

Mobile Matrix

Mobile payment options for vending machines are here, but how do they enable payment, what's needed and what benefits do they offer the operator? This matrix is meant to provide the answers at-a-glance. Information was gathered from manufacturers for each of the existing solutions that enable a consumer to pay at a vending machine with a mobile device. Information was further reviewed by Dr. Michael Kasavana.

POS INTERACTION
Point-of-sale interaction implies the type of hardware or item that is required at machine level. For our purposes, readers and touchscreens are categorized as appearing on the outside of the machine while a dongle connects on the inside of the machine to enable mobile payment.

ACCEPTANCE
Acceptance includes all current mobile payment options available in the vending industry. Major credit cards include Visa debit and credit, MasterCard debit and credit, Discover and American Express. While most solutions accept all major credit cards, the payment options may be limited by the credit processor used as well as by the specific mobile wallet or cellular carrier the consumer chooses. For example, MasterCard debit can not be used on devices with the credit processor Heartland due to an operating agreement with Visa which lowers transaction fees on small-ticket items.

MERCHANT OF RECORD
Merchant of Record (MOR) is the company that receives and holds a consumer's credit payment from the vending machine. The MOR holds the merchant account with the processor/acquiring bank and is responsible for paying the interchange fees associated with each credit card transaction. The MOR is the company that is ultimately responsible for the financial transaction.

REPORTS
Reports indicate information available to the operator and may include sales data, product sales and consumer demographics.

ADDITIONAL PARTNERSHIPS
The company producing the hardware that can accept mobile payments at the vending machine is actively partnering with other companies to include their specific forms of mobile payment at the vending machine point-of-sale.

LOYALTY
For this matrix, loyalty includes history and rewards offerings. History refers to whether the consumer's purchasing history is tracked while rewards indicates whether the consumer is "rewarded" for loyalty with complimentary items or discounts.

INDUSTRY CROSSOVER
Industry crossovers refers to the product compatibility and availability in industries outside of vending (not including micro markets) such as arcade, parking, laundry, etc.

Product	Company	POS Interaction			Communication Method			Acceptance					Consumer Requirement	Merchant of Record		Reports			Loyalty	Industry Crossover	Additional Industry Partnerships	
		Reader/Touch-screen	QR Code	Dongle	NFC	BLE	Other	Major Credit Cards	PayPal	Google Wallet	Softcard	Apple Pay	Social Media	App download	Provider	Operator	Consumer Demographics	Sales	Prod Intelligence	Rewards/History	Technology used in other industries	
QR code/ MDBlu	BYNDL		x	x		x		x	x					x	x		x	x		x	x	x
PayLab	PayLab	x					cameras & infrared w/ phone accelerometer	x	x		x			x	x		x	x		x		x
PayRange	PayRange			x		x		x					x	x		x	x				x	x
ePort	USA Tech	x			x	x		x	x	x	x			x			x	x		x	x	x
4in1	CPI	x			x			x		x	x				x		x	x				
VPOS	NAYAX	x			x			x	x				x		x		x	x		x	x	
AV7/AV5	AirVend	x			x	x		x		x	x			x	x		x	x				x
Vend-Screen Unit	Vendscreen	x			x			x	x	x	x			x			x	x		x		
Seed Cashless	Cantaloupe	x			x			x		x	x				x		x	x				
FanWise	FanWise		x				cellular data/ WiFi						x				x			x	x	

QUICK RESPONSE CODE
A Quick Response (QR) code is located on the front of the machine.

COMMUNICATION METHOD
Communication method refers to the way in which the user's device connects to the vending machine.

CONSUMER REQUIREMENTS
Consumer requirements refer to a mobile app download needed for the user to make a payment. Generally the app is accompanied by the user creating an account, either manually or with an existing account. This does not include third-party mobile wallet installation.