Unified Payment Processing

This paper represents how a unified payment processing would look like in practice and tries to present a closely alike system.

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What is “Unified Payment Processing” ?

A unified payment processor would be able to achieve particular advantages which current payment processors lack, which includes following points:

1- Being able to process payments regardless of ledger system and consensus.

2- Being able to operate decentralized.

3- Not exposing payment consensuses through processing and payment injection attack.

4- Platform agnosticity (The ability which grants complete modularity with merchant platforms)

5- Establishing a platform for open finance technologies.

There are also other advantages which such a system would provide but when put, it would take pages to explain how revolutionary this system could be if designed properly.

Payment design sections

Hub

Hub is a set of modules responsible for high availability, data integrity, security and making connections between modules from inside and outside as the name hence.

Payment Processor

Payment Processor is a set of modules responsible for processing transactions from ledgers and interpreting them for outside use.

Ledger management and Payment processing

- Ledger Management is responsible for data management and integrity which would represent assets in different form (physically and virtually)

- Payment Processing is a set of processes which would translate ledger information to usable information for stores (converting assets into products)

Separating Ledger management from Payment processing would build the foundation for more secure, reliable and usable merchant systems.

What are unified payment processing design principles ?

- High availability
- Separation of transaction integrity and consensus from payment processors
- Open finance complaint
- Platform agnosticity (Software agnostic)
- Ledger management through payment processing (managing local assets and inserting transaction into ledgers)
- Communication channel agnostic

Visual design demonstration

For accessing to Visual design demonstration please contact me through contact information.

What would unified payment processing change in merchandise industry ?

Each design principle serves certain purposes

- High availability

  Enabling almost no down time as payment systems have to operate at 100% availability in an ideal situation.

- Separation of transaction integrity and consensus from payment processors

  Separating Ledger management from Payment processing would build the foundation for more secure, reliable and usable merchant systems. (Page 5)

- Open finance complaint

  Payment systems should be able to operate without the need for central authority for integrity and validity.

What would unified payment processing change in merchandise industry ?

- Platform agnosticity (Software agnostic)

  When it comes to financial services, platforms must operate with the lowest maintenance needed as financial institutions would prefer a more used system rather than a modern one (which is not a good approach for innovative finance), therefore platform agnosticity is needed for the system to operate with compatibility regardless of the platform it runs on.

- Ledger management through payment processing (managing local assets and inserting transaction into ledgers)

  Merchant asset managements are crucial for certain tasks such as exchange, refunds and payments.

- Communication channel agnostic

  Payment processors should operate regardless of the communication channel they use (HTTP - RPC - gRPC and etc)

There are also other advantages that unified payment processing would provide, for further information please contact me through my contact information section in this document (Page 2)

