

ACM

The Future of Card Management Solutions



<https://pst.asseco.com/>

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Introduction to ACM

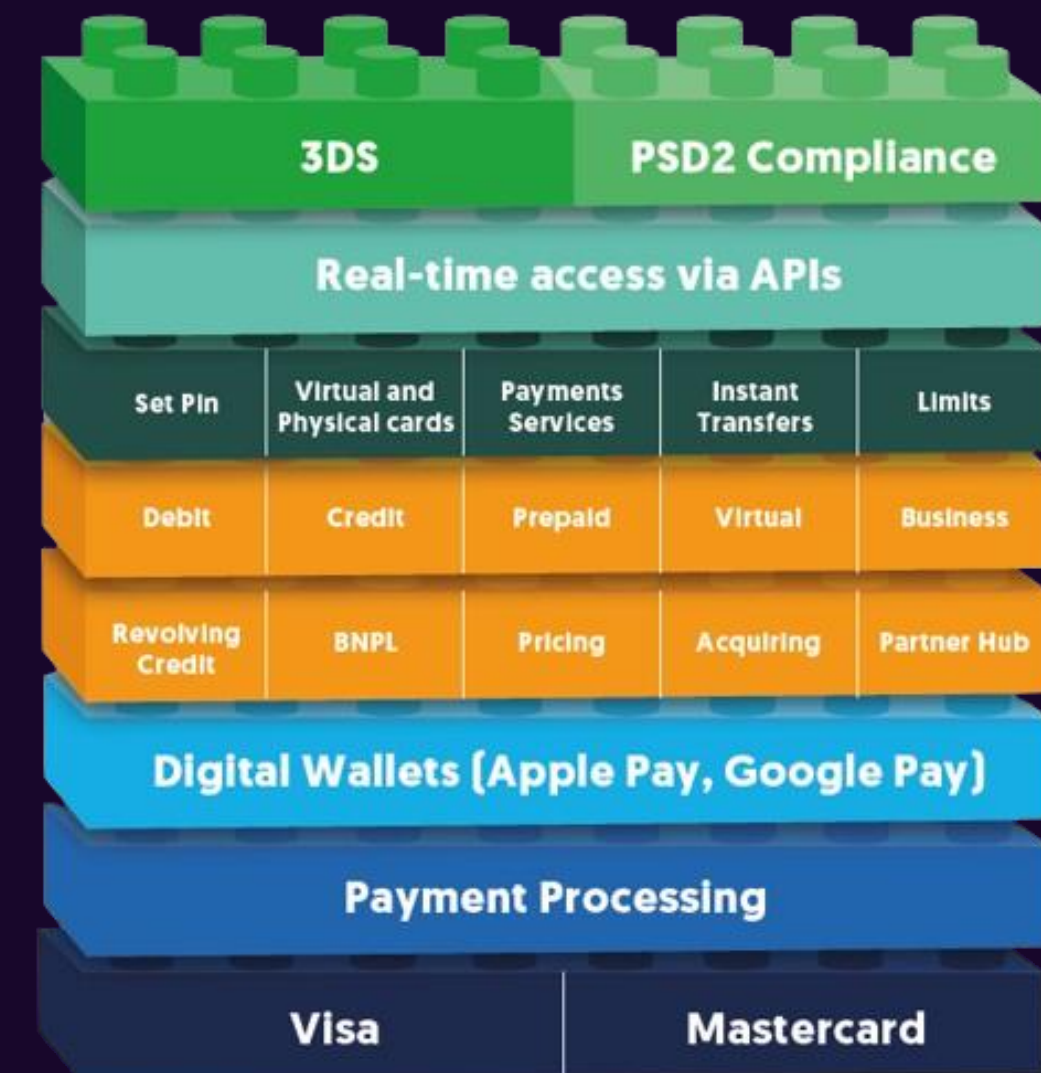
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1 What is ACM?

ACM, or Advanced Card Management, is a specialized software solution designed specifically for banks to **enhance the management and supervision of card-related operations.**

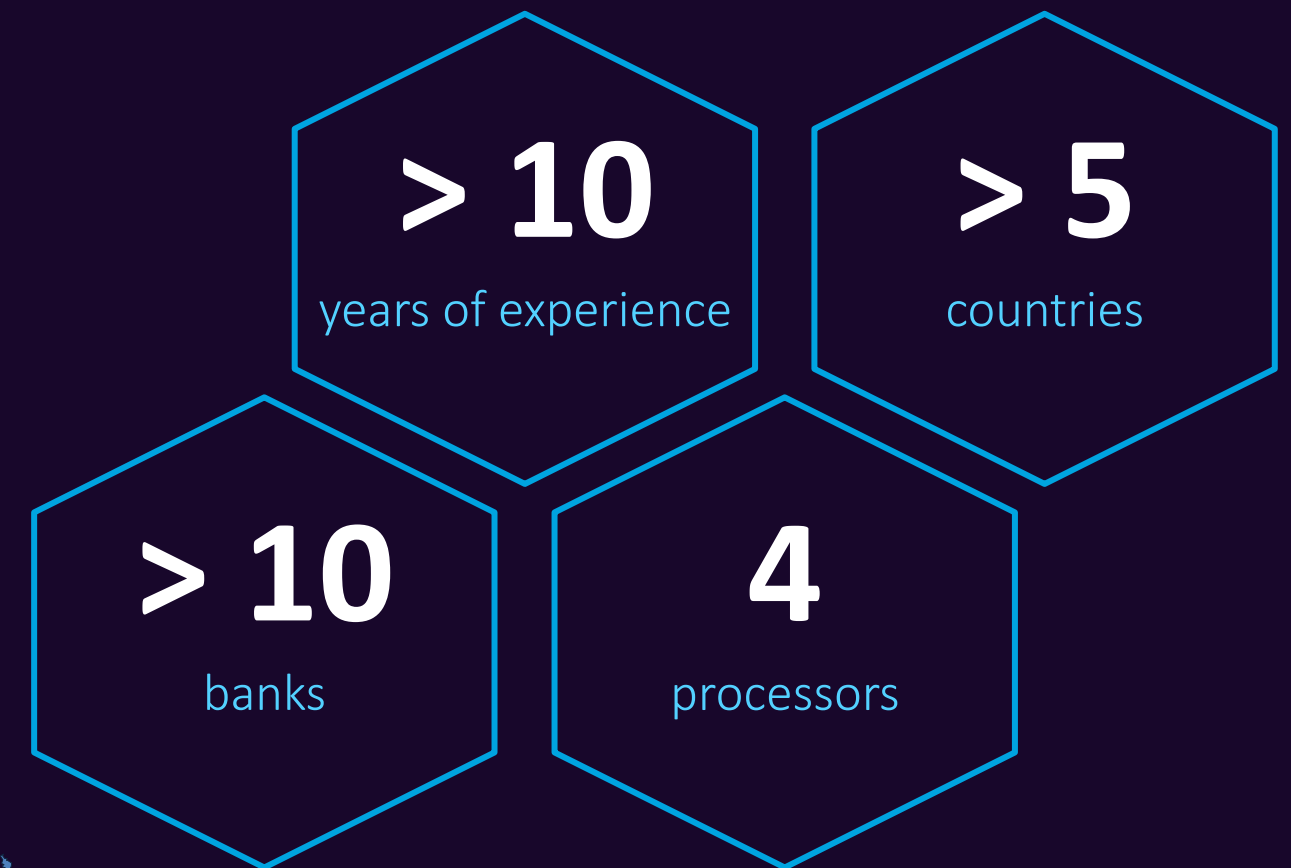
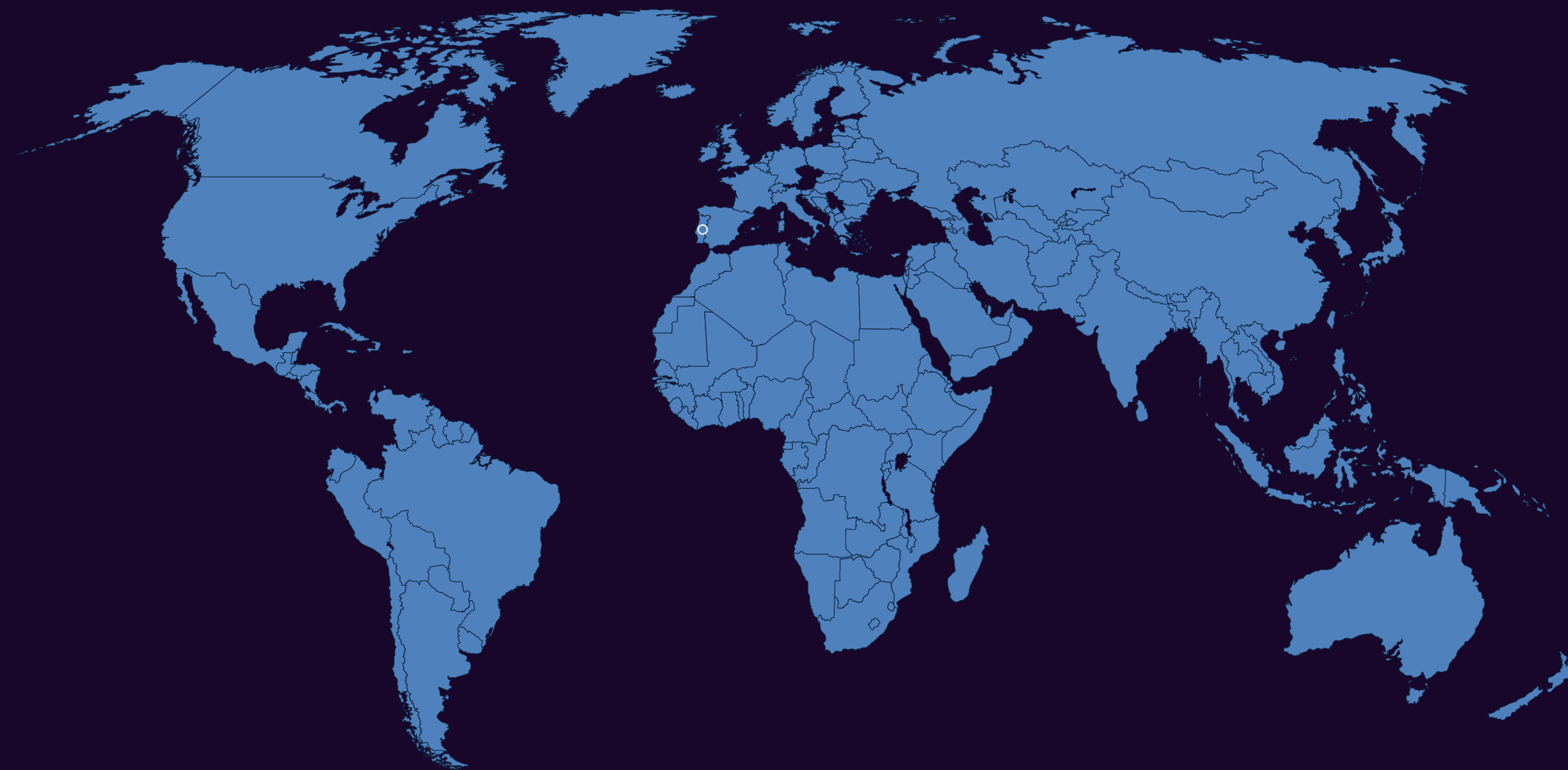
ACM empowers financial institutions to effectively manage the entire lifecycle of cards, This comprehensive platform offers a range of functionalities designed to simplify tasks such as card issuance, tracking, and maintenance.

Additionally, ACM provides intuitive card customization options and integration with banking schemes. Banks can handle the complexities of card management with confidence and agility by utilizing ACM's capabilities, guaranteeing a flawless experience for both employees and clients.



1

Solution used by several Financial Institutions Worldwide



2010

First version of product to delivery on cape verde bank

Source: Asseco

2012

Implementation in a Portuguese bank. The largest consumer credit bank. Cetelem.

2014

Several implementations in other Portuguese banks

2018

Born the first ACM product version.

2019

Implementation in a Namibian bank

2020

Growth of ACM product and refinements

Where ACM Stands

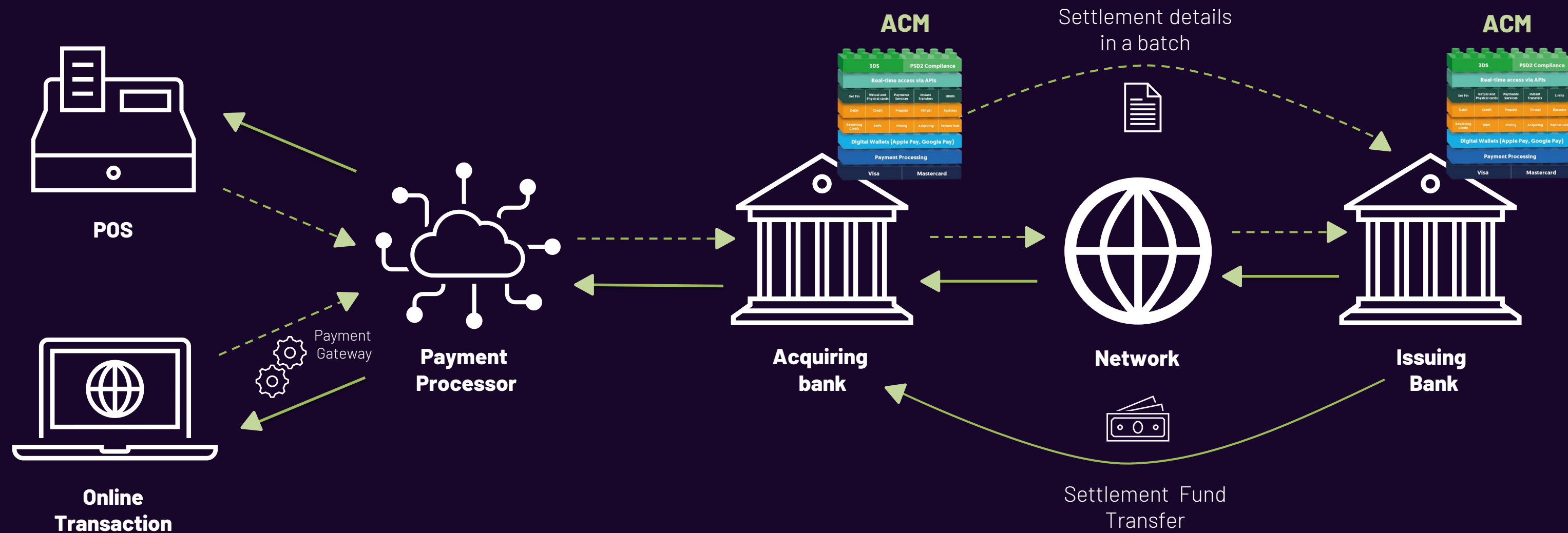
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2

Payment Structure



The structure of the **bank card payment system** is defined by the following interactions:



Phase 1: Initiating the Purchase

- Consumer Confirms Purchase: The cardholder confirms the purchase at a Point of Sale (POS) terminal or online checkout.
- Consumer Submits Transaction Details: The cardholder swipes their card at the POS or enters card details online.

Phase 3: Payment Verification

- Issuing bank verifies the cardholder's funds and the transaction's legitimacy, then sends an approval or decline message back through the Credit Card Network.



Phase 2: Data Transmission

- Encryption: Transaction details are encrypted and sent to the payment processor.
- Processor to Network: The payment processor sends the encrypted data to the Credit Card Network.
- Network to Issuer Bank: The Credit Card Network forwards the data to the issuing bank.

Phase 4: Authorization

- The authorization response is sent to the payment gateway or card reader, displaying the result to the consumer. If approved, the merchant proceeds with the delivery of goods or services.

Phase 5: Processing and Settlement

- The merchant's bank (acquiring bank) processes the batch of approved transactions submitted by the merchant.
- Payment Settlement Flow:
- The acquiring bank requests settlement from the issuing bank.
- The issuing bank transfers the funds to the acquiring bank, deducting fees.
- The remaining funds are deposited into the merchant's account within 2-3 business days.

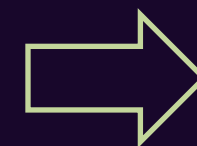
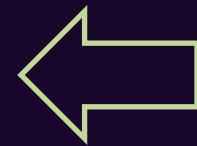
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Role of ACM in the Transaction Process

The ACM plays a crucial role in **assisting the issuing bank**, particularly during phase 3 and phase 4:

Phase 3: Payment Verification

ACM supports the issuing bank in verifying if the client has sufficient funds to cover the payment. Once the verification is complete, ACM sends an approval or decline message back to the payment processor.



Phase 4: Authorization

During the authorization process, ACM helps the issuing bank to efficiently process and validate transactions. Using advanced algorithms and real-time data analysis, ACM enhances the speed and accuracy of authorizations for merchants and consumers.

Current Features Showcase

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Features Overview



The ACM Suite offers several key advantages due to its **full modularity**:



Easy to Adjust



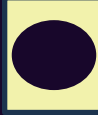
Customizable



Goal-Focused Setup



Improved Efficiency



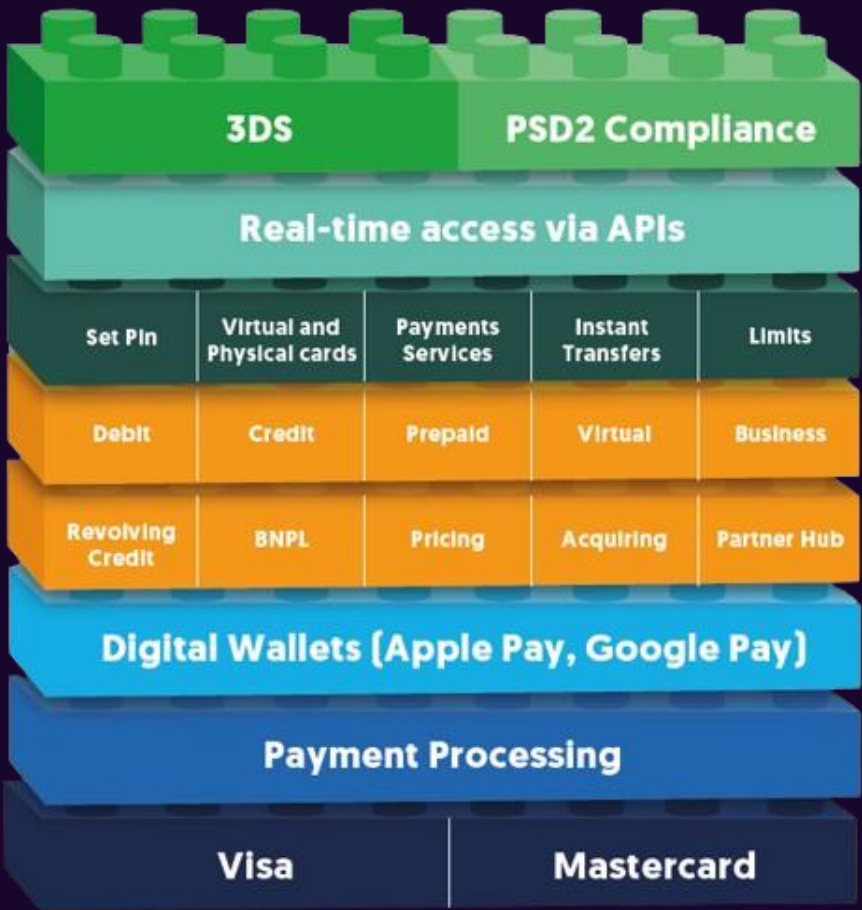
High Performance



Versatile



Personalized Solutions



3

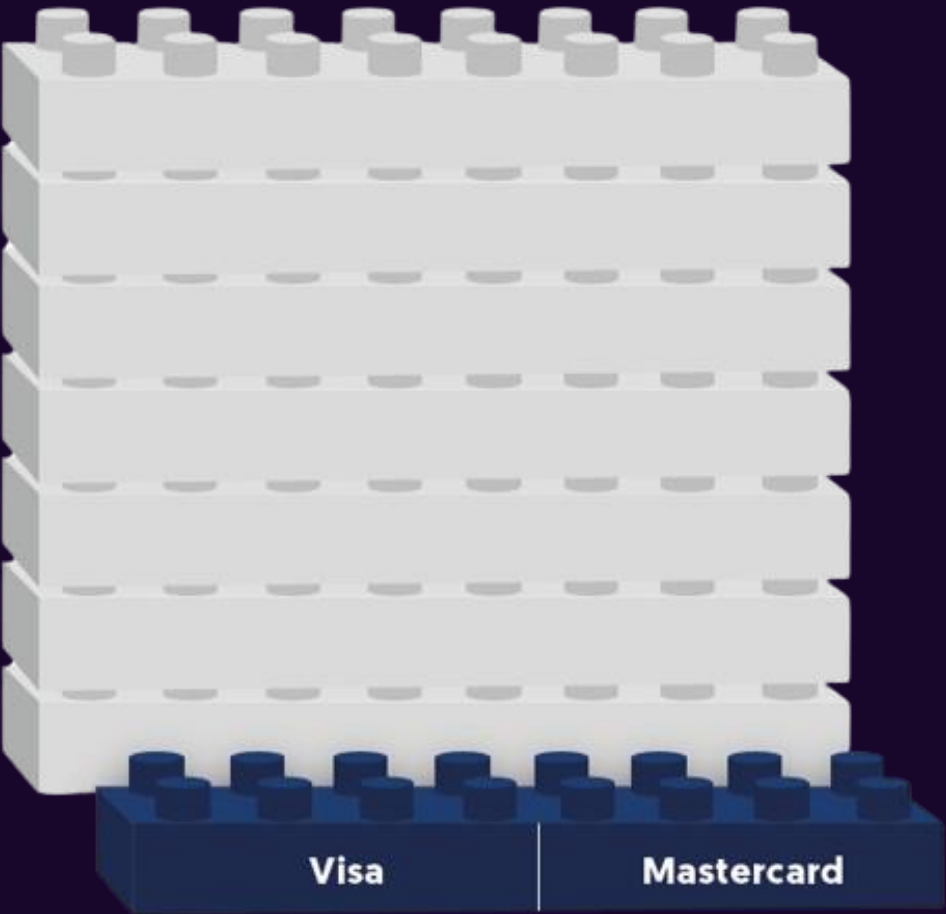
International payment schemes



International Payment Schemes: We specialize in global payment systems.



VISA and Mastercard Solutions: We offer complete services for issuing and managing these cards worldwide.



Cross-Border Transactions: We facilitate transactions across international borders.



Global Card Administration: We ensure seamless management of cards on a global scale.



Efficiency and Reliability: Our expertise guarantees efficient and reliable services for our clients.

3

Certified integration with multiple processors

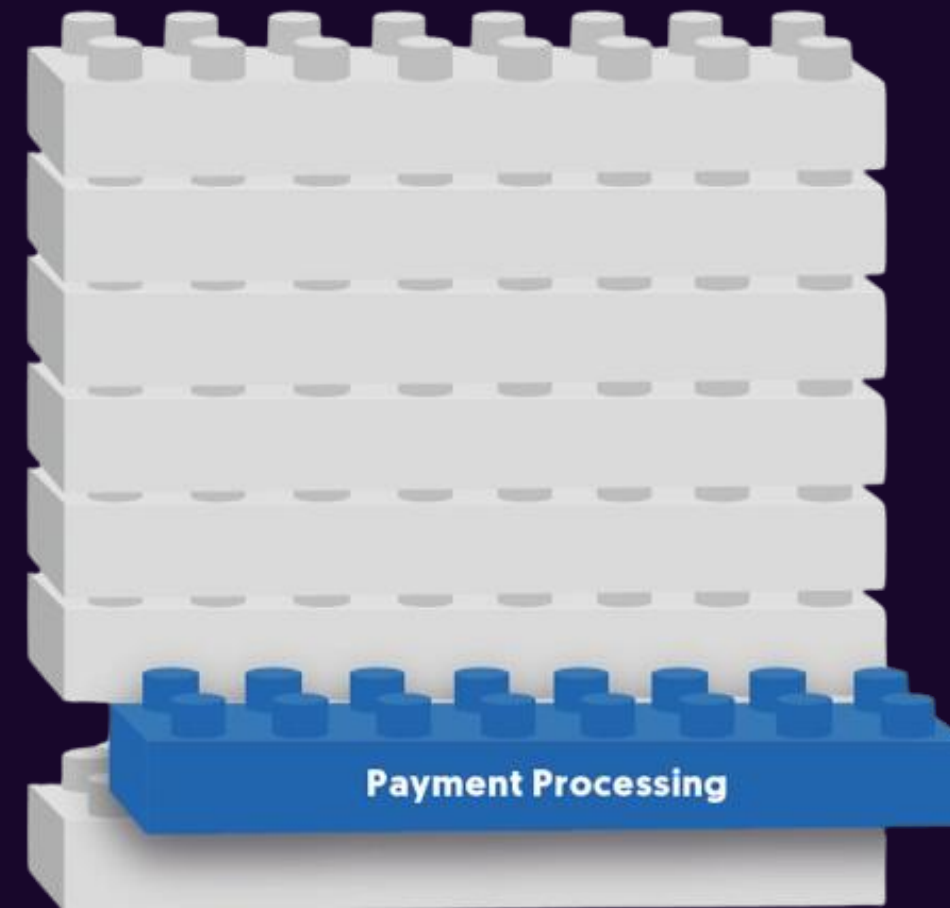


Certified Integration: We are certified to integrate with a wide variety of processors.



Local and International Processors: We integrate with processors both locally and globally, including:

- SIBS (Portugal)
- EMIS (Angola)
- SIMO (Mozambique)
- SISP (Cape Verde)
- Danubepay (international)



Seamless Compatibility: Our solution ensures smooth compatibility with different systems.



Smooth Operations: Our integration ensures clients enjoy smooth operations.



Streamlined Processes: Clients benefit from streamlined processes across various platforms and regions.

3 Tokenization and integration with digital wallets



Exceeding Standards: We aim to surpass modern standards in user convenience and payment security.



Tokenization Support: The ACM solution supports card tokenization, enhancing security and ease of use.



Seamless Transaction Processing: It efficiently handles transactions, including those from digital wallets.



Digital Wallet Compatibility: The ACM solution works smoothly with Apple Pay and Google Pay.

3 Support for different card types

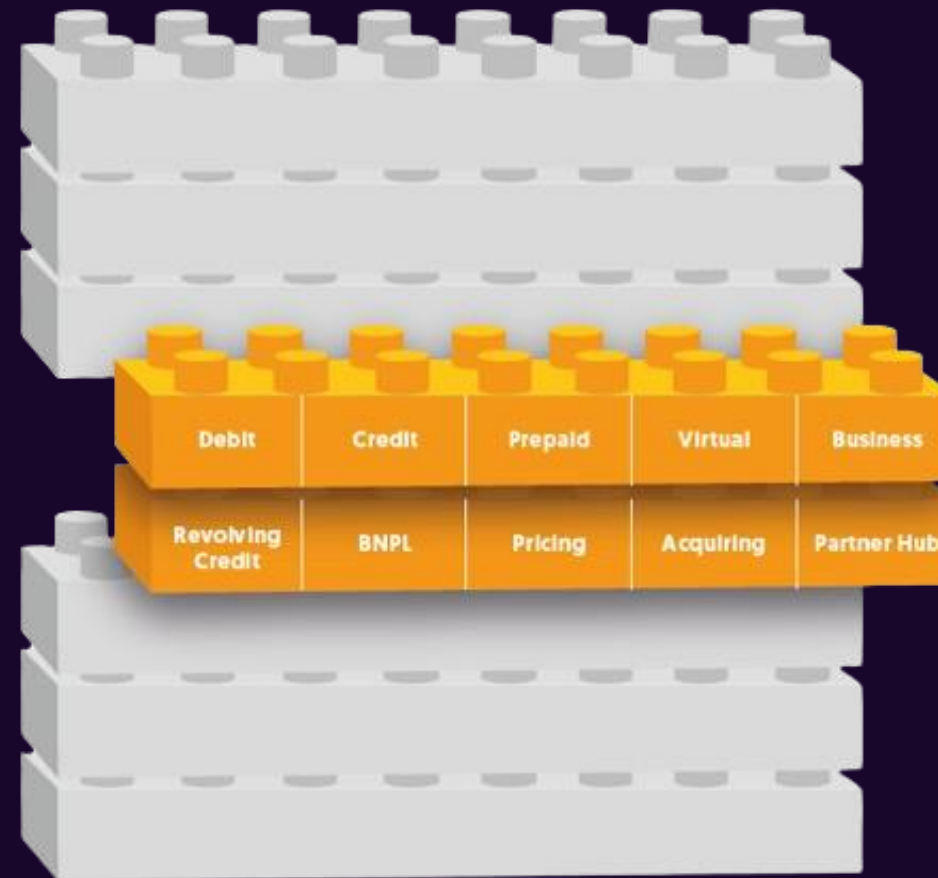


Comprehensive Card Suite: Includes debit, credit, prepaid, virtual, and corporate cards.



Sophisticated Card Management:

- Seamless lifecycle management
- Flexible limit management
- Enhanced security with 3D Secure
- Secure tokenized payments



Diverse Functionalities:

- Revolving credit options
- Flexible split purchase alternatives
- 'Buy now, pay later' features
- Efficient price list management
- Streamlined accounting
- Effective acquiring network management
- Hub for partners
- Strategic notification management for marketing



3

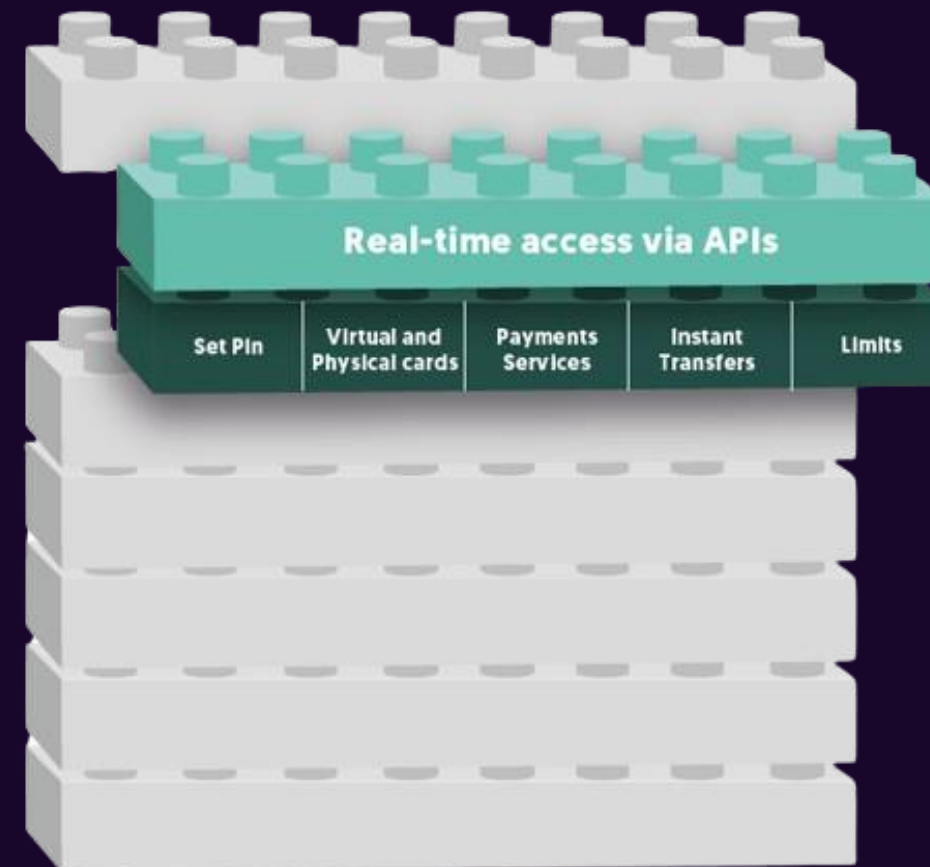
Solid API for integrating across your channels



Powerful Service API: Provides seamless card management for cardholders.



Enhanced Banking Experience: Effortless access to features for improved user convenience.



Key Functionalities:

- Requesting a new PIN
- Comprehensive card lifecycle management (block, replace, request new issues)
- Flexible limit management options
- Convenient payment capabilities for services and purchases
- Hassle-free mobile phone top-ups
- Swift and secure instant transfers



3

Security and usability when paying online



Simplified Card Operations: ACM handles 3D Secure implementation seamlessly for secure online transactions.



Effortless Compliance: Organizations can focus on core operations while we manage the complexities of 3D Secure.



Streamlined 3D Secure Process:

- Enrolling 3D Secure contracts for cards
- Managing contact details linked to contracts
- Handling cardholders' preferred authentication methods
- Ensuring PCI-DSS and Open Banking Directive PSD2 compliance

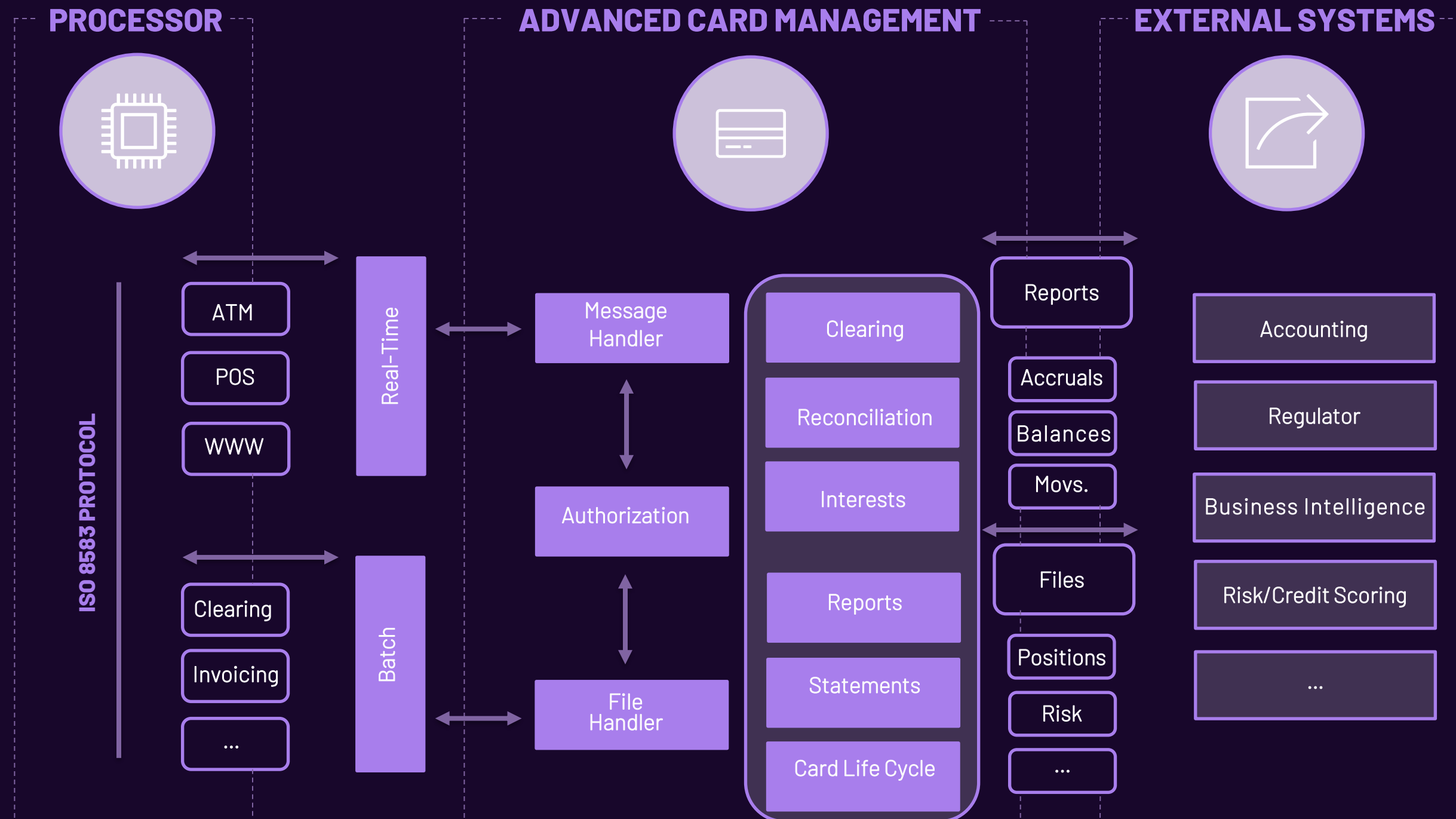
Architecture and Technology in Use

4

Support Database	Development frameworks	Frontend
 Microsoft® SQL Server™	 Java™	
		
		

4

ACM Suite Architecture



Types of Cards

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Types of cards

ACM offers a diverse range of card types, catering to various financial needs and preferences.

Prepaid/debit cards

With prepaid cards, users load funds onto the card in advance, allowing for controlled spending without the risk of overspending or accruing debt. Debit cards, on the other hand, are directly linked to the user's bank account, enabling seamless access to funds for purchases and withdrawals.

Credit cards

Credit cards provide users with a predetermined credit limit for making purchases, with the option to pay later.

Combined cards

Combined cards offer users the convenience of both debit and credit functionalities in one card. They provide access to funds from the user's bank account while also allowing borrowing up to a set credit limit.

Virtual cards

Virtual cards provide a digital alternative to physical cards for online transactions, particularly in ecommerce. They offer added security by not exposing sensitive card information and are ideal for one-time or limited transactions.

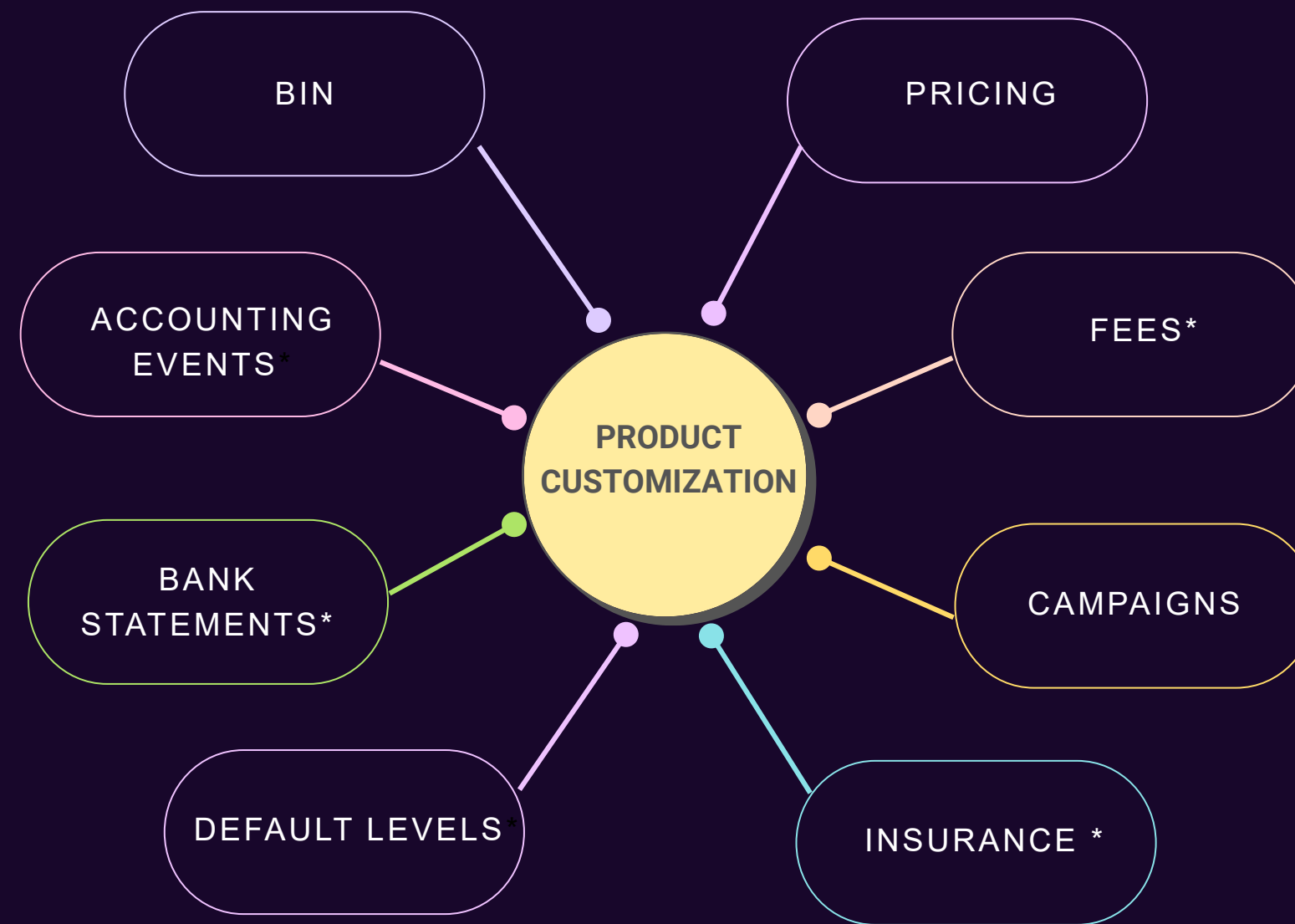
Tokenized cards

Cards integrated with digital wallets, like Apple Pay, Google Pay, or Samsung Pay, offer users a convenient and secure way to make payments using their smartphones or other mobile devices.

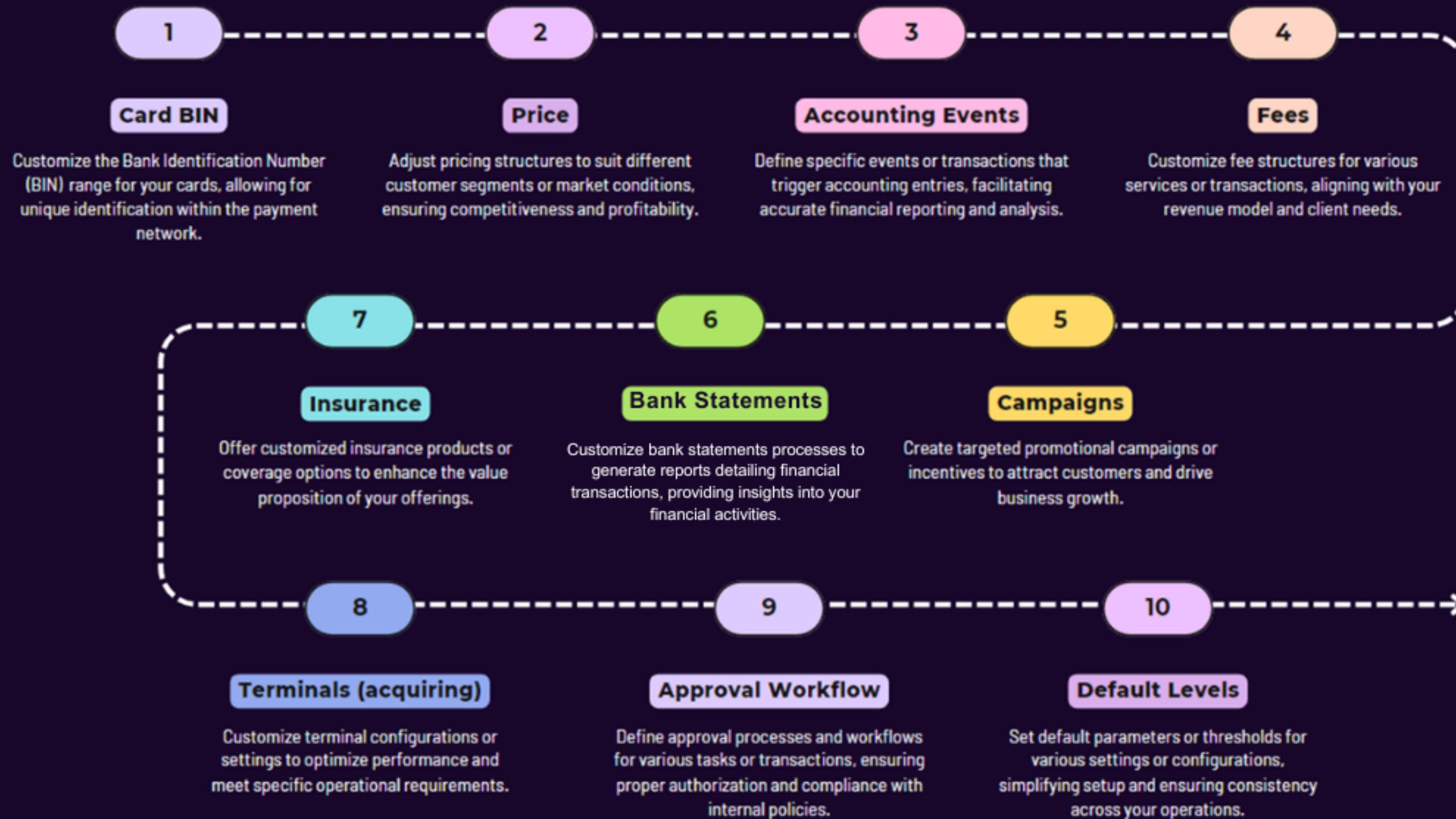
Business cards

Business cards offer features for corporate spending. These cards can be customized to provide individual spending limits (X limit for each employee), allowing businesses to manage expenses effectively and track spending per employee. Alternatively, they can be shared, with one collective spending limit for all employees, simplifying administration and providing flexibility in allocating funds across the organization.

Initially, you customize your product to meet your specific requirements, defining its parameters. Once your product is personalized, you have the ability to further refine the following aspects:

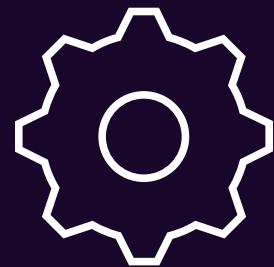


* → Only prepaid and credit cards



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Card Issuing process



1.

To apply for an ACM card, simply link your account number and choose the card type from options including credit, debit, or prepaid, with personalized characteristics to suit your needs. You can also opt for instant issuance for immediate access.



2.

After selecting your preferred card type and choosing the destination for delivery (either to the bank for pickup or directly to the client's address), the next step is for the card to be produced on the main processor.



3.

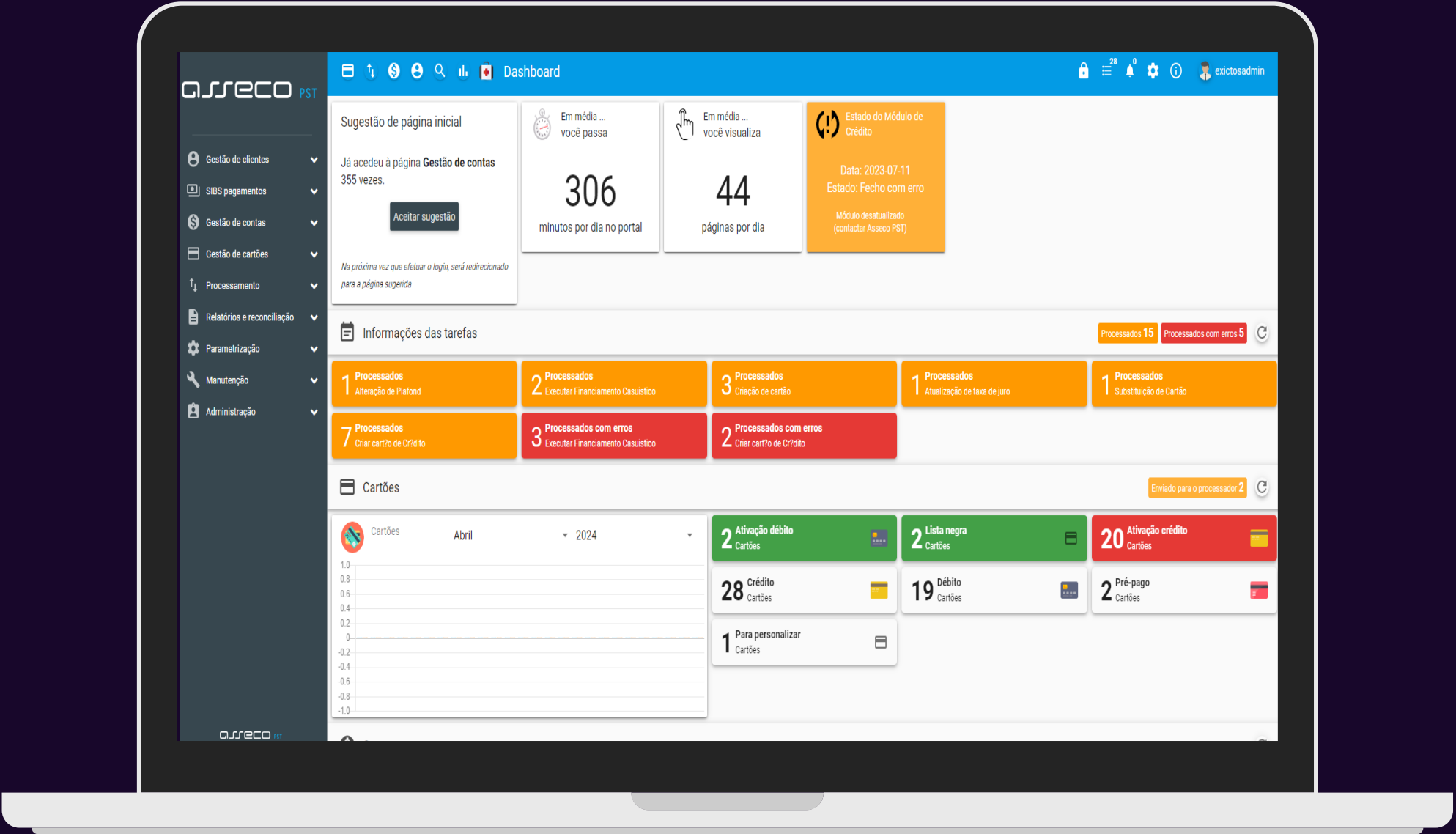
After production on the main processor, the card will be dispatched to the specified destination, typically arriving within 2-3 days, or within 1 day if it was issued with urgency. **Simple as that!**

Our Back Office

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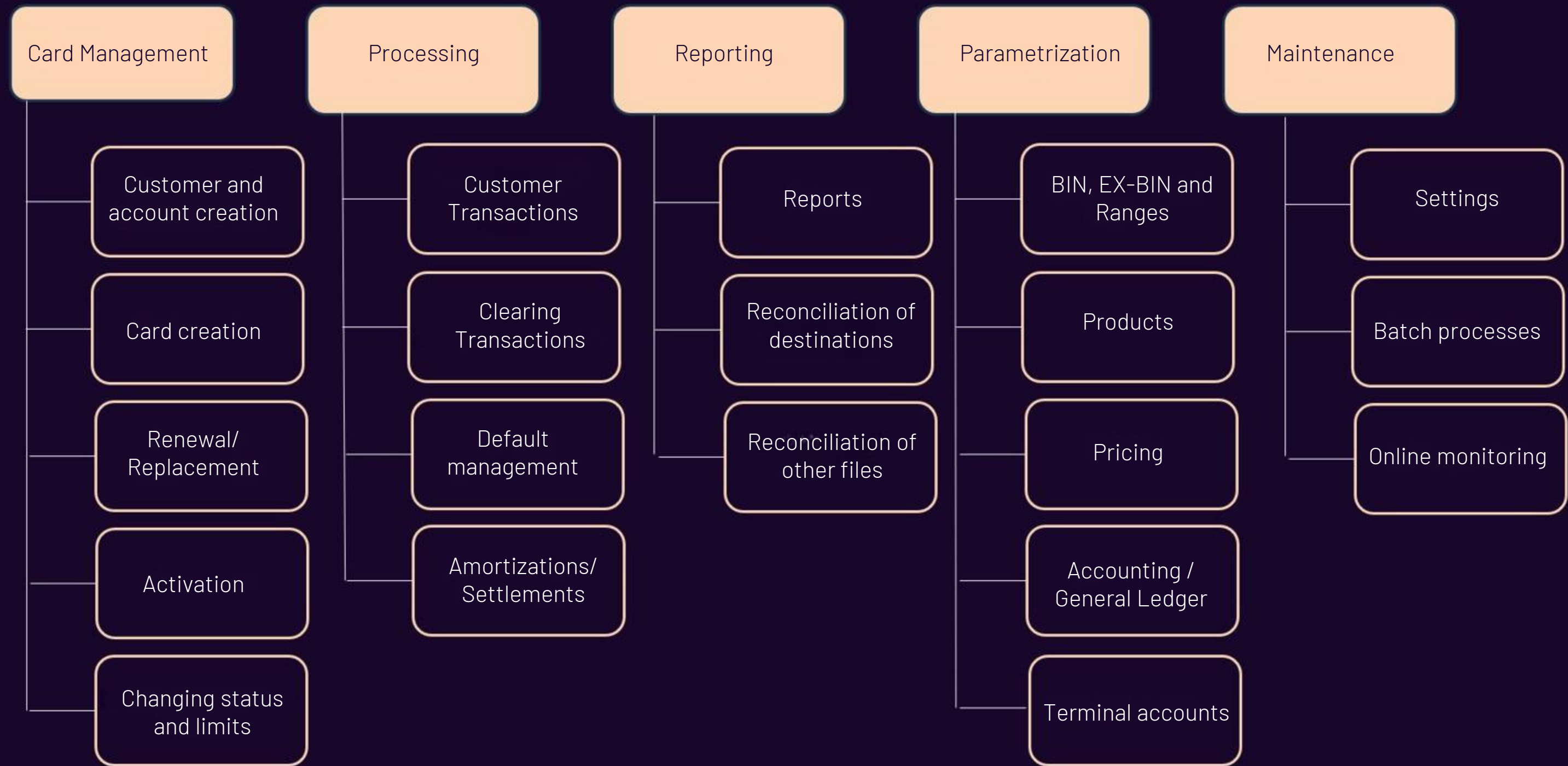


This is our portal: **Suite ACM**



6

ACM Features



Our implementation process

7

7

Implementation Steps

1

Solution Design

- Requirement analysis
- Workshops
- Defining your card solution

3

Launch

- Define users
- Launch your card
- Testing and feedback

5

Continuous improvement

- Supervision and Support
- Unlock new features

2

Client integration

- Product configuration
- Environment available
- Core integration

4

Rollout

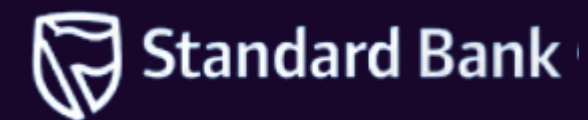
- Production environment
- Grow your business
- Grow your userbase

12 weeks

**Grow your business
in only 12 weeks!!**

Our Clients

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BancoBNI

Asseco PST Contacts

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Technology for business, solutions for people.

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