

COURSE TITLE: MSc Financial Technology

LECTURER NAME: Philip Hickey

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TEAM MEMBERS:

Gauri Vijay Shingane (20018204)

Krishnan Sanjeev Nair (20003928)

Lakshitha Kasun Jayasinghe (20020502)

Roshni Tukaram Dalvi (20012887)

Sahil Dayal Punjabi (20004826)

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INTRODUCTION

In this fast-changing "interconnected world," where there is a high degree of interdependence and connectivity among different regions, countries, businesses and individuals for commercialization, there is an urgent need for a safe and fast money transfer system between P2P, P2M as well B2B. And with the emerging FinTech solution the day is not far away. Such technical revolution is envisaged by the Fintech development across the EU landscape. However, when it comes to traditional Banks across the EU, they face the challenge of the immediate payment service facility.

The time it takes to transfer money from one bank to another bank in Ireland can vary depending on several factors including the banks involved and the type of transfer a customer chooses. Although banks offer multiple transfer options, including standard bank transfers using SWIFT or SEPA-based transactions, actual transfer time varies in each case. The SEPA Instant service is not offered by all participating banks across the SEPA banks and even the banks who offer these services may not comply completely with SEPA Instant. On top of that, the fees charged by banks for SEPA Instant services are substantial and hence make it less appealing for customers. Also, the requirement of IBAN to initiate these transactions is due to unnecessary discriminating steps involved like registering non-domestic SEPA IBAN (*TrueLayer Blog: Open banking: why SEPA Instant payments need a nudge*, no date).

PRODUCT DETAILS – IMMEDIATE MONEY TRANSFER (IMT)

The European banking sectors launched SEPA (Single Euro Payments Area) in collaboration with national governments, the EU Commission, and other public authorities. With the help of SEPA services, customers could make euro payments to any entity across the EU as well as the non-EU SEPA countries (Bank, 2023).

To overcome all the drawbacks and limitations of SEPA Instant we propose the Immediate Money Transfer (IMT) mode of instant payments. Using IMT anyone can transfer funds 24x7 including holidays and weekends. Also, IMT payments can be completed through multiple electronic channels like mobile phones, SMS, and ATMs as well as traditional banking services like physical visits to the bank.

The adoption of IMT services will reduce a lot of work for the customers as they will be able to access and use the instant payment services more efficiently and easily. The registration process for IMT services is also much simpler than that of the SEPA as IMT registration can entirely be done online whereas to register for SEPA services the customer must contact the banking services. Also, SEPA registration requires IBAN and BIC, while IMT requires the customer to provide only their bank account and mobile numbers which are more readily available. (What is SEPA Direct Debit | Stripe, no date)

TECHNOLOGY

The technical architecture of Immediate Money Transfer (IMT) service ensures secure, efficient, and instant interbank transactions. To undertake seamless payment process, the IMT uses a layered structure that handles various components and protocols required.

Layer 1: Banks

The core component of Immediate Money Transfer infrastructure are the banks involved in the service. All participating banks are connected to a central communication network to facilitate interbank transactions. Each bank still must maintain customer accounts and process the financial transactions using its own Core Banking Services (CBS).

Layer 2: Central Communication Network (CCN)

The Central Communication Network forms the backbone of the IMT service as it provides channel for the participating banks to communicate with each other. The CCN is responsible to transfer the transaction requests from one bank to another and ensure seamless connectivity across the IMT network.

Layer 3: Transaction settlement

When user initiates an IMT transaction through mobile banking app or internet banking portal, the transaction request is first sent to their bank's CBS. The bank then follows general transaction processing steps like validating transaction request, verifying bank account and then send the transaction to the CCN. The CCN then validates the transaction and sends confirmation to the initiator bank's CBS, which updates the sender's account balance and again sends settlement request to the CCN. The beneficiary bank's CCN interface receives the settlement request, validates it, and sends it to the beneficiary's bank CBS. Now, the CBS updates beneficiary's account balance and sends confirmation message to the CCN.

Layer 4: Security

The IMT system is built based on strict security measures to protect sensitive information about account holders as well as transaction details. The data is always encrypted while being transmitted over the network and all transactions are monitored for possible frauds. Also, IMT can also implement rollbacks for incomplete or unauthorized transactions to ensure safety of account holders and their assets.

To implement the IMT infrastructure the banks will need to get authorized access to the CCN. Since the banks have their own CBS, they also need to make sure their respective CBS and the CCN work in harmony without any conflicts to ensure seamless transactions. The banks need to comply with the security standards set by the CCN for safe communication over the network to prevent fraudulent activities.

UNIQUE SELLING PROPOSITION (USP) OF IMMEDIATE MONEY TRANSFER

In this fast-paced economy there is an urgent need for the Immediate Money Transfer tool that is easily accessible, secured, promoting financial inclusion and capable of meeting the evolving needs of users in a digital and interconnected financial landscape. An interface that can facilitate interbank peer-to-peer (P2P), business-to-business and person-to-merchant (P2M) transactions. A mobile application to instantly transfer funds between two bank accounts without any requirement to register recipients with their respective bank details. Anyone having a bank account with a registered mobile number can create a VPA or Virtual Payment Address which must be of unified format across all the banks. Such VPA can be further converted to QR (Quick Response) codes as well and shared with anyone to receive money as in P2M scenario. This will eliminate the need to register recipients every time prior to making any payments.

Some unique features of Immediate Money Transfer are:

- **Instant Transfers:** Such transfers payments can be executed instantly with immediate credit to recipient account within seconds via the VPA and eliminate lag time to wait for getting urgent payments.
- No bank details required: While processing such instant transfer there is no requirement for an additional bank account number IBAN or BIC of the recipient. Simply a unique virtual ID (VPA) of the recipient is sufficient to process the transaction making the process quick and hassle free.
- Convenient and Simple: User friendly interface and easy accessibility makes the payment process more acceptable and convenient for any user since this does not even require computer /laptops. Simple smart phone-based transactions can be executed.
- **Secure Transactions:** All transactions processed via this system are 100% secure with 2-layer security factors Virtual ID and Mobile based Pin.

COMPARATIVE ANALYSIS OF IMMEDIATE MONEY TRANSFER VISA A VIS SEPA PAYMENT SYSTEM:

Factors	Immediate Money Transfer	SEPA
Safety	Secured with 2 factor authentication -	No additional security layering for
	Virtual ID & Mobile based Pin. It	processing any transaction endangering to
	fulfils Strong Customer Authentication	scope of hacking or phishing.
	(SCA) protocol as per PSD2 of CBI.	
Easy	No requirement to update Account	Require IBAN & BIC number of recipient
Accessibility	Number or bank details. Just the VPA	every time. No laid down process to register
	or QR code of beneficiary will initiate	payee in banking apps as one time process.
	transfer.	
Transfer time	Hassle free transfer 24x7 with	Transfer time may vary from immediate
	immediate credit to recipient account.	credit to 2 business days depending upon the
		type of payment.
Transaction	Works both push and pull transaction	Can be used only for payment. Except in
type	i.e., can be used to make payment as	cases where separate standing instructions
	well raise request for payment by	need to be signed prior to execution.
	merchants or business.	
Versatility	This can be used for P2P, B2B and	SEPA is used only for P2P or B2B. It cannot
	P2M. Even QR Scan payment can be	be used by business to claim payment from
	made for merchant payment.	its customers / creditors.

VALUE PROPOSITION

The requirement for new FinTech solutions has been heightened by the current challenges that industry studies and projections have identified. The value proposition of Immediate Money Transfer precisely matches these market dynamics by considering essential components including,

1. Quick and Secure Money Transfer:

Immediate Money Transfer presents itself as the answer to the problems that financial institutions encounter while trying to provide immediate money transfer services. The platform eliminates the delays associated with using traditional techniques by guaranteeing quick and secure transfers. Also use of latest security and optimization tools allows the product to adapt to evolving customer needs in a connected and digital financial environment.

2. Addressing Market Trends and Adoption:

Ireland, being among the leading FinTech adopters, serves as a crucial market. Immediate Money Transfer provides an inclusive and accessible platform, in line with the trend. The forecast highlights the need for financial institutions to update to the newest FinTech technologies aligns with the platform's commitment to innovation.

3. Immediate Money Transfer Tool:

The main benefit of Immediate Money Transfer value proposition is the offering of an immediate money transfer tool that exceeds the limitations of existing solutions. The platform addresses the needs of a fast-moving economy by providing an interface that makes interbank P2P and P2M transactions faster. It is no longer required for customers to complete time-consuming recipient registration when Immediate Money Transfer allows them to make payments by linking bank accounts to their registered mobile number.

4. Accessibility and Economic Inclusion:

Immediate Money Transfer advances the idea of financial inclusion by making sure a large user base may simply use its solution. Users of various backgrounds in technology can interact with mobile applications with ease due to its user-friendly interface and multi-

language support. This addition fits in with the bigger objective of satisfying users' different needs within a connected financial environment.

To sum it up, Immediate Money Transfer encourages financial inclusion by ensuring that many people may easily utilize its solution. The user-friendly interface and multilanguage support of the mobile application enable users from different technological backgrounds to interact with it with ease. It also contributes to the larger goal of meeting the various needs of users in a connected financial environment. Immediate Money Transfer, able to satisfy the demands of a digital and connected world, is a transformational force in the industry, taking advantage of real-time capabilities, ensuring accessibility, and connecting with global FinTech trends.

MARKET OPPORTUNITY

The market opportunity for instant money transfer is significant and growing rapidly. According to Juniper Research, the global instant payments market is expected to reach \$1.9 trillion by 2026, from \$330 billion in 2022. This represents a compound annual growth rate (CAGR) of 37%.

There are several factors driving the growth of the instant money transfer market:

• Rising demand for speed and convenience:

Consumers and businesses are increasingly demanding faster and more convenient ways to transfer money. Instant money transfers offer instant gratification and eliminate the need to wait for traditional banking processes.

• Evolving regulatory landscape:

Regulatory frameworks like PSD2 are opening access to payment systems, enabling third-party providers like fintech companies to offer instant money transfer solutions.

• Technological advancements:

Technological advancements in real-time payment processing, such as blockchain and APIs, are enabling faster and more secure transactions.

The instant money transfer market is divided into three main segments:

• Consumer-to-Consumer (C2C):

This segment includes transactions between individuals, such as person-to-person payments and bill splitting.

The C2C segment is the largest segment of the instant money transfer market, accounting for over 80% of the total volume. This is due to the high frequency of person-to-person payments, such as sending money to friends and family.

• Consumer-to-Business (C2B):

This segment includes transactions from individuals to businesses, such as online purchases and app payments.

The C2B segment is also growing rapidly, as more and more businesses are accepting instant money transfers as a payment method. This is driven by the convenience and speed of instant money transfers, which can help businesses to improve their customer experience and reduce payment processing costs.

• Business-to-Business (B2B):

This segment includes transactions between businesses, such as supplier payments and cross-border settlements.

The B2B segment is also seeing growth, as businesses are increasingly using instant money transfers to settle payments with their suppliers and partners. This is due to the efficiency and security of instant money transfers, which can help businesses to improve their cash flow and reduce transaction costs.

Overall, the market opportunity for instant money transfer is significant and growing rapidly. Investors who are looking for exposure to this growing market should consider investing in companies that are developing and providing instant money transfer solutions.

SCALABILITY AND PLAN

A lot of products have their unique needs and **IMT** is one of these products, as one of the transaction technologies available it stands at the forefront of the digital payments industry. With a high potential consumer base, it can scale to adapt to these growing challenges. We are planning to scale our product by using the following methods,

• Technical Infrastructure and security:

Since it is a digital payments platform, the infrastructure needs to be robust enough to handle high transactions throughout the day and give smooth transaction experience to the customers. At the same time, cybersecurity needs to be given high priority to handle sensitive bank. In IMT we provide both robustness and security, and we are always working on making the system more secure and impenetrable by constantly updating our software.

• Expanding User Base:

For this expansion, our approach is to target each demographic in the EU separately. European users have differing needs, and these needs must be fulfilled individually.

• Integration with Merchants:

We plan to add merchants and vendors to accept the IMT money transfer method to have more users connect with the system. This can be done by giving incentives to merchants to accept the payments from IMT instead of traditional payment methods and at the same time develop user-friendly tools for them.

• Partnerships:

We look forward to partner with traditional banks as well as e-commerce platforms to better position our product as a viable competition to the existing products. Partnering with banks helps in increasing the reach of the product and helps in getting into newer markets.

Marketing:

This is necessary for creating awareness among the users for this product and educate the users for the potential benefits of IMT, this can also help as it is the only digital payment solution for fast payments for the people.

• Customer Support:

We plan to have a 24x7 customer support to help resolve any issues that customers might face while doing transactions using IMT service. Also, during the initial days to better understand the usage of the IMT services we plan to have large scale customer support teams.

• Analytics:

Predictive analytics will be used to better understand user behaviour and market trends, using this information we are planning to give personalised announcements for products and services to the users.

In this report we have delved into the concept of Immediate Money Transfer service in detail, examining the keys features, benefits and about the transforming effect this service will have on the financial system. With given features, strong security, and scalability the IMT service is revolutionizing the money transfer and payments system. As the demand for faster, more convenient, and secure transactions continues to grow IMT looks forward to become future of finance.

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