

# UNATTENDED FOR THE MASSES

The rise of self-service payments in Europe & the UK and the four big use cases driving growth



## Executive Overview

Retailers, businesses and solutions integrators, are all looking to benefit from giving customers greater access, convenience and control when buying, booking, or ticketing. As self-service form factors evolve, we're seeing all sorts of functionality taking hold – from interactive multimedia and AI to personalised rewards and mobile push notifications. This paper, from Castles Technology, reveals why unattended payments and services are the new preference for today's tech-savvy consumers.

It explores the big four use cases that are driving unprecedented demand for unattended payment infrastructure at scale - EV charging, paperless ticketing, grab and go vending, and unattended retailing. It gives merchants, businesses and integrators a snapshot of the trends behind them. How they impact functionality, and the acceptance features that can future proof investment and deliver a positive experience for customers ready to take control.

# Why self-service payments are in demand at scale.

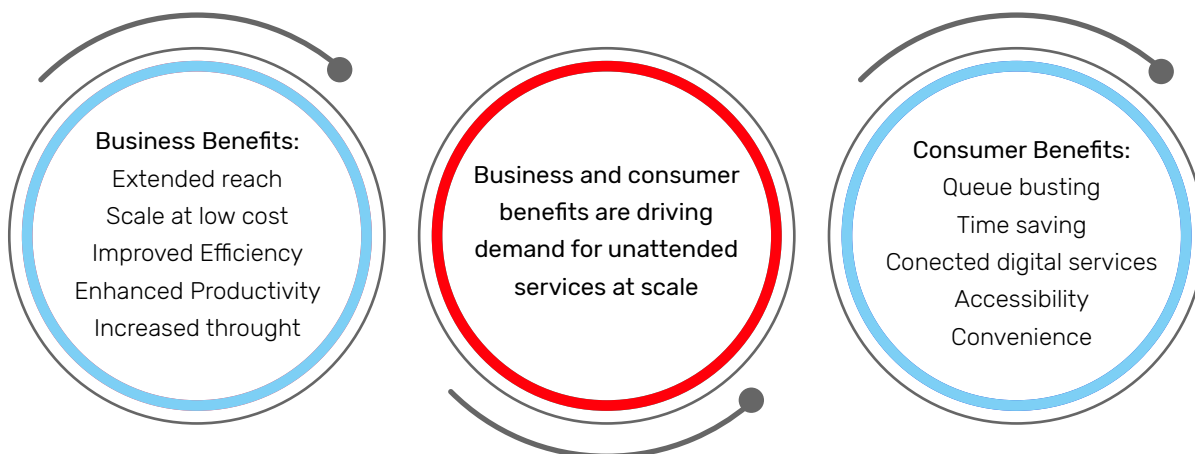
The rise of online shopping, booking and ticketing has changed payment attitudes forever. Tech-reluctant buyers who prefer human interaction to having to navigating payment on screen are increasingly in the minority. Today's buyers are prepared to go solo at the point of sale. Since COVID, most generations are now avid cashless and digital shoppers. Across Europe and the UK, people increasingly expect to discover, purchase and collect using unattended machines – especially if they're faster and more convenient.

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Surveys in the UK reveal that **66%** of people believe self-service at the point of payment makes shopping more efficient.”



## Benefits are creating push and pull demand

As technology continues to evolve, and devices become more sophisticated with easier to use and more intuitive interfaces, they are fast becoming the new payment choice for high-volume applications. Not only are they helping merchants, governments and businesses to solve the challenges of accepting payments efficiently at scale, but they are also creating better experiences for consumers by busting physical queues, reducing waiting times, delivering more connected digital services and creating better accessibility for the underserved.



## Which areas are driving growth?

Hardware growth is primarily attributed to the rise in demand for automated devices, self-service machines, wireless connectivity, and remote administration solutions and a switch to cashless economies.



*The global self-service technology market size was valued at **\$33.10 billion** in 2021, and is projected to reach **\$76.78 billion** by 2030, a CAGR of 9.8%.*



Tech innovation is making self-service options ubiquitous. Unattended payments and self-service installations are now popping up everywhere. Consumers are using them to register for hotel services, to self-check luggage at airports, to book tickets for travel and entertainment, to view product information, book healthcare appointments, and more.

Today, transport is a major growth sector for ticket purchase and payment and contactless barriers.

Parking too is experiencing new investment with the inclusion of mobile payment facilities as well as electric vehicle charging points. Meanwhile in the grocery segment, new types of unattended and remote payments are emerging including fully automated, checkout-free stores. Control of payments is now very much in the hands of the buyer.

# Spotlight on Unattended Payments at Scale

Almost every physical purchase or information point offers a potential for unattended payments. However when it comes to rolling out unattended projects at scale, there are four important use cases driving the most growth – **EV charging, paperless ticketing, interactive vending, and unattended retailing.**

## The four big self-service use cases

### 1. Electronic Vehicle Charging

In the drive for sustainability, there has been a dramatic increase in the number of Electric Vehicles (EV) on our roads. It is expected that **30%** of all new vehicles sold in Europe will be battery powered by 2025.

However, to go carbon neutral by 2050, Europe doesn't just need more EVs, it needs more EV chargers too. In 2021, there were around **375,000** public charging stations in Europe, but this will need to reach at least **3.4 million** by 2030. That means the current rate of roll out will have to increase from **1600** to **6000** a week.



#### Payments are a core part of the equation

There is now massive demand for unattended payment solutions that can be rolled out at scale to meet the diverse needs of all those involved in public EV infrastructure e.g. fuel forecourts, utilities providers, service stations, parking companies, retailers or shopping centres.

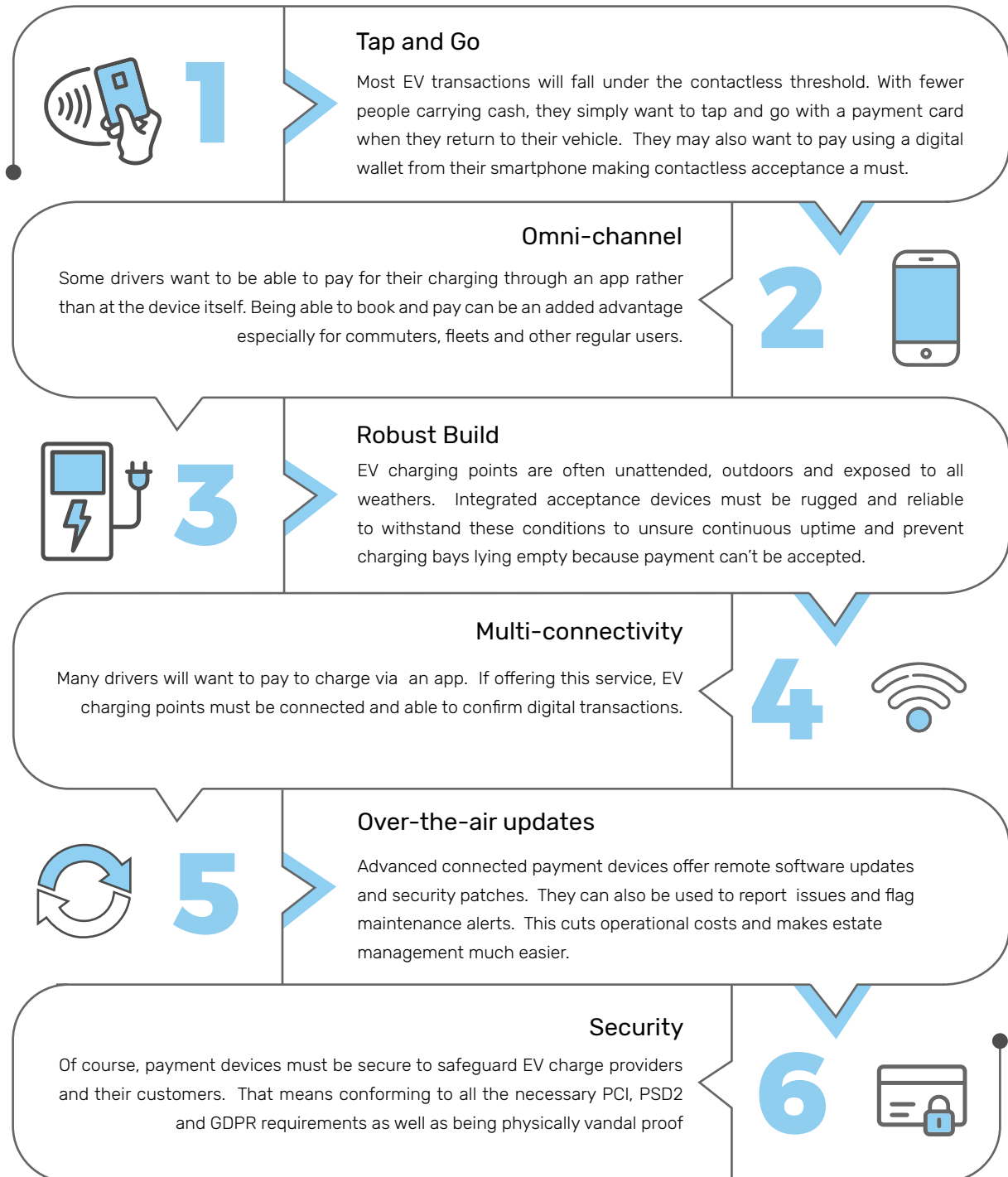
This includes easy to integrate, robust and reliable acceptance hardware capable of empowering all types of charging estates from the smallest of installations to large nationwide networks and even international parking/charging estates as they spread across Europe.

#### Smoothing the path to sustainability

A big factor in the success of EV adoption will be convenience. The more effortless it is to charge vehicles; the more people will be attracted to EVs. Conversely, any delays or difficulties when paying for battery top-ups could lead to a bad experience and put users off.

EV service providers and parking solutions integrators need to get it right. Charging-on-the-go requires integrated acceptance devices that are robust, quick, easy to use and secure, and that can accept a wide variety of electronic payment options.

# 6 Unattended Payment features that reduce friction at EV charging points



## 2. Paperless ticketing for transport

From buses, trains, and trams to ferries and flights, transport is critical to European businesses and global supply chains as well as to commuters, shoppers, local travellers and tourists.

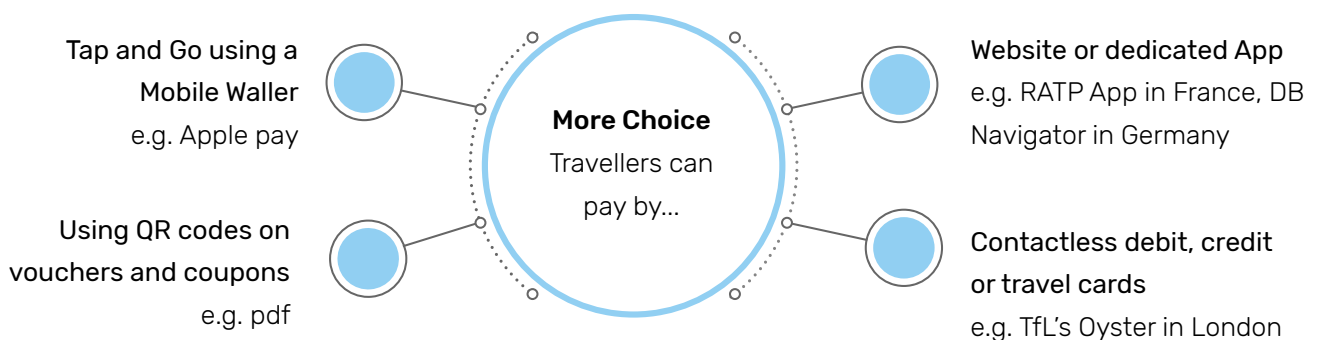
The sector contributes around 5% to the EU's gross domestic product and employs more than 6 million people. Providing the infrastructure and resources to enable the booking, sale and collection of tickets is a mission critical function. Across the continent, paperless ticketing is already transforming operations and creating better travel experiences for millions of people daily. It also makes economic sense for operators. Digitalisation has been shown to reduce ticketing costs by up to 85%. Given that in 2021, 5.2 billion passengers made national journeys in the EU, the scale and scope of these savings are immense.



### Paperless ticketing creates better user experiences

Automated payment systems, including e-cards, contactless barriers and mobile apps make it much easier and faster for passengers to pay and board. Paperless ticketing also means they don't have to worry about carrying, damaging or losing their paper tickets – especially if they buy in advance or online.

With electronic payments and wider acceptance, travellers no longer need cash or a card to pay at stations, terminals and stops but can pay on the go with a raft of convenient payment options.



## Unlocking operational benefits

Switching to cashless is helping to make European cities, public and private transport providers to get smarter, and make services more efficient. It is also letting them tap into a wealth of real-time behavioural data that helps them identify trends, define travellers needs and allocate resources more effectively.

# 6

## Reasons paperless ticketing works for transport operators

# 1

Faster boarding means less queues leading to fewer missed rides and less frustrated customers

# 2

Automatic barriers reduce the opportunity for fare jumping and ticket misuse and fraud

# 3

Better route planning and logistics/resource management because of greater visibility and more accurate data on travel usage trends and patterns

# 4

Improved productivity as tickets can be scanned automatically without staff having to read and check ticket stubs

# 5

More opportunity for fare innovation e.g. creating travel card discounts/promotions/special pricing

# 6

Paperless tickets are more sustainable, using fewer raw materials, eliminating print and processing and cutting ticket litter in and around stations/stops

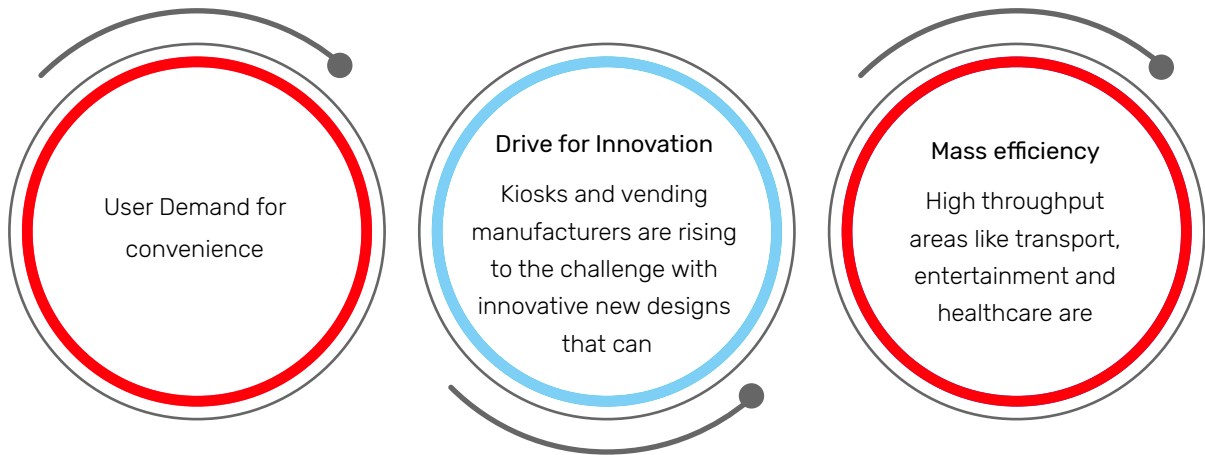
### 3. Grab and go vending

While vending machines have been around for many decades, advancements in payment and build technology are rapidly transforming the humble kiosk into a powerful fulfilment, conversion and brand building tool with more functionality, presence and applications than ever before.

Reflecting this, the global kiosk market, valued at USD 22.47 billion in 2022, is projected to more than double to USD 51.27 billion by 2031 - a CAGR for the period of 9.6%. Meanwhile the Europe vending machine market size is anticipated to reach USD 27.21 billion by 2028, registering a CAGR of 8.9%.



### 3 Trends fuelling vending growth



#### DIY experiences must deliver

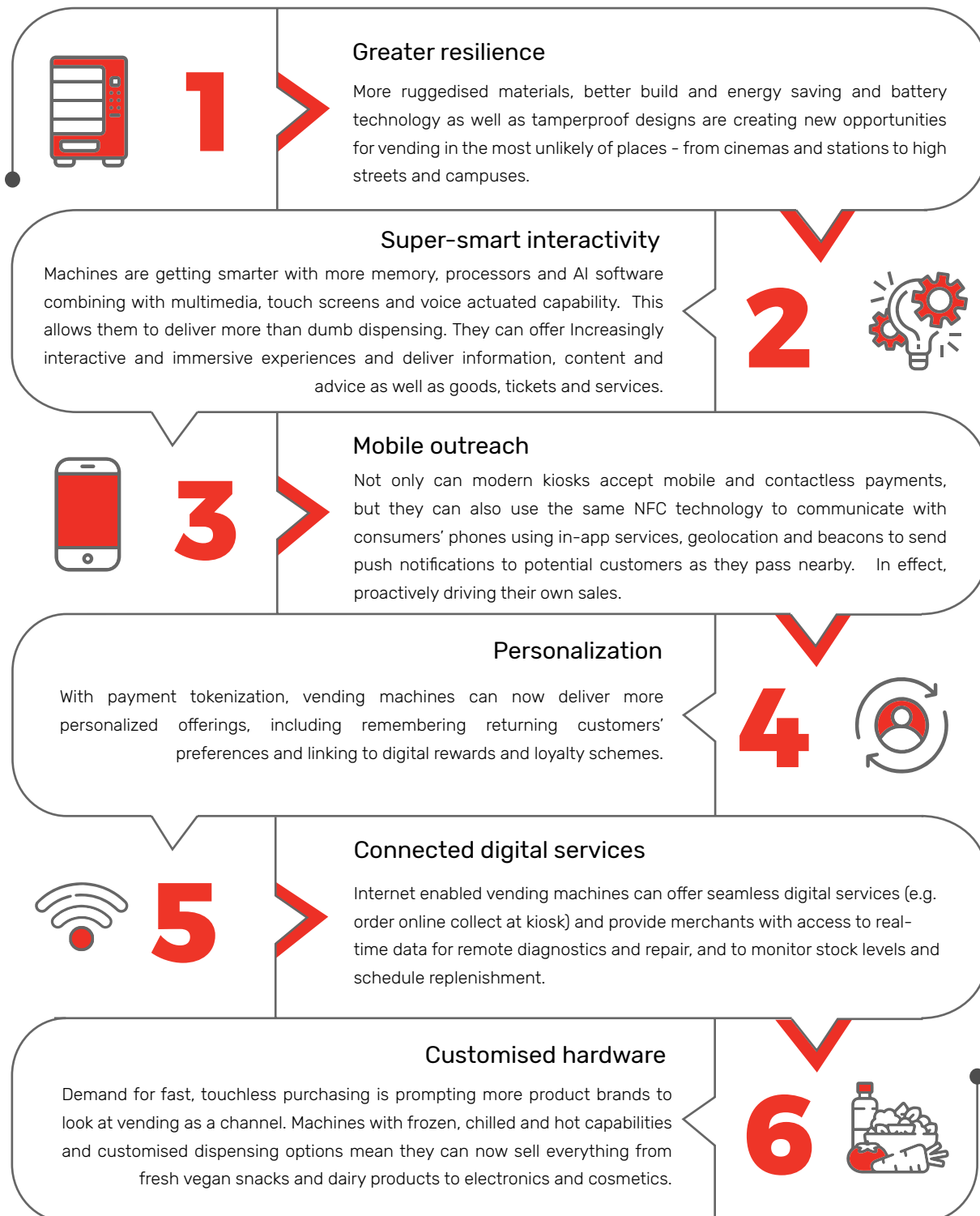
As consumers move away from cash for everyday and low value purchases, vending machines must now accept every type of digital payment from mobile wallets and QR codes to cards and contactless. Importantly they must be able to do this securely, without compromising the super-fast experience expected by the customer.

But it is not just about payments, vending must continuously evolve to stay ahead of customer

expectations and provide even more options, greater functionality and higher levels of convenience.

Digital functionality, advanced software, and integrated self-service tech is opening new doors for kiosks, allowing them to branch out into untapped and high-growth sectors. Expect to see even more diverse applications as new form factors come to the fore.

# 6 Ways tech innovation is fuelling vending growth



## 4. Unattended retailing

From self-checkout lanes and kiosks to fully autonomous stores, unattended retail is gaining momentum across Europe and the UK. By offering multiple options with different levels of interaction, grocery merchants can accommodate a broad range of customer preferences while minimising staff costs and serving more customers, faster.

In 2022, the global market for Self-Checkout Systems was **US\$3.7 Billion**. By 2020, it is projected to reach **US\$9.3 Billion**, representing a CAGR of **12.3%** over the period. European adoption is also booming with Germany, for instance, forecast to grow at approximately **11.3% CAGR**.



*By 2026 there will be **1.5 million** self-checkouts installed globally*

### Multilane is rolling out self-checkout at pace

While unattended checkouts are making their way into smaller retail and express outlets, it is large multi-lane grocery stores that are upping their investment and finding more ways to implement automated services into their customer experience strategies.

Traditional manned checkouts are making way for self-service checkouts as retailers seek to speed service and reduce staff costs. By giving customers more control they aim to improve customers' shopping trips as well as their stores' bottom lines.



*Cost is a big factor. The estimated cost per shopper of using a self-service checkout is only **14 pence**, compared with **£2.50** for using a till with a checkout operator.*

In Europe, Carrefour, Lidl and Kaufland, continue to invest heavily in self-checkout technology. Poland's Biedronka also ramped up its self-checkout rollouts. In the UK, Tesco and Waitrose are the latest retail giants to announce that they are replacing most traditional checkouts, in response to customer demand.

### Unattended means more than self-scan

Supermarkets are also looking at new ways to guide discovery and ease gridlock at high demand areas such as instore bakeries, meat counters and delis with interactive ordering kiosks and grocery lockers.

Marks & Spencer has launched a new augmented reality wayfinding app named List&Go, aimed at enhancing the shopping experience of its customers. Meanwhile, Tesco, has adopted a playful approach to shopping by integrating AR features into its Tesco Discover shopping app.



### Taking automation to the next level

High volume and convenience focused retailers are turning to unattended POS systems to speed throughput. New image recognition technology is taking the concept of shop and go to the next level.

Using cameras, sensors and computer vision systems, they can track customers in store journeys, recording items as they are taken off the shelf or placed in carts, and automatically charging them to customers online accounts.

Amazon's cashier-less store was one of the first examples of this, but European retailers are now following suit. French supermarket giant Carrefour, for example, has opened a fully autonomous store called Carrefour Flash 10/10 in Paris while in Poland, retail chain, Lewiatan, has had a self-service store since 2020.

## How are providers like Castles Technology responding to help scale up unattended?

### What it takes to build a great unattended experience

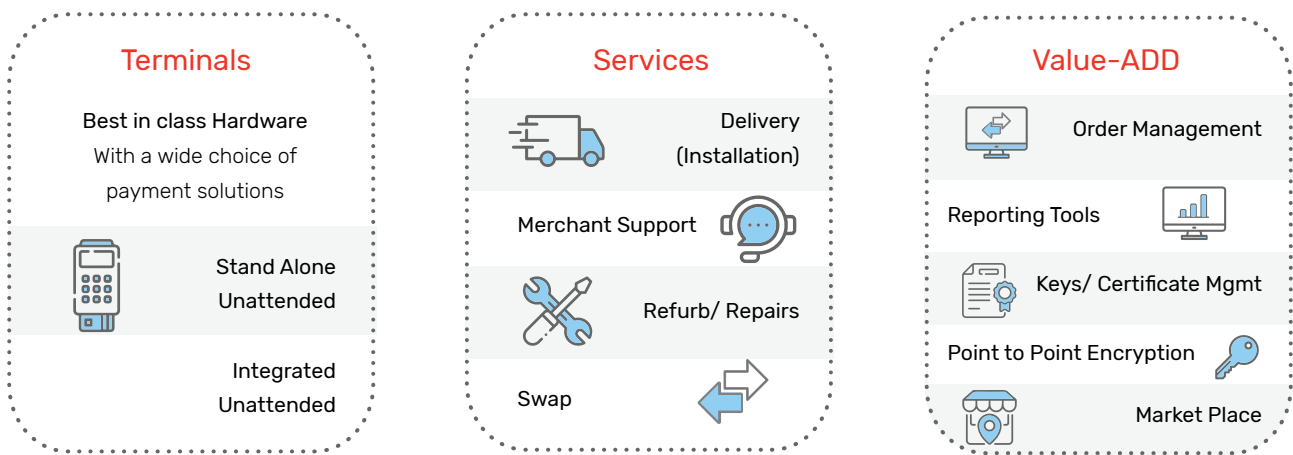
Looking across all the major applications for unattended, there are some key features that are critical for self-service developers and integrators when specifying a payment solution:

- multiple payment options including contactless and mobile acceptance
- value-added software to connect hardware with business and
- ability update connected device software remotely
- tools to capture and customise estate data for monitoring and reporting
- resilience, reliability and robustness with certified performance

## Keeping solutions out in front

Castles Technology has risen to the challenge of providing secure, reliable and fast payments at scale - with everything needed to integrate robust and easy to use self-service functionality. This includes best in class hardware and software, merchant services and value-adds for all types of integrated and stand-alone unattended payment applications.

## Everything you need to help launch self-service at scale



### Solution in Action

With 43,800 unattended vending units in 20 countries, KIS is a world expert in the design, manufacture and distribution of high-tech unattended devices and digital kiosks.

It uses Castles UPT1000F devices, "which combine ruggedness with elegance, power and performance", according to François Ottmann, Payment Systems Manager at KIS/Me Group. He believes "because Castles Technology's devices last longer, they help keep lifetime costs down, boost ROI and are more sustainable - making them better for business and for the planet".

## Robust, connected and secure solutions

At the end of the day, the success of any unattended payment installation rests on the quality and reliability of its acceptance solution. With Castles Technology, businesses can rest assured that they are getting build quality and functionality they can rely on, at a price they can afford.

Our state-of-the-art unattended payment terminals are compact, smart and hyper-connected with build designs that fit all types of hardware configurations. Offering PCI 6 security and EMV contact and contactless readers, they can connect via Bluetooth 4.2, 4G LTE, WIFI and Ethernet and can be fitted within a wide range of hardware configurations, from vending and ticketing machines to kiosks, self-scans and EV charging stations.

## Want to grow your unattended business?

Discover how Castles Technology can help you build self-service at scale.



[www.castlestechema.com](http://www.castlestechema.com)

