MFSA FinSights | Sectoral Applications

Embedded Finance

The financial sector is continuously evolving through the rapid development and adoption of new technologies. The term 'FinTech' generally refers to financial innovation that seeks to provide enhanced financial service offerings through the utilisation of enabling technologies. These generally include Distributed Ledger Technology & Smart Contracts, Artificial Intelligence, Machine Learning & Big Data, Cloud Computing, Web 3.0, Application Programme Interfaces and Micro-Services, Robotic Process Automation, and the Internet of Things.

As part of the MFSA's initiatives to generate awareness, drive culture and deliver a cross-sectoral knowledge platform which can support the MFSA's functions in preparing for the financial services of tomorrow, these insights will delve into enabling technologies, enabling innovations and their sectoral applications.

1   What is Embedded Finance?

Embedded Finance, otherwise known as EmFi, refers to the integration of financial offerings and solutions within non-financial applications with the aim to enhance customer's experience. Essentially, this means that financial services, such as payments, lending, insurance, and investment management, are embedded within other applications or services, such as e-commerce or social media platforms. As a result, financial institutions may thus be encouraged to collaborate with non-financial institutions that supply innovative technologies, which help both the modernisation of the institution's underlying product, via new [Cloud Computing](), [Artificial Intelligence]() & [API]() solutions, and in the creation of new viable business models. EmFi has the potential to increase access to financial services for a wider range of consumers, by advancing its availability in a seamless and convenient manner.

1.1   Categories of EmFi

The rise of consumer interest and demand has led to the overall proliferation of Embedded Finance in the recent years, fuelling growth, revenue, and an increase in the development of payments, insurance, lending and investing services across a wide variety of economic sectors.

Embedded Payments

This category of EmFi refers to the development and integration of digitalised payment methods within an application or platform, allowing customers to make payments and manage their finances directly from their mobile devices by means of digital wallets. Some prominent examples of embedded payment solutions include Apple Pay and Google Pay.

Embedded Insurance

Embedded Insurance refers to bundling of insurance products with goods and services from other economic sectors. Essentially, this process allows for consumers to simultaneously purchase insurance products that are related to the underlying product being bought in a convenient and accessible manner. Examples of embedded insurance range from an e-commerce website that offers customers the option to purchase an extended warranty for the products at the point of sale to a ride-sharing app that automatically provides insurance coverage to drivers

and passengers during their trips, as well as decentralised flight delay insurance via self-executing smart contracts on a blockchain.

Embedded Lending

This category of EmFi is associated with the integration of loans or other credit products to customers within applications or platforms such as e-commerce marketplaces, fintech apps, or even social media platforms. Such integrations encourage the use of "Buy now, pay later" (BNPL) schemes which provide for point-of-sale financing, where customers can apply for credit directly while making a purchase. The BNPL company Klarna is just one example of companies that operate to facilitate embedded lending for online platforms such as eBay.

Embedded Investment

Embedded Invest refers to the practice of integrating investment services, such as robo-advisory or asset management, into non-financial products or services. An example of this could be the availability of crypto-assets investment options provided by e-commerce platforms through a loyalty program.

1.2   EmFi Platform Models

Several types of business models are adopted by EmFi platforms, ranging from the archetypal ones such as B2C (business-to-consumer) and B2B (business-to-business) to B2B2B (business-to-business-to-business) and B2B2C (business-to-business-to-consumer) business models. However, emerging platform models like the C2C (customer-to-customer) and G2G (government-to-government) are also being implemented in this space.

B2C refers to a retail business model wherein the consumer may opt to make use of financial services directly at the time of making a purchase. A good example of B2C in EmFi is a BNPL scheme described in Section 1.1 above.

B2B refers to a financial business offering financial services (e.g. lending solutions, working capital financing, cross-border payments, insurance, etc) to other businesses or merchant platforms. An example of B2B in EmFi is a payment processing solution that integrates with other business applications to provide payment processing services.

B2B2B refers to a non-financial business offering financial services, to other businesses or merchant platforms. An example of B2B2B in EmFi would be a supply chain financing platform that integrates with both suppliers and buyers to provide working capital solutions. In this case by leveraging embedded finance, the supply chain platform can offer suppliers a more efficient and cost-effective financing solution.

B2B2C refers to a model involving a technology company or fintech company that partners up with another non-financial entity, such as a furniture retailer, to provide an EmFi offering to the end-consumers of the latter. One example of such model is an insurtech company collaborating with a car dealership agent to offer car insurance to the agent's end customer at the time of purchase.

C2C refers to a peer-to-peer (P2P) marketplace which facilitates the exchange of goods and services or otherwise one which provides a platform for freelancers with an embedded financial service such as flexi payment options.

G2G refers to a model that facilitates transactions between governments or levels of government. An example would be a tax collection platform that is integrated with government agencies to collect taxes and fees on their behalf. The platform may use EmFi to process transactions and provide secure payment methods such as credit card or bank transfers.

2 Benefits and Risks

When assessing emerging technologies, like Embedded Finance, one notes numerous benefits to both consumers and innovators. Nevertheless, due consideration ought to be given to the risks and challenges arising from EmFI.

BENEFITS

Customer base – Strategic partnerships with non-financial players may boost traditional financial institutions' customer base and allow institutions such as banks, to branch out and offer improved credit and lending services.

New revenue streams – By offering financial services alongside non-financial products, businesses can increase revenue and drive customer loyalty.

Convenience – Seamless transaction processing and access to financial services, provided by non-financial players may enhance customer experience.

Data insights – Embedded Finance solutions may seek to leverage existing AI, API, and Blockchain innovative technologies to acquire data analytics regarding customer behaviour and financial habits while integrating such insights to enhance the EmFi solution.

RISKS

Regulation – In view of EmFi's recency, it is yet to face serious regulatory scrutiny which may create future complexities relating to licensing and compliance among other possible regulatory implications with respect to EmFi solutions.

Security – The Internet is the base layer for innovative technologies like EmFi which in turn could pose certain risks relating to cybersecurity. Other security risks related to the integrated technologies may include privacy breaches from API vulnerabilities and exploits.

Operational risk – Integration of financial services into non-financial products is generally a complex process. It must be ensured that the systems and processes are robust and reliable to avoid operational issues that could disrupt business operations, resulting in damage to reputation and customer trust.

Supplementary Reads...

KPMG, 2022. Embedded Finance – Partnering platforms for success. Available online.

McKinsey & Company, 2022. The 2022 McKinsey Global Payments Report. Available online.

Check our other **FinSights** and should you have any queries or wish to discuss your ideas within the context of our **MFSA Fintech Regulatory Sandbox**, contact us at **fintech@mfsa.mt**.