrictions on trading for such period as SCA may prescribe. **Offer Documentation** required in respect of the Security Token, includes extra disclosures, requirements and details than in IPO documentation.
- **BDL**: No approval process for a STO currently.
- **CBB**: An IPO is associated with a company with proven track record while a STO may or may not be. IPO results in listing while it is not incumbent on the issuer of a STO to get listed.

**Analysis**: The majority of regulators who have contemplated STOs, including: FSRA, CBB and SCA (UAE) have specified that the STOs shall be at par with IPOs. SCA and CBB, however, have specified further that the STOs may have additional and dissimilar requirements from existing IPO regulations. Specifically, SCA (UAE) has elaborated on the requirement of a more detailed technical analysis in cases of STOs. For STOs to be effectively implemented regulators will require technical oversight on the processes for assessing the transactional processes and capability of the issuer.
5) What would be the applicable data privacy compliance requirements imposed upon the platform facilitating the Security Token Offering (STO) and what cyber resilience measures will they require?

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>Data Privacy Compliance Requirements</th>
<th>Cyber Resilience Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMA (KSA)</td>
<td>This is not applicable to the CMA.</td>
<td></td>
</tr>
</tbody>
</table>
| FSRA         | ADGM’s Data Protection Regulations 2015  
In their capacity as Data Controllers possessing of and processing Personal Data, all trading venue facilitating the listing and/or trading of Digital Securities (as well as licensed entities clearing and settling Digital Securities transactions) are expected to comply with the Data Protection Regulations 2015.  
ADGM is expected to promulgate its updated Data Protection law and regulations in the near future. | There is no mandatory provisions for specific cyber resilience measures for Digital Securities. The FSRA, however, has set out certain regulatory expectations related to technology governance for licensed entities like: (a) having a well-defined, documented and deliberate approach for the implementation of software; (b) having measures and procedures in place, which comply with network security industry best practices; (c) having a security policy in place that addresses information security for all personnel; and (d) having a program of planned system outages to provide for adequate opportunities to perform updates and testing. |
<p>| SCA (UAE)    | This is not applicable to the SCA. SCA’s rules and regulations about confidentiality shall be applied. | Security measures, cyber security and data protection must be complied with by entities, according to Article 18 of the Explanatory Guide. |
| BDL          | No specific regulations for STOs.     |                               |</p>
<table>
<thead>
<tr>
<th><strong>CBB</strong></th>
<th>General applicability of Liban Basic Decision number 12872 dated 5/9/2018 on the application of the General Data Protection Regulation issued by the European Parliament and Council of the European Union on 27/4/2016.</th>
<th>Cyber resilience measures have not been issued either by BDL, nor by the Lebanese Capital Markets Authority. Notably, BDL Decision Number 12725 on Cybercrime prevention requires Banks and financial institutions operating in Lebanon to set policies, as well as adopt measures and procedures relating to cybercrime prevention, and these measures and regulations may be considered for application accordingly.</th>
</tr>
</thead>
</table>

CBB contemplates that at the minimum, the same standards as the existing data protections regime should be applied as that which is applied to other financial instruments. Higher standards are expected and should be applied thereto, depending on the complexity of the business and product. A “one size fit all” approach cannot be taken as the sector is fast evolving.

CBB contemplates that a comprehensive cyber resilience framework mechanism must be formulated. To this end, the board of a company must formulate and implement an effective cyber security program. At a minimum, entities must follow standards similar that prescribed by National Institute of Standard and Technology (NIST) or other equivalent standards, addressing the following aspects (i) Identification (ii) Protection (iii) Detection (iv) Response and (v) Recovery.

**ANALYSIS:** For purposes of data protection, most regulators have not contemplated separate requirements for security token offerings, however, there seems to be a consensus on requirements of appropriate and high degree of data protection. Similarly, while most jurisdictions do not have specific standards for cyber security measures for token offerings, the majority have approached same with caution and intend to implement high degree of cyber security and resilience standards.
6) Could you please elaborate on the regulatory qualification of a token as a financial instrument in your jurisdiction?

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMA (KSA)</td>
<td>This is not applicable to the CMA.</td>
</tr>
<tr>
<td>FSRA</td>
<td>For a token to be a security, it is required to fall within the definition of a Financial Instrument in under FSRA’s applicable regulations.</td>
</tr>
<tr>
<td>SCA (UAE)</td>
<td>A Crypto Asset will be designated as a Security Token if, in consideration of the SCA, the Crypto Asset demonstrates the substantive features of, or poses equivalent risks to investors of a Security, or is otherwise a right to a financial claim on an Offering Person, or the electronic representation thereof.</td>
</tr>
<tr>
<td>BDL</td>
<td>Tokens have not been authorized, nor regulated by the applicable Lebanese laws and regulations; and therefore, tokens are not qualified as financial instruments in Lebanon.</td>
</tr>
<tr>
<td>CBB</td>
<td>The CBB currently only regulates financial services in relation to payment tokens, i.e. Bitcoins. The scope of activity is limited to trading in accepted crypto-assets.</td>
</tr>
</tbody>
</table>

**ANALYSIS:** FSRA and SCA specifically have confirmed their intention of treating tokens at par with the existing definitions and parameters of ‘financial instruments’ or ‘Securities’. Further, CBB currently only regulates native tokens, such as Bitcoin and Ethereum.
7) What is the investor protection mechanism in your jurisdiction, especially with respect to non-accredited and/or retail investors?

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>CMA (KSA)</td>
<td>Clients’ protection is considered by the regulators as high priority. Thus, any Regulation on a STO will consider and apply this.</td>
</tr>
<tr>
<td>FSRA</td>
<td>Issuers that wish to offer Digital Securities to the Public must publish an Approved Prospectus, containing the same information as required for any other Security; and must include appropriate information and disclosures for the investors.</td>
</tr>
<tr>
<td>SCA (UAE)</td>
<td>Where the Offering will include persons, other than Qualified Investors in the State, the prior approval of the Authority is required, pursuant to Article 7.1. Together with this approval, the filing of the Offer Documentation with the Authority differs from that of the QIS, which contains the relevant information.</td>
</tr>
<tr>
<td>BDL</td>
<td>By powers vested in the Capital Markets Law dated 17/8/2011, the Capital Markets Authority ensures the protection of savings invested in Financial Instruments, which in turn encourages the capital markets in Lebanon; and facilitates coordination between the various concerned sectors</td>
</tr>
<tr>
<td>CBB</td>
<td>For investor protection, the CBB implements the same measures as are currently applicable to securities market investors. The extant rules governing client money and client asset is applicable to crypto-asset businesses.</td>
</tr>
</tbody>
</table>

**Analysis:** All five respondents of the distributed surveys have considered investor protection to be a high priority. Specifically, to address this, the majority of regulators have prescribed the requirement of adequate disclosures to specific classes of investors, pursuant to the offering documents.
8) Kindly provide details on marketing and soliciting rules and/or restrictions that a token issuance entity should adhere to, while marketing their offerings towards accredited and non-accredited/retail investors in your jurisdiction? Knowing that any advertisement relating either to an offer of securities to the public, or relating to an admission for trading on a regulated market shall be obligated to comply with the principles stipulated in the regulations relating to advertisements and solicitation of securities offerings.

<table>
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<tr>
<th>Jurisdiction</th>
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<tbody>
<tr>
<td>CMA (KSA)</td>
<td>Advertising rules are provided for in the <em>Securities Business Regulations</em> and <em>Authorized Persons Regulations</em>, which are applicable to all offers of securities.</td>
</tr>
<tr>
<td>FSRA</td>
<td>FSRA’s Market Rules (Rule 4.12) contains restrictions on advertisements made in relation to Prospectus Offers of Securities (including Digital Securities) in the ADGM. No additional requirements apply specifically to Digital Securities.</td>
</tr>
<tr>
<td>SCA (UAE)</td>
<td>Article 7 of Chapter 2 determines the marketing and soliciting rules in relation to the issuer in marketing the offerings towards non-accredited/retail investors. Article 19 of Chapter 8 prescribes the marketing and soliciting rules where the issuer is marketing the offerings towards accredited investors.</td>
</tr>
<tr>
<td>BDL</td>
<td>Token issuance and marketing are not presently regulated in Lebanon. When regulated, such marketing of its offerings towards accredited and non-accredited/retail investors in Lebanon shall adhere to the rules and restrictions as stated in the Capital Markets Authority “<em>Series 6000: Offer of Securities</em>”.</td>
</tr>
<tr>
<td>CBB</td>
<td>The CBB does not presently have specific regulations for security tokens. As and when the rules are framed, the appropriate regulations governing advertisements shall be included therein.</td>
</tr>
</tbody>
</table>
9) What is your regulatory approach to a Security Token Offering (STO) which has been approved in another jurisdiction, in it being made available to citizens / residents within your country – and particularly where same is made available through an online platform?

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMA (KSA)</td>
<td>This is not applicable to the CMA.</td>
</tr>
<tr>
<td>FSRA</td>
<td>An Issuer intending to make an Offer of Digital Securities should be incorporated within the ADGM and will require approval for their Securities to trade on a RIE or MTF, operating within ADGM, as a primary listing venue. FSRA does not allow listings of Digital Securities within ADGM on a secondary listing basis, where the primary listing remains outside of the ADGM, and in a jurisdiction that is not yet appropriately understood or deemed suitable by FSRA.</td>
</tr>
<tr>
<td>SCA (UAE)</td>
<td>Security Tokens may only be offered for subscription and/or issued in the State by an offering Person incorporated in the State or in a financial free zone within the State, or with an establishment in the State.</td>
</tr>
<tr>
<td>BDL</td>
<td>In application of Article 6306 of the “Series 6000: Offer of Securities”, an offer of securities by an issuer in another country may be made to an offeree in Lebanon hereinaunder, provided that: i. the offer qualifies as an exempt offer under article 6304, and ii. the offer is made through an approved institution in compliance with the Law and the Regulations;</td>
</tr>
<tr>
<td>CBB</td>
<td>The solicitation and marketing of securities token registered in other jurisdictions shall be considered as an illegal act, as marketing of such tokens shall fall under the ambit of marketing of a financial product for which an entity requires a license from the CBB.</td>
</tr>
</tbody>
</table>

**ANALYSIS:** Other than BDL, none of the jurisdictions have provisions or shall permit any security token offerings from another jurisdiction to be offered within their jurisdictions. CBB has specifically categorized this as being an illegal activity. Given the agile nature of the security token offerings, the former mentioned position is of concern, as such provisions will restrict market access of the security tokens in other jurisdictions.
10) Considering the cross-border nature of tokens, how would the platforms facilitating STOs go about adopting unified, effective and efficient KYC, AML/CFT checks and measures when the relevant participants or the platform may be subject to different jurisdictions?

<table>
<thead>
<tr>
<th>Jurisdiction</th>
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</tr>
</thead>
<tbody>
<tr>
<td>CMA (KSA)</td>
<td>CMA has reiterated that AML and CFT are crucial requirements and will be covered in future, proposed and expected regulations.</td>
</tr>
<tr>
<td>FSRA</td>
<td>All trading and settlement venues licensed within ADGM are required to comply with the FSRA’s AML (Anti-Money Laundering and Sanctions Rules and Guidance) Rulebook, which is aligned with the UAE’s AML/CFT Federal Laws and international standards, such as the FATF Recommendations and the United Nations Sanctions.</td>
</tr>
<tr>
<td>SCA (UAE)</td>
<td>SCA has clarified that all participants and licensees shall comply with KYC, AML/CFT checks and measures adopted within the UAE; and that these shall be covered under the future, proposed and expected regulations.</td>
</tr>
<tr>
<td>BDL</td>
<td>Cooperation and coordination at an international level is needed to reach an agreement on a set of unified KYC, AML/ CFT checks and measures, together with efficient regulatory standards, which then are intended and would be adopted and applied by the relevant participants and platforms in varied jurisdictions.</td>
</tr>
<tr>
<td>CBB</td>
<td>The CBB intend to and shall implement the measures stipulated by FATF and IOSCO, aligning thereto.</td>
</tr>
</tbody>
</table>

**ANALYSIS:** All the regulators have either admitted to having specific, sophisticated and adequate AML and CFT requirements, or have proposed to enhance their existing requirements in accordance with specific regulations that may be introduced for security tokens. Effective implementation of security tokens shall require appropriate AML and CFT regulations- which are specifically guided for security token offerings.
11) We understand that the STO exchanges are an important platform to connect global investors to projects; and is an essential part of the ecosystem in providing liquidity for the tokens. What are the regulations and compliance requirements for the setting up of an STO exchange in your jurisdiction?

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>Regulations and compliance requirements for setting up an STO exchange</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMA (KSA)</td>
<td>The CMA does not Regulate this field.</td>
</tr>
<tr>
<td>FSRA</td>
<td>Within ADGM, a Recognized Investment Exchange (RIE) may operate both in primary and secondary markets in relation to Digital Securities. Digital Securities listed on a RIE may also be traded on the licensed Multilateral Trading Facilities, under this regime.</td>
</tr>
<tr>
<td>SCA (UAE)</td>
<td>Respectfully refer to: Chapter 6 / Article 6 and Article 8 of the draft ICO Regulation; read together with Article 13 of the Explanatory Guide.</td>
</tr>
<tr>
<td>BDL</td>
<td>At present, Lebanon has not promulgated any regulations for the setting up and operation of an STO exchange.</td>
</tr>
<tr>
<td>CBB</td>
<td>At present, Bahrain has not promulgated any regulations for the setting up and operation of an STO exchange.</td>
</tr>
</tbody>
</table>
12) Please identify and describe the tax compliances surrounding the token issuance in your jurisdiction?

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>Tax compliances surrounding the token issuance</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMA (KSA)</td>
<td>YES</td>
</tr>
<tr>
<td>FSRA</td>
<td>YES: ADGM entities are subject to 5% value added tax (VAT) in relation to goods and services. Issuers will need to take legal advice as to whether taxes are payable in respect of Offer of Securities.</td>
</tr>
<tr>
<td>SCA (UAE)</td>
<td>YES</td>
</tr>
<tr>
<td>BDL</td>
<td>YES</td>
</tr>
<tr>
<td>CBB</td>
<td>YES</td>
</tr>
</tbody>
</table>

**ANALYSIS:** None of the jurisdictions possess of appropriate tax regimes for any token issuance. These jurisdictions are required to specifically review and remodel their tax regimes, if tokenization models are to be effectively used for fundraising.