itm

In the cloud

Application rehosting POC

What to do?

- Open Banking
- Real-time payments
- Digitization and digital
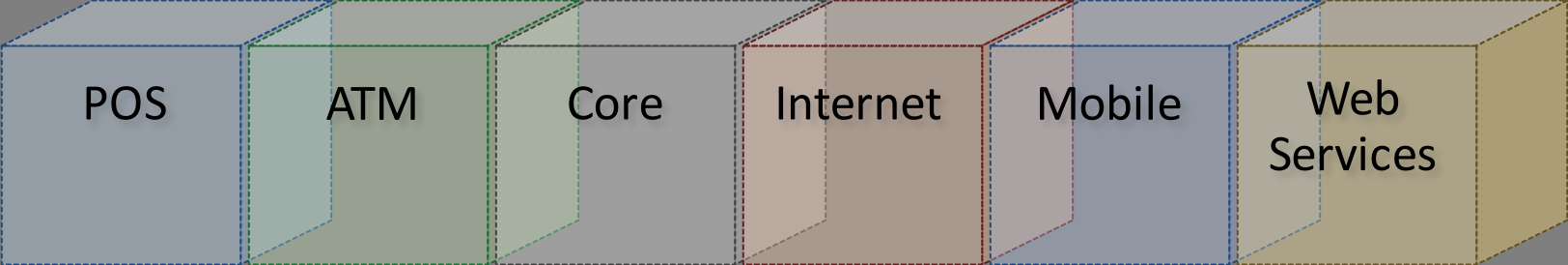- Aggregators
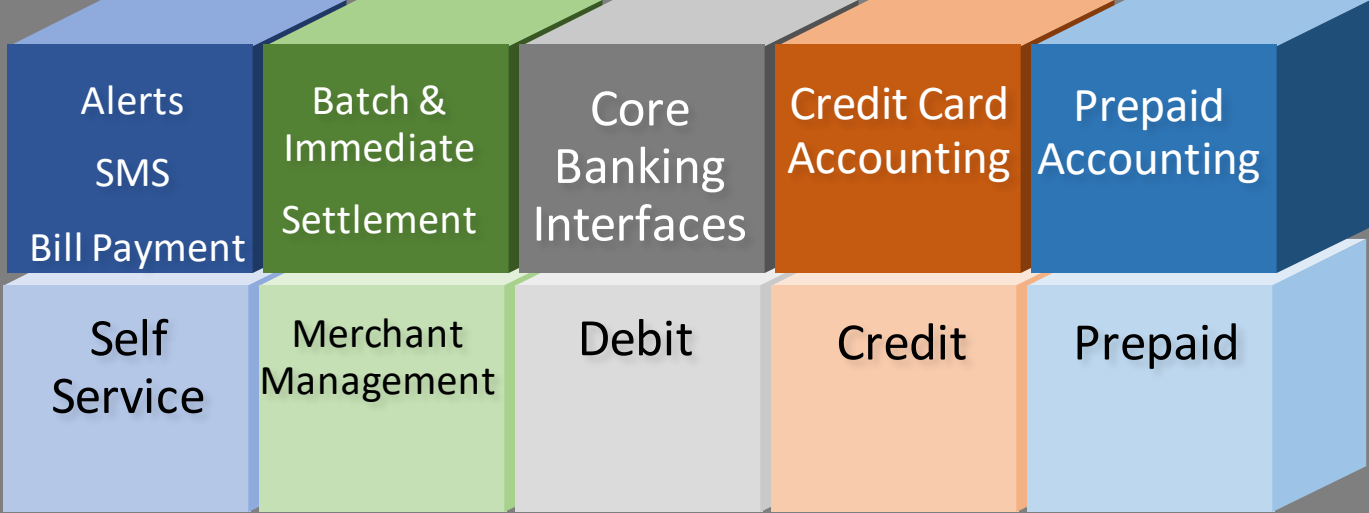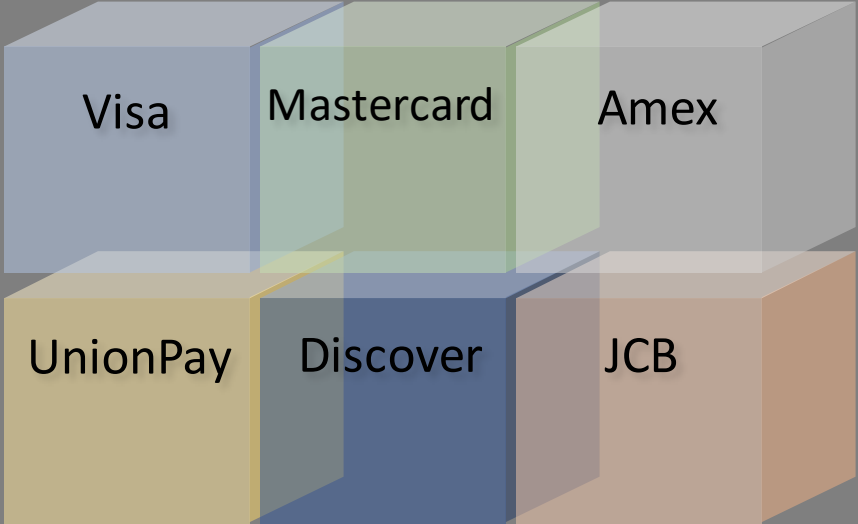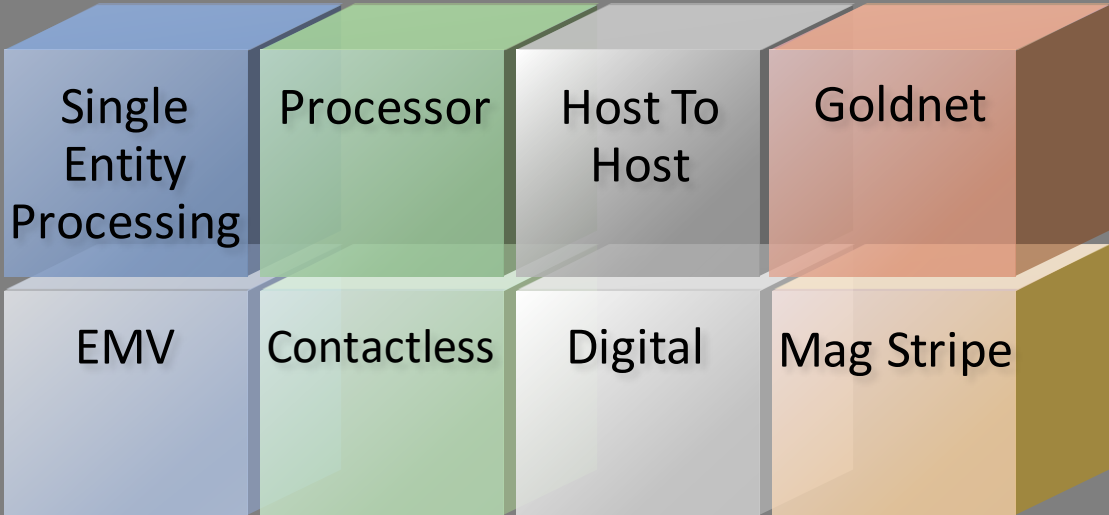- Fintechs
- Neobanks
- Payment Hubs
- Omni environment

Strategy

- Create focus on functionality and not hardware

- Leverage the open, web services foundation we have built

- Hybrid Integrated Payment Platform direction – the best of both platforms front ended with one user interface

- Rehosting not modernization

Building Blocks For Success

Single Entity Processing	Processor	Host To Host	Goldnet
EMV	Contactless	Digital	Mag Stripe

Alerts / SMS / Bill Payment	Batch & Immediate Settlement	Core Banking Interfaces	Credit Card Accounting	Prepaid Accounting
Self Service	Merchant Management	Debit	Credit	Prepaid

POS — ATM — Core — Internet — Mobile — Web Services

Visa	Mastercard	Amex
UnionPay	Discover	JCB

Cryptography & Key Management — eCommerce & Gateway Routing

Objective

PROVE THE APPLICATION WILL RUN

RUN PROCESSING CYCLES IN A CLOSE TO REAL ENVIRONMENT

LIMITED 'REAL' SO AS NOT TO PROLONG POC

CRYPTOGRAPHY CRITICAL HARDWARE

USE CREDIT CARD – TOUCHES MOST OF ITM

'RUN 3 MONTHS' IN THE LIFE OF A CLIENT

Cloud Provider Consideration

Start with IBM, ITM is an IBM platform solution

Cloud provider
- Geographical presence
- Server sizes
- Managed services

Private and Public – private preferred financial application

All have IBMi servers
- Microsoft, Azure, Google, IBM VS, Amazon all have an offering
- IBM, Connectria, Skytap, MerdianIT

Use Cases

Relocate on-prem

High Availability, Disaster recovery, Dev-ops in cloud

Hybrid

Hybrid Integrated Payment Paltform

Immediate findings

IBM is cloud focused and strategy includes IBMi

Thales at the time of the POC was getting their cloud cryptography infrastructure in place

Proximity of critical applications or hardware a must to prevent latency
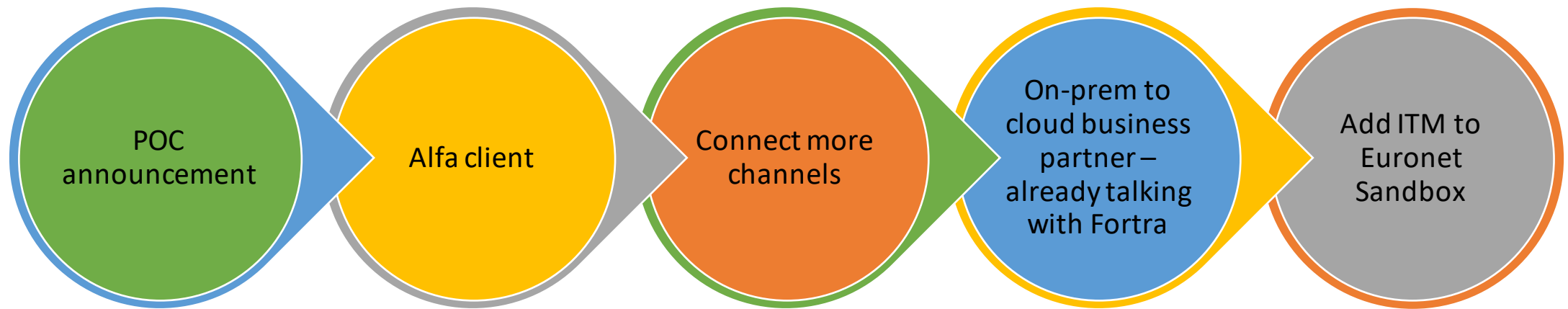
Immediate cost is high

Cost benefits are long- term

Clients want managed services and out of the hardware business

Next Steps

POC announcement

Alfa client

Connect more channels

On-prem to cloud business partner – already talking with Fortra

Add ITM to Euronet Sandbox

- Formally Help systems
- IBMi solutions provider but so much more

No barriers

- Hardware
- Application
- Functionality

Euronet Web Services

Consume someone else's

SOAP

REST

History

APIEXCHANGE – CONSUME VERSUS EXPOSE

Transactions
- Account Validation
- Pre-Auth
- Card maintenance
- Travel notification
- P2P
- B2B
- M2P

Enhanced Transactions
- DCC
- FX
- AVS
- 3D Secure
- Ecommerce
- ACH
- VCR
- MDR

Added Value
- ATM Locator
- Merchant locator
- Account updater
- Loyalty

Wallet
- MDES
- VTS
- Checkout
- Paypass/wave
- QR

Flexibility Funnel

Foundation
Get the base approach and layers right

Fraud
Security is paramount if processing is going to be faster

Faster
Imperative and the new norm for projects and day to day execution

Future
Positioning for the future and for demands we aren't even dreaming of yet

Flexible
Able to quicky respond, be competitive, and more agile

Protect yours and ours

Why

Newer technology/architecture

Digitization means integration

Ease of use for third-parties

New functionality provides the opportunity

- Open and immediate banking
- Digitization, especially in onboarding
- Remote is the new normal
- Business automation processing

COVID is the catalyst

REST vs SOAP

REST represents about 70% of public APIs

REST allows a greater variety of formats, SOAP allows XML only

REST is generally faster and uses less bandwidth

REST provides superior caching performance

Adding new functionality is simpler

Micro services versus monolithic

Strategy

New REST web services are being created

For some time, both sets of web services, SOAP & REST, will coexist and be supported

Existing SOAP utilization not affected

It does mean that two sets of maintenance will be applicable

Creating a path for replacement of SOAP

Replacing SOAP with REST services may require projects with Euronet and third-parties

Web Services package

CDB, CMS, PPD, ICC and IMS – complete package

Services – option to install as needed

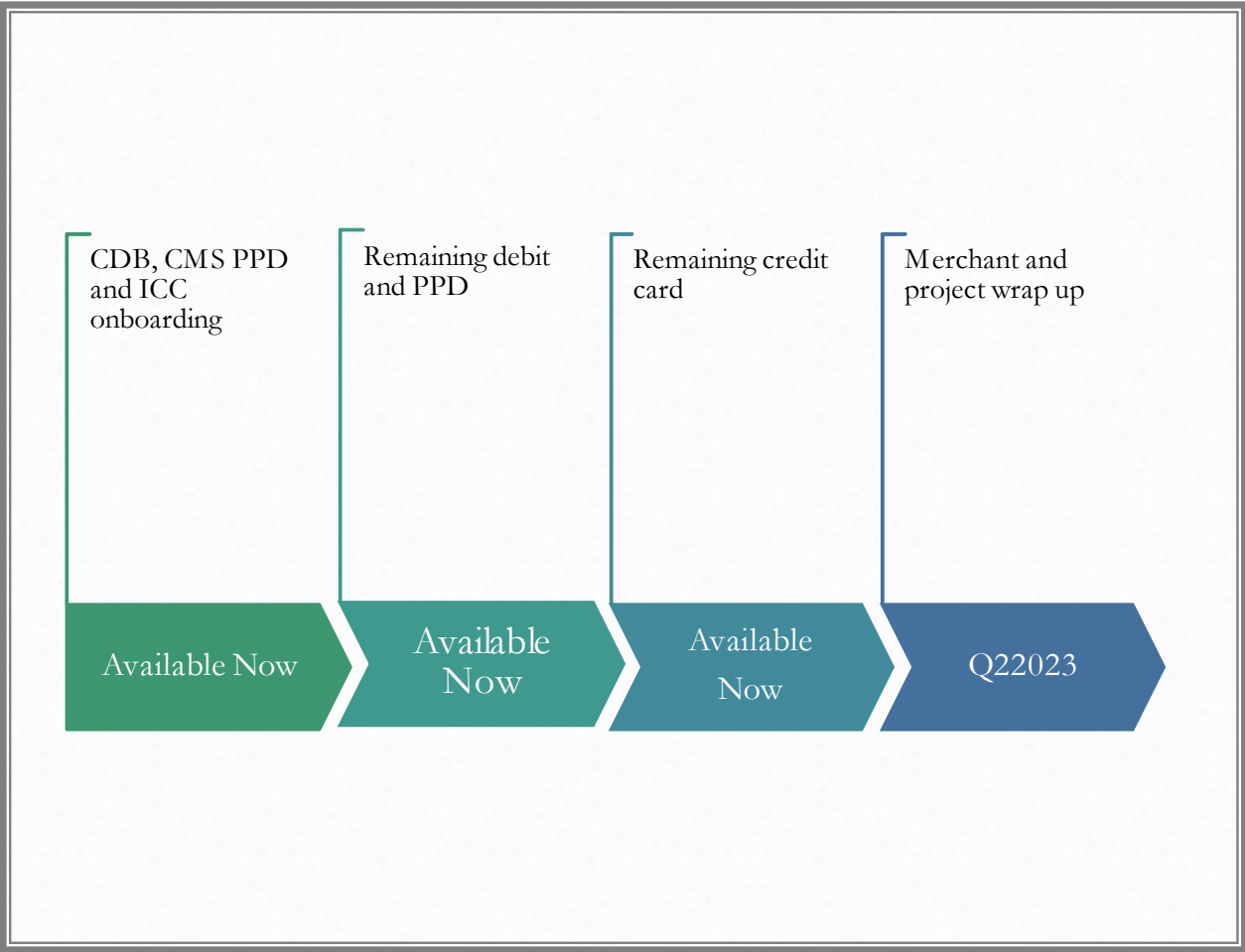| CDB	CMS	PPD	ICC	IMS
Client	Card	Prepaid	Credit	Merchant

Functionality

Much more functionality than the SOAP catalog

All EUI screens/functions are being represented by micro services

Smaller packets of data more functions

User permissions support

Built with open, digital and automation in mind

CDB, CMS PPD and ICC onboarding

Remaining debit and PPD

Remaining credit card

Merchant and project wrap up

Available Now

Available Now

Available Now

Q22023

The Journey

Next Phases

 OTAC & PIN

 Transaction

 Card Inventory

 Money Transfer

 Bill Payment

 Mobile Banking

Benefits

A package for the future

Functionality you need now and may need in the future

Simpler installation of services (REST approach)

Performance improvements by leveraging Liberty

Achieve automation, digitization and open banking

Controlled sandbox

Postman testing tool

Play before you license

Test before you install

Sandbox

Log In to Merchant

UserName

Password

Forgot your password?

Log In

Don't have an account yet?

Create an account

Technology Cookbook

Get client cards	Get card credentials – number, expiration date and CVV	PIN information	Account list associated with card or client
CASA account balance	Prepaid balance	Credit card balance, available credit	Pending authorizations – debit, credit or prepaid

Documentation

REST Web Services

REST API Specifications Overview	Provides instructions for the APIs to call based on common functions performed in ITM.
REST API FAQs Guide	Provides information for frequently asked questions about REST API.
Test Euronet Web Services with Postman †	Provides instructions for testing Euronet Web Services with Postman.
CDB Web Service Specifications	Specifications for the Client Database (CDB) REST Web Services. **YAML**
CMS Web Service Specifications	Specifications for the Card Management (CMS) REST Web Services. **YAML**
ICCS Web Service Specifications	Specifications for the Credit Card (ICCS) REST Web Services. **YAML**
ITM Web Service Specifications	Specifications for the ITM REST Web Services. **YAML**
PPD Web Service Specifications	Specifications for the Prepaid (PPD) REST Web Services. **YAML**

Euronet

Let us take you there!

The right technology for the future

Your Choice