SevimaPay (Engineering)

Core Modules

1. Core switching
2. API client
3. API channel

Additional Modules

1. Operation/Support
2. Client/Channel portal
3. Reporting

Core Switching

1. Limits for each channel and client. Compartementalize the risks.
2. Ledger style transaction record, with double entry bookeeping.
3. Digital signature for transaction verification.
4. Database fields subset from ISO8583. No need for every field, but need to be consistent in field naming and usage as specified in ISO8583. Therefore, we can assure the update in the future.
5. No hard delete in database, only soft delete.
6. Separate database log server with only SELECT + INSERT permission.
7. No reliance on database restore. Every transaction must be traceable dan fixable on its own without impacting the whole system.

General

1. Separate internal authorization into 4 areas:
    a. Developer
        i. Only have authorization in codes.
        ii. Codes need to be verified each step, to ensure no backdoor.
        iii. No authorization to production server and data.
    b. Infrastructure (DevOps)
        i. Have authorization to production server and data.
        ii. No access to keys for signature and verification.
    c. Customer Support
        i. Have authorization to interface for day-to-day maintenance.
        ii. Everything related to supporting and to revising errors must be done via interface.
        iii. No authorization to server and code and database.
    d. C-level
        i. Authorization to private keys.
        ii. Deploy and activate private keys each and every update.
        iii. Transaction verification will not work without keys.

        iv. Of course, can have access to everything server and code and database if required.
2. Therefore, there's no single party below C-level that have complete control over the integrity of the system.

Engineering Team

1. Senior developer, not necessarily experienced in financial development.
2. At least has the skill of Hawkeye Team.
3. Hire 2 people, with different background.