

MERCHANT PAYMENTS

POSITIONING FOR FUTURE SUCCESS

NOVEMBER 2021

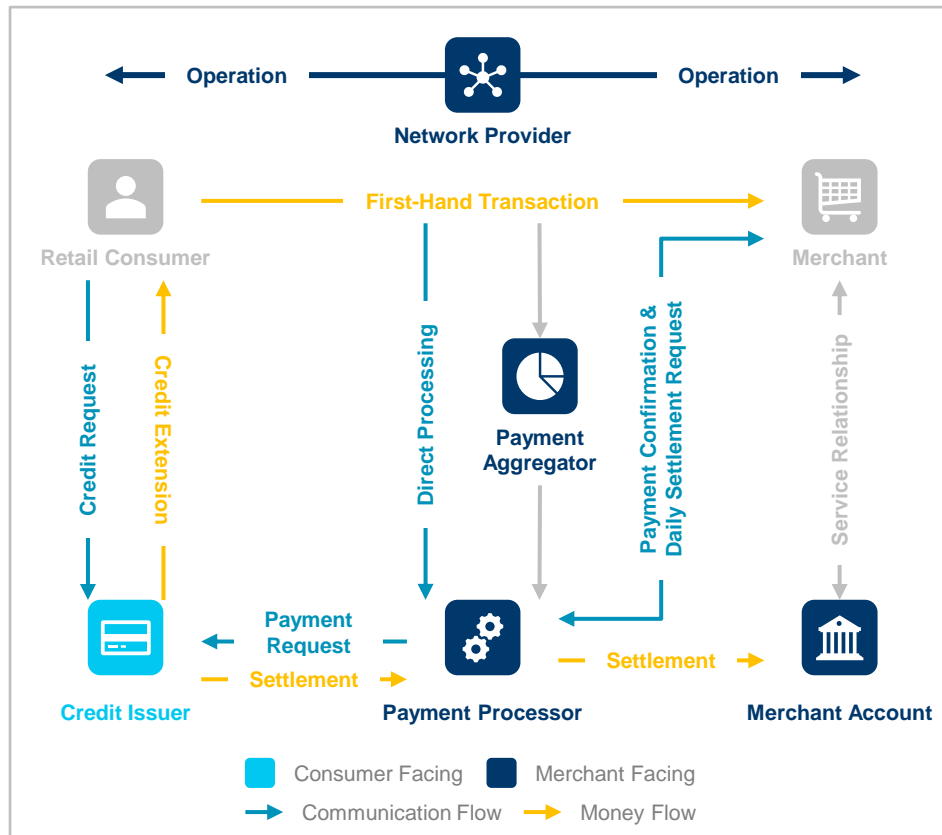
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PAYMENTS ECOSYSTEM

The merchant payments ecosystem consists of various players, each with different responsibilities to help enable and execute consumer transactions











Payments Ecosystem

Overview



Stakeholder

Examples

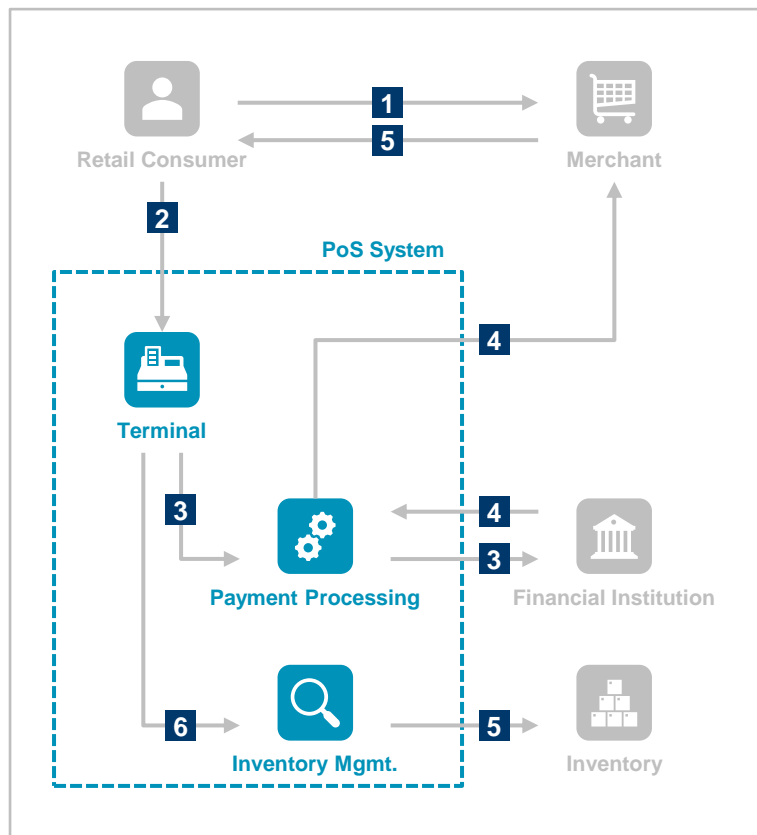
 <p>Credit Issuers Provide financing to consumers to support purchases, earning interest as revenue</p>	
 <p>Payment Aggregators Enable merchants to accept payments without needing to go through a bank</p>	
 <p>Payment Processors Handle transactions and comms. between consumer bank / credit issuer and merchant bank</p>	
 <p>Merchant Accounts Allow merchants to accept digital payments, operated by a merchant acquiring bank</p>	
 <p>Network Providers Facilitate communications between merchants and credit issuers for the retail transaction</p>	

POINT OF SALE (“PoS”) SYSTEMS

Merchants implement PoS systems in store (both physical and online) to accept payments from retail consumers, via various channels

PoS Systems

Process



Process Flow Description

1

Consumer visits the merchant’s store, either online or offline, and chooses to purchase certain products / services

2

PoS terminal calculates the total price for the chosen products and offers various channels through which the consumer can pay

3

Payment instruction is then passed on to a payment processing system, which is subsequently passed to a financial institution

4

Once payment instruction is approved by the financial institution, a confirmation is passed to the PoS system and indicated to the merchant

5

Upon confirmation of the transaction, the merchant delivers the purchased products / services to the consumer

6

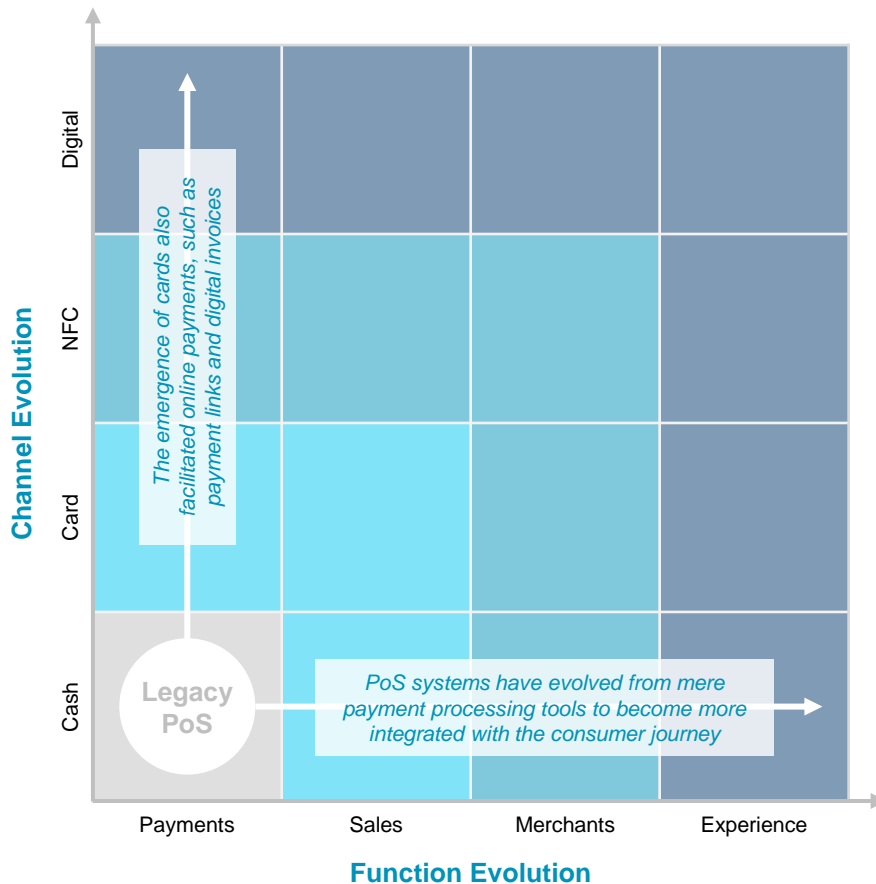
Amount purchased is communicated to an inventory management system, which tracks the inventory status

PoS SYSTEM EVOLUTION

PoS systems have evolved over time, both in terms of the payment channels and functions, to enhance the customer journey / experience

Development Direction

Next-Generation Solutions



Channel Evolution

- 1 **Cash**
Cash is the oldest unit for exchange, and PoS systems were set up to facilitate cash-based transactions
- 2 **Card**
PoS systems handled card-based transactions via physical manners, such as swiping and punching
- 3 **NFC**
Non-contact-based transactions for cards, which also enables the adoption of virtual credit / debit cards
- 4 **Digital**
Other payment methods are being developed and adopted, such as mobile wallets and QR-codes

Function Evolution

- 1 **Payments**
PoS systems were used only for payment handling and separated from the overall sales process
- 2 **Sales**
Integration with the sales process, providing relevant information to enhance the customer journey
- 3 **Merchants**
New functions added to facilitate merchant operations, such as CRM, inventory mgmt., and business analytics
- 4 **Experience**
Additional features are being explored to integrate customer journey and enhance purchase experience

PAIN POINTS

However, PoS systems still present various pain points to both consumers and merchants, suggesting room for further enhancements

Pain Points

Existing Systems



CUSTOMER JOURNEY



Sales Fragmentation

PoS may not fully integrated into the sales experience, resulting in a fragmented journey



Channel Limitations

Most PoS handle limited types of payments, and multiple systems are needed for coverage



Customer Service

Dedicated staff are required, both in-store and online, to address any failures / problems



BUSINESS OPERATIONS



System Integration

PoS may not be interoperable with other systems, requiring additional manual inputs



Hardware Defects

PoS terminals become outdated or defective over time, and need to be replaced



Service Cost

Upfront instalment expense and ongoing service fees required to implement PoS systems



TECHNOLOGICAL SYSTEMS



Internet Connectivity

Network connectivity issues may cause delays and failures during transaction processing



Maintenance & Upgrades

Both PoS hardware and software need to be maintained, incurring additional costs



Security / Fraud Risk

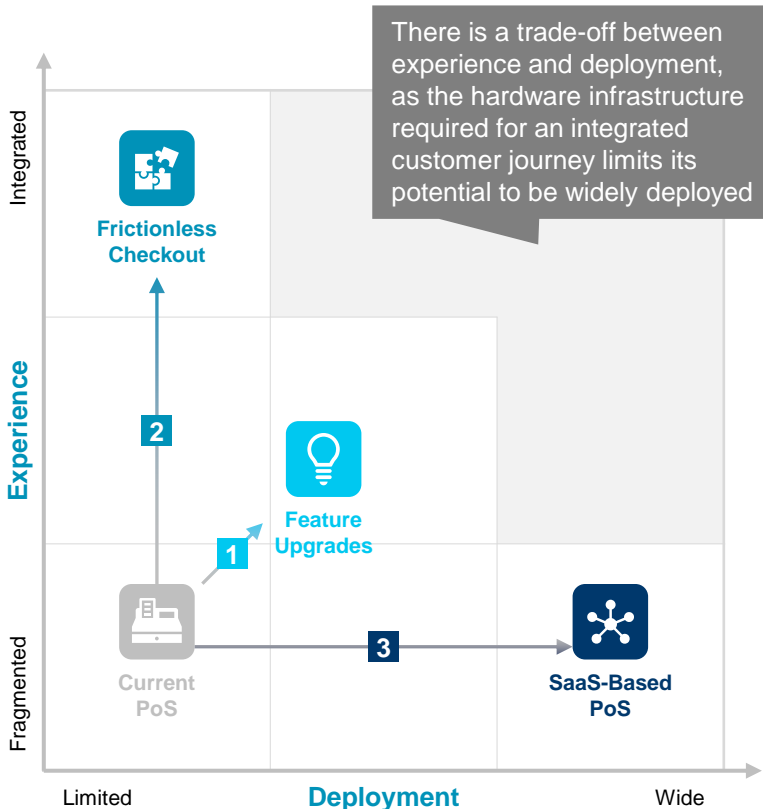
There are identity theft concerns both at the PoS terminal level and for back-end processes

NEXT-GENERATION SOLUTIONS

To address these pain points and enhance customer experience, the industry has been exploring next-generation solutions across three directions

Development Direction

Next-Generation Solutions



- 1 Feature Upgrades**
 Additions to a PoS system's hardware or software, providing smoother customer experience or additional functions

Minor Upgrades
 To Experience / Deployment
- 2 Frictionless Checkout**
 Complete integration of the sales process, where payment is made automatically after goods are selected

Major Upgrades
 To Experience
- 3 SaaS-Based PoS**
 Modularised PoS software that can be deployed on any smart devices, enabling scalability of transaction processing

Major Upgrades
 To Deployment

CASE STUDIES

Various companies have pursued all three directions in upgrading their PoS systems, finding different degrees of success

Use Cases

Next-Gen. PoS

1 Feature Upgrades

Additions to a PoS system's hardware or software

QR Payments



QR codes are increasingly being adopted at PoS systems, with push QR referring to QR codes displayed by merchants and pull QR referring to QR codes shown by customers at purchase

1

Contactless payment method that only requires a smartphone

2

Convenient and easy to use, with little customer education required

3

Potential integration with financial apps for consumer financing

2 Frictionless Checkout

Complete integration of the customer journey

Amazon Go



Amazon Go is a chain of cashierless stores in the US and UK, where customers use an app to enter the store and can then purchase items without the need to physically undergo the payment process

1

Completely automated stores without any physical PoS systems

2

Fully integrated customer experience with little potential for friction

3

Holistic data collection for business intelligence and consumer analytics

3 SaaS-Based PoS

PoS software deployed on smart devices

Smartphone PoS



Smartphone (or tablet) applications that enable merchants to receive payments via bank cards with a subscription model, and additional upgrades can be implemented for other payment methods

1

Easy-to-use PoS solution deployed without the need for initial installation

2

Remote PoS terminal to facilitate transactions anywhere

3

Subscription-based model enables scaling according to business needs

KEY BENEFITS

These next-generation solutions focus on addressing various pain points currently experienced by merchants

Benefits

Next-Generation Solutions

		NEXT-GENERATION SOLUTIONS			
		Feature Upgrades	Frictionless Checkout	SaaS-Based PoS	Description
Customer Journey	Sales Fragmentation	-	✓✓	-	<ul style="list-style-type: none"> Frictionless checkout is fully integrated into a seamless customer journey from entry to exit
	Channel Limitations	✓	✓	✓✓	<ul style="list-style-type: none"> Many solutions expand payment channel coverage, but SaaS-based solutions are easiest to deploy
	Customer Service	✓	✓	✓✓	<ul style="list-style-type: none"> SaaS service vendors tend to operate a dedicated customer service team to address any problems
Business Operations	System Integration	✓	✓✓	-	<ul style="list-style-type: none"> Processes are integrated in frictionless checkout, with all systems being interoperable and automatic
	Hardware Defects	-	-	✓✓	<ul style="list-style-type: none"> No specific hardware is required for SaaS-based solutions, and any smart device can be used
	Service Cost	-	-	✓	<ul style="list-style-type: none"> SaaS services follow a subscription-based model, with service costs scaling to business needs
Technological Systems	Internet Connectivity	✓	✓✓	-	<ul style="list-style-type: none"> Frictionless checkout stores can run independently, without relying on any external connections
	Maintenance & Upgrades	✓	-	✓✓	<ul style="list-style-type: none"> SaaS solutions are maintained by the vendor and upgrades are typically easy to deploy
	Security / Fraud Risk	✓	✓✓	✓✓	<ul style="list-style-type: none"> Additional security and protection mechanisms are being developed across all new solutions

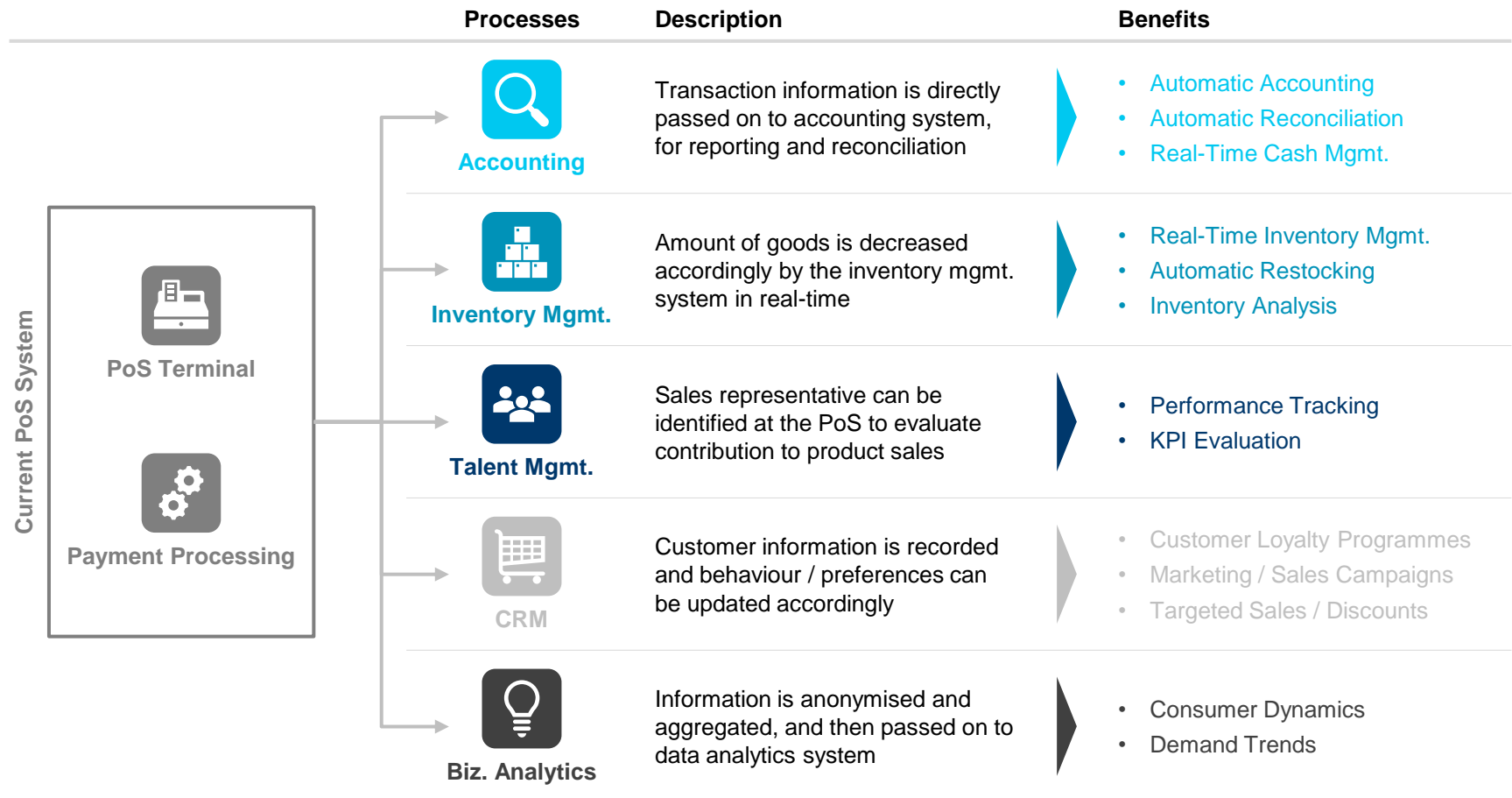
✓✓ Fully Addressed
 ✓ Partially Addressed
 - Not Addressed

PoS INTEGRATION

In addition to upgrading the PoS system itself, merchants have also been looking to integrate the PoS with their various operational processes

Integration

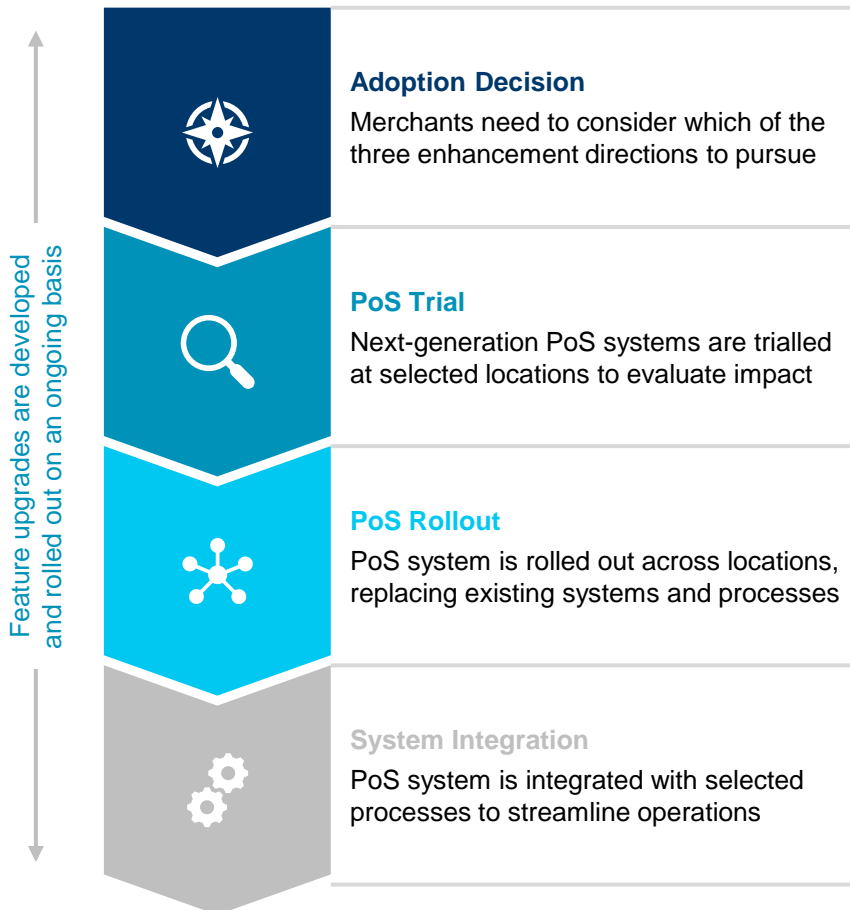
PoS Systems



ADOPTION TIMELINE

Merchants need to consider how their PoS systems should be upgraded, taking into account the impact of the PoS on remaining operations

Adoption Timeline Implementation Approach



DECISION FACTORS

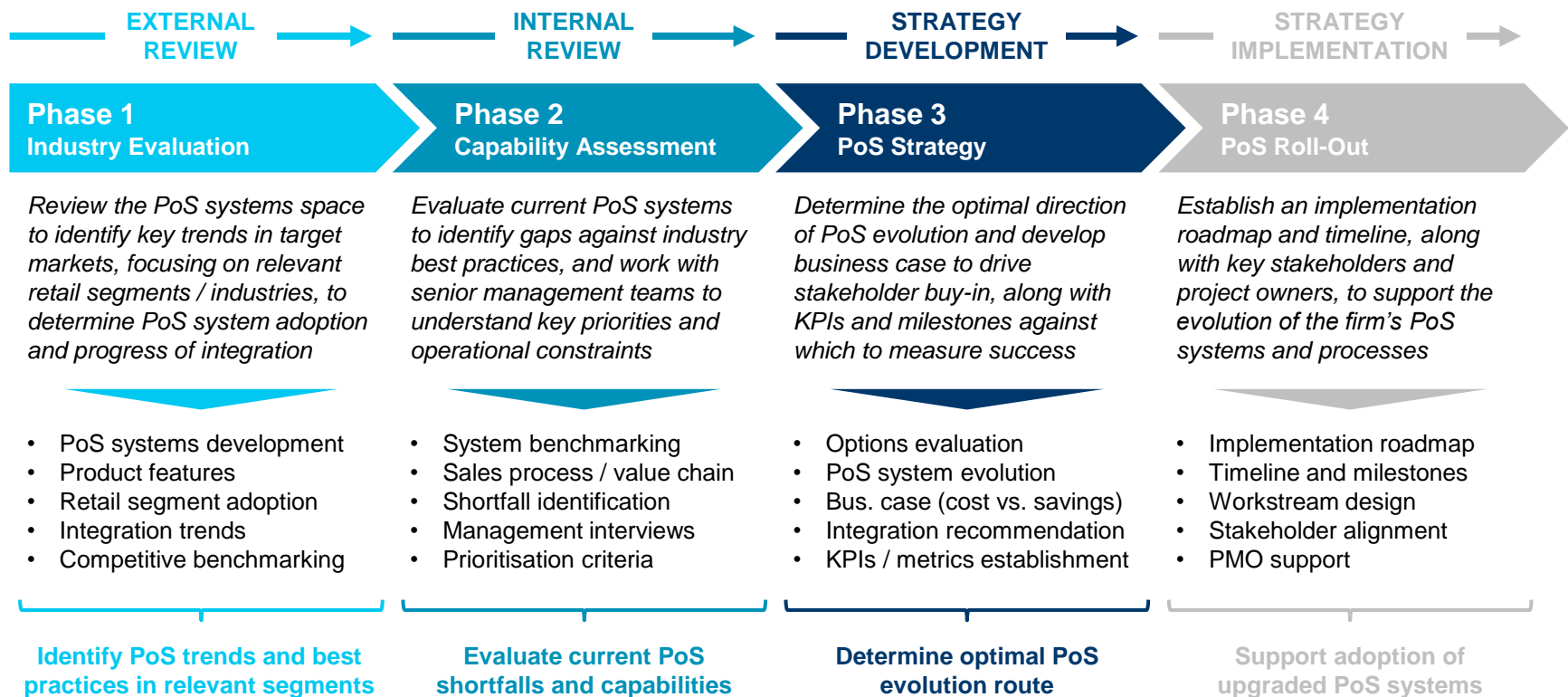
- 
Brand Positioning
 Expectations around the impact of PoS on customer journey, based on brand perception
- 
Consumer Behaviour
 Payment behaviour of target consumers, especially with regards to payment channels
- 
Existing Pain Points
 Ability of new PoS systems to address pain points currently experienced by consumers
- 
Implementation Complexity
 Cost and ease of solution implementation, along with ongoing maintenance and upgrades
- 
PoS System Scalability
 Potential for the PoS system to be deployed across online and offline locations

HOW WE CAN HELP (1/2) – MERCHANTS

We offer end-to-end consulting support for merchants looking to upgrade their PoS systems, helping them to identify the most appropriate optimisation pathway

Project Approach

Merchants



HOW WE CAN HELP (2/2) – PoS VENDORS

We advise payment services providers and PoS vendors on their strategic growth plans, include identifying relevant market entry opportunities and product expansion pathways

Project Approach

Merchants



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STRATEGY WITH A DIFFERENCE