



Opinion Paper

# Contactless adoption in Saudi Arabia 2020

Collaborating for success

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September 2021







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# Foreword

## **Solid growth in Saudi Arabia Contactless payments usage driven by a collaborative approach by Saudi Central Bank (SAMA), Visa and the wider payments industry.**

Saudi Arabia's successful adoption of contactless payments serves as a model for other markets. From just 4%<sup>1</sup> of face-to-face transactions<sup>2</sup> in 2017, in December 2020 Contactless transactions<sup>3</sup> accounted for 94%<sup>1</sup> of all face-to-face transactions in the Kingdom. This has been achieved through a concerted and collaborative effort between Saudi Payments and Visa under the supervision of the Saudi Central Bank (SAMA) and has contributed significantly towards the Kingdom's Vision 2030 national strategy goal to increase the share of cashless rate by 2030.

Today, Saudi Arabia's Contactless penetration is at 94% placing it third among Central and Eastern Europe, Middle East and Africa (CEMEA) markets after Georgia (97%) and Russia (96%).<sup>1</sup> In the Middle East and North Africa (MENA) region, Saudi Arabia is the leading country, followed by Kuwait (81%) and United Arab Emirates (81%)<sup>1</sup>.

"For the past few years, the Middle East region has been making rapid progress in driving digital commerce, thanks to underlying dynamics including a youthful demographic, high smartphone penetration and supportive government policies. Saudi Arabia in particular has achieved great strides and today has among the highest contactless payment penetration and usage rates in the world.

While the ongoing global health challenge has accelerated this journey with contactless

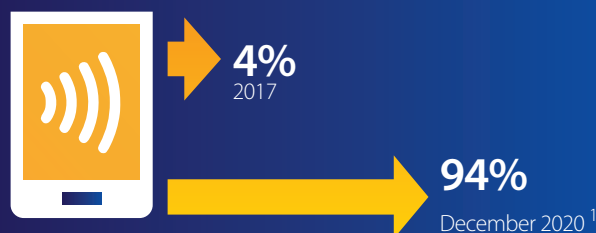
and other digital payment options becoming stronger alternatives to cash, credit has to be given to the foresight and collaboration of the Saudi government and public and private enterprises in developing cutting edge infrastructure that can support the needs of consumers and merchants alike. This shift to digital-first commerce and technologies like contactless payments has ushered in a new generation of consumer tendencies that will have a ripple effect on the global economy for years to come."

**Ali Bailoun – KSA General Manager, Visa**

"The launch of Contactless payment in KSA has remarkably added to the exponential growth rates we see today in POS Volumes and Values. The noticeable public adoption to the technology was also a crucial driver to prove that payment experience has massively improved."

**Abdulaziz Al-Afaieg – Saudi Payments Managing Director**

### **Contactless payment transactions in Saudi Arabia, 2017 to 2020**



1. Face-to-face transactions defined as Saudi domestic transactions (All domestic transactions are from SAMA) (CNP excluded)

2. Visa Contactless transactions defined as Visa transactions with Point of Sale Entry Mode 07 and based on C&S.

3. VisaNet data, December 2020.

4. Kingdom of Saudi Arabia Vision 2030.

# An introduction to Contactless

## So what is Contactless?

Contactless is a secure, digital payment technology based on EMV, the global standard for smart cards.

It can be deployed on cards, mobile phones and many other devices such as wearables to make payments quicker and more convenient – whilst keeping them secure.

Consumers pay simply by 'tapping' their card or device when prompted by the terminal.



## How does Contactless work?

Contactless payments use near-field communication technology.

A tiny antenna is embedded into the card, phone or wearable device, which securely transmits payment information to and from the Contactless reader.

For the payment to work, the card or phone must be held within 4cm of the secure Contactless reader. It then takes less than half a second for the reader to receive the card details.

Typically, the total transaction time is just a few seconds (including authorization, printing and handover of the receipt). It is therefore perceptibly faster and easier than paying by cash – and is considerably more secure.










In other respects, the end-to-end experience of paying using Contactless will be the same as paying with a payment card.





## A day in the life – Contactless journey

**Ali finds using Contactless so much quicker and easier than carrying cash around. He uses it wherever possible through his day...**

 6:30am	Picks up a bottle of water after working out at the gym – SAR 2 (pays with wristband – tap only)
 7:30am	Buys a new monthly pass for the train commute to work – SAR 150 (pays with mobile phone + fingerprint biometric customer verification)
 10:30am	Buys a coffee – SAR 12 (pays with card – tap only)
 12:15pm	Buys lunch – SAR 20 (pays with card – tap only)
 17:45pm	Pays for a tennis court, match with colleague – SAR 75 (pays with wristband – tap only)
 19:00pm	Taxi to dinner with a friend – SAR 15 (pays with card – tap only)
 20:30pm	Pays for share of dinner – SAR 80 (pays with card – tap only)
 20:45pm	Taxi to grocery store near home – SAR 25 (pays with card – tap only)
 21:15pm	Pays for some groceries on the way home – SAR 90 (pays with card - tap + PIN*)

*All amounts are illustrative.*

\*With the final transaction at the grocery store, the cumulative Contactless spend limit of SAR 300 before verification required has been breached. As such, the customer is asked to input PIN on the terminal as part of the transaction flow.

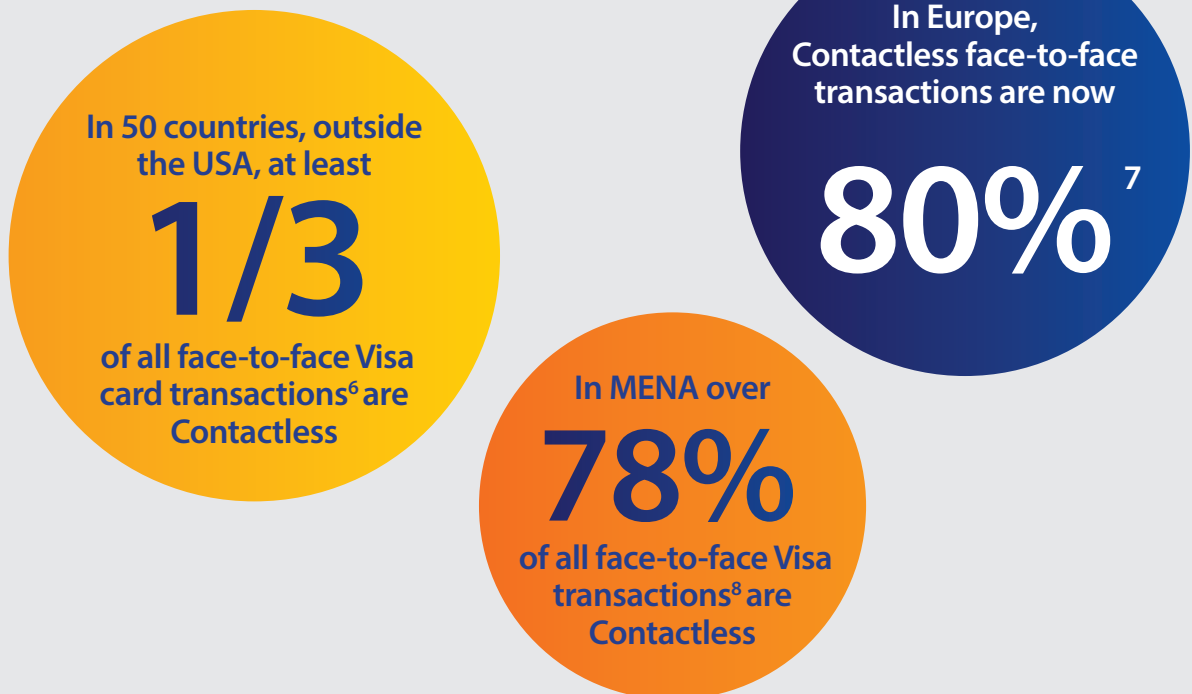
## Part 1

# The fundamentals of Contactless in Saudi Arabia

## Contactless – a global success

By the beginning of 2020, Contactless card payments accounted for more than a third of the world's face-to-face Visa transactions, up from 1 in 4 transactions a year earlier<sup>5</sup>. Outside the USA, this figure is over 50% of face-to-face Visa transactions, with almost 50 countries where Contactless payments represent at least a third of all face-to-face Visa transactions<sup>6</sup>. In Europe, Contactless transactions as a share of total face-to-face transactions is now 80%<sup>7</sup>; whilst in the MENA Region, that figure is 78%<sup>8</sup>, up nearly 10 percentage points in around 6 months<sup>9</sup>. This penetration level is well ahead of some of the other regions but with further growth anticipated.

### Key statistics



5. Visa data, Q4 2019.

6. Visa data, Q3 2019.

7. VisaNet Data, December 2020.

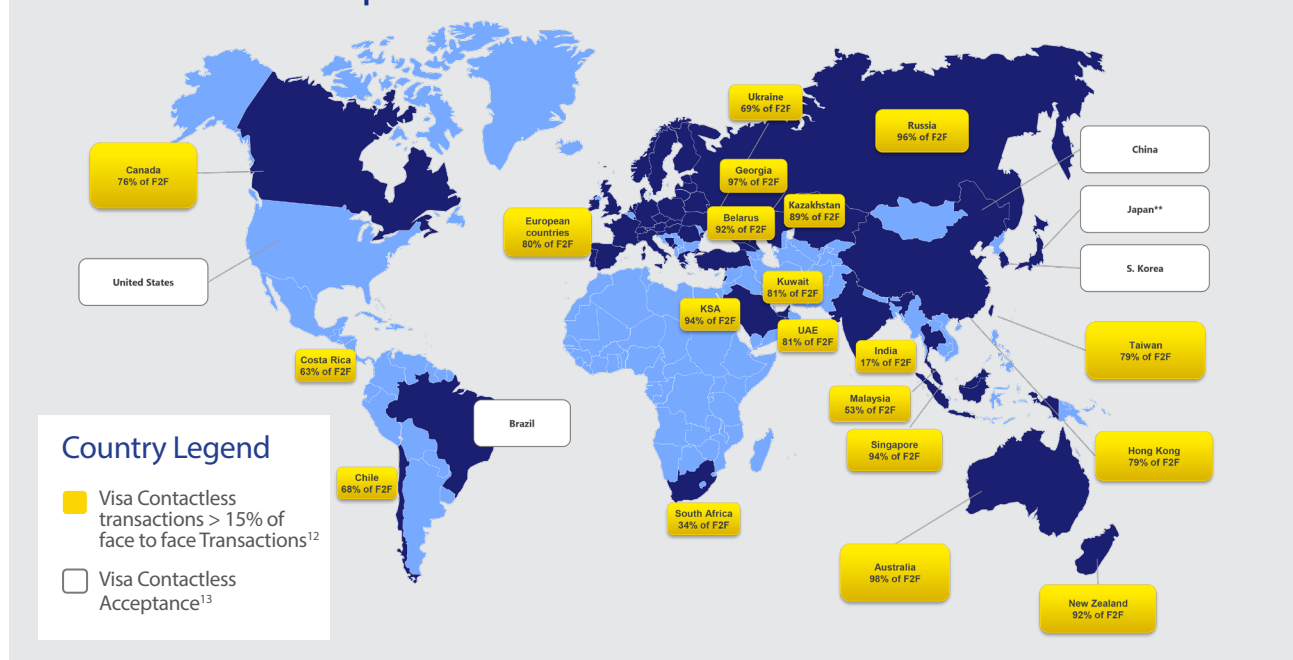
8. Visa data, December 2020.

9. Visa data, CEMEA Contactless penetration was 70% in June 2020.

This growth in Visa Contactless payments over the past few years has been a major success story for electronic payments. When Contactless is introduced to a market, it increases the number of electronic transactions. For example, in the UK, transaction volume growth out-paced Payment Volume (PV) growth by a factor of 2.5 as consumers made more small value 'tap' transactions with their Visa card instead of using cash. Introducing Contactless payments to a market also drives higher consumer engagement<sup>10</sup>:

- Year-on-Year growth from 2016-2019 of over 10%<sup>10</sup> per annum in average transactions per active Contactless enabled device in top Visa Contactless markets; and
- In Asia Pacific Region, active 'tap-to-pay' users deliver 3.8x transactions per active card and 1.8x<sup>10</sup> PV spend per active card v non-active tap-to-pay' users.

### Global Contactless Acceptance and Penetration<sup>11</sup>



#### Americas

- Canada 76% of F2F
- Costa Rica 63% of F2F
- Chile 68% of F2F
- United States >5%
- Brazil >5%

#### CEMEA countries

- Kuwait 81% of F2F
- KSA 94% of F2F
- Russia 96% of F2F
- UAE 81% of F2F
- South Africa 34% of F2F

#### European countries

- Georgia 97% of F2F
- Belarus 92% of F2F
- Kazakhstan 89% of F2F
- Ukraine 69% of F2F
- European countries 80% of F2F

#### APAC countries

- Australia 98% of F2F
- New Zealand 92% of F2F
- Singapore 94% of F2F
- Hong Kong 79% of F2F
- Taiwan 79% of F2F
- Malaysia 53% of F2F
- India 17% of F2F
- China >5%
- Japan >5%
- S.Korea >5%

Note: Note that list of highlighted countries is not exhaustive.

\*\* Felica proprietary.

10. Visa Investor Day 2020.

11. VisaNet Data, December 2020.

12. Visa Contactless transactions defined as Visa transactions with Point of Sale Entry Mode 07 and based on C&S. Face-to-face transactions defined as all Visa domestic transactions (CNP excluded).


13. Visa Contactless acceptance defined as significant deployment (>5%) of Visa Contactless terminals.



# Saudi Arabia – a testament to collaboration

Today, Saudi Arabia is the leading country in the MENA Region in Contactless penetration. As of December 2020, KSA Contactless penetration reached 94%<sup>14</sup>. There has been strong growth in Contactless in Saudi Arabia, reaching today's penetration level from just 4% of Visa transactions in 2017.

The growth of contactless payments in Saudi Arabia is the result of a strong partnership between SAMA, Visa, Saudi Payment, local banks and other participants in the KSA payments ecosystem. This collaboration is an example of how public-private partnerships can transform a whole market and make it a true leader across the region. It also highlights how different actors in an ecosystem can work together to help deliver ambitious long-term goals; in this case Saudi Arabia's Vision 2030 national strategy, and the target to deliver 70%<sup>15</sup> of all transactions in Saudi Arabia to be through digital payments by 2030. There are a number of elements delivered by this partnership, all of which have contributed to the continued success of Contactless in Saudi Arabia.



Saudi Arabia's  
Vision 2030  
national  
strategy, and  
the target to  
increase rate  
of cashless  
transactions by  
2030

## How does Contactless work in Saudi Arabia?

While the fundamental principles of Contactless functionality are consistent globally, there are some specific elements that are decided locally. These elements reflect the nature of the payments ecosystem in a given country and typically ensure that any Contactless implementation is best suited to the needs of the individual market and its consumers. In Saudi Arabia, the below are the key Contactless elements, as at the date of this white paper:

- Contactless limit for an individual transaction – online PIN or biometric verification required – SAR 300.
- Cumulative spending limit for Contactless transactions from all payment methods before online PIN or biometric verification required – SAR 300.
- Cumulative spending limit (across all devices) resets each time the customer uses a PIN or biometric verification on any of their devices.

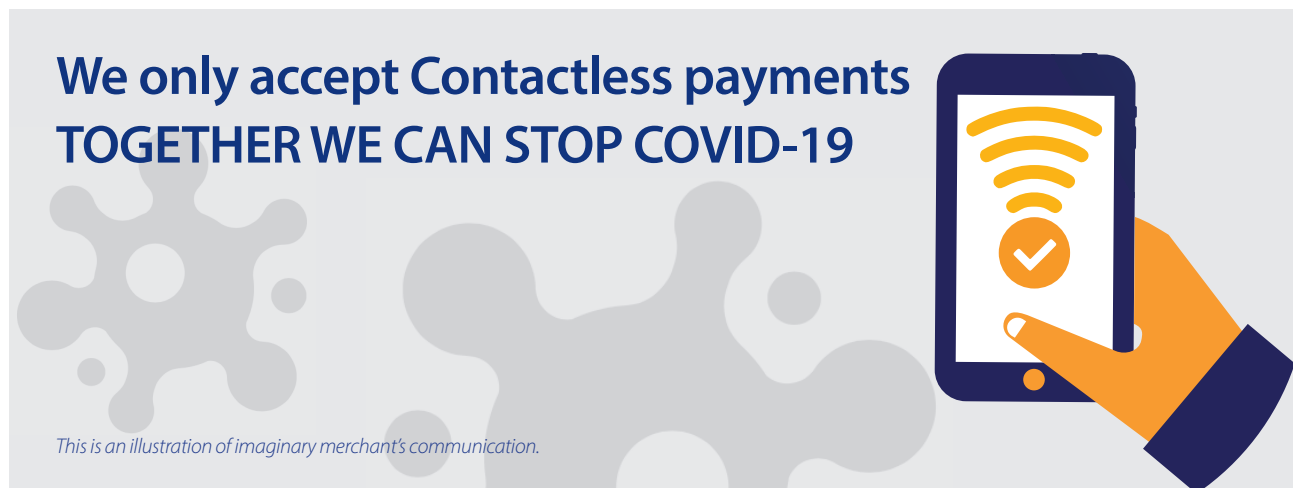
14. Saudi Payments Data (December 2020).

15. Kingdom of Saudi Arabia Vision 2030.

# The impact of COVID-19 on Contactless

In addition to the significant growth achieved in Contactless at the end of 2019, a factor that is likely to have a profound effect on growth in 2020 and beyond is COVID-19. There are a number of proof points which suggest that the global response of governments, retailers and customers to COVID-19 will drive enduring systemic changes to local payment norms:

- In early March 2020, the World Health Organization (WHO) warned that banknotes may spread coronavirus<sup>16</sup>. The WHO recommended using Contactless payments where possible to help control the virus.
- Contactless transactions require minimum physical interactions and so are seen as far safer than other payment types as it reduces the need to touch anything.
- Central Banks across different regions have actively positioned Contactless as part of COVID-19 emergency banking support measures – with many countries increasing the maximum Contactless transaction limit. For example, in the U.K. the limit rose from GBP 30 to GBP 45 (equivalent to roughly USD 55) and in Saudi Arabia SAMA increased the limit from SAR 100 to SAR 300 (equivalent to circa USD 80).
- Retailers have included using Contactless as part of their recent advertising campaigns and heavily promoted its use in-store.



Contactless has been a helpful tool in the fight to reduce COVID-19 transmission. As more people have gotten used to 'tapping' they have realized the simplicity and speed that it brings. It is safe and consumers are expected to continue tapping in the future, crystallizing the recent behavior change into the long-term. In Saudi Arabia we have seen Contactless penetration increase from 76% to 94%<sup>17</sup> from January to December 2020 and anticipate this will grow further in the coming months.

<sup>16</sup> World Health Organization, March 2nd 2020.

<sup>17</sup> VisaNet data, December 2020.

## Part 2

# Successfully delivering Contactless in Saudi Arabia

Without doubt, Contactless has had a significant and positive impact on the payments ecosystem in Saudi Arabia. As of December 2020 over 23m (68.75%) of the total cards-in-force (CIF) in Saudi Arabia are Contactless enabled. Contactless is also used across all segments of the economy.

Of those customers that use Contactless, they use it in the following types of retailers<sup>18</sup>:



<sup>18</sup>. Saudi Payments Data (November 2020) – top market segments for Contactless transactions.

# Contactless foundational accelerators

Before detailing some of the specific actions that were undertaken in Saudi Arabia, it is worth recognizing several foundational accelerators that underpin Contactless success. These accelerators have been seen to support rapid growth of Contactless across all markets where they have been initiated.



## Government focus on payments

Wherever you look in the world, an efficient and dynamic cashless payments market tends to be a pre-requisite for an efficient and dynamic economy. As a paper from Moody's Analytics puts it: "Payment cards are not just convenient but also play a crucial role in stimulating economic growth in countries around the world."<sup>19</sup>

In many countries, payments have therefore assumed a prominent position on the public policy agenda. The challenge faced by governments and regulators is to adopt a progressive and supportive attitude to electronic payments – by encouraging acceptance, enabling competition and fostering innovation – whilst, at the same time, maintaining security and providing protection to consumers and retailers alike. In Saudi Arabia, this government's focus was captured by its Vision 2030 national strategy and the various legislation and mandates that flowed from this (details to be covered later in this paper).

19. Moody's Analytics, The Impact of Electronic Payments on Economic Growth, 2016.



## Mobile payment acceptance

Visa data shows that whilst Contactless activation increases overall spend per card compared to a non-Contactless enabled device, activation of a mobile wallet has a much greater impact on spend per card.



# Mass transit Contactless acceptance

Cities have continued to grow for over 60 years with approximately 54% of people worldwide now living in cities, compared to just 30% in 1950<sup>20</sup>. The way the growing number of people move around their city is evolving. Today's city dweller expects fast, secure and hassle-free experiences in all aspects of their lives; and transportation is no exception.

A daily trip can now involve different types of transport in a single journey; including buses, trains, car shares, bikes and scooters. Using Contactless in order to 'tap to ride' improves daily life for millions of people around the world:

- **Fast** – get there faster by freeing up time waiting in line, reloading a transit fare card or fumbling with cash.
- **Simple** – no need to worry about zones and peak time fares and whether you've bought the correct ticket.
- **Easy** – simply turn up and 'tap to travel' using the same Visa Contactless card or device that you use every day in a shop.
- **Secure** – digital payments are based on secure industry standards that are proven to reduce counterfeit fraud, giving consumers peace of mind and reducing the need to carry cash.

In the last five years Visa has helped to launch 180 Contactless transit projects globally, with 60 of these in 2019, including Miami, Rio de Janeiro, New York and Singapore. Africa's first project in Johannesburg launched in Q1 2020 and plans for a Riyadh metro solution in Saudi Arabia are currently in development.

Launching mass transit Contactless programs delivers two key benefits<sup>21</sup>

- 1) It helps to generate critical mass and awareness of Contactless in the locality. For example, in New York Visa data shows that there are already 60,000 taps per day on the New York Metropolitan Transportation Authority<sup>22</sup>.
- 2) Using Contactless to 'tap to pay' drives a wider halo effect. For example, with Transport for London, where there are 2 million journeys a day, consumers who use their cards for transit make twice as many 'tap to pay' payments as non-TFL users<sup>22</sup>.

20. United Nations 2018 Revision of World Urbanization Prospects <https://population.un.org/wup/>

21. Visa data, from Visa Investor Day, Q4 2019.

22. Saudi Payments, June 2020.

## Collaboration in Saudi Arabia – a recipe for success

In Saudi Arabia, cards were the first form factor enabled for Contactless payment. Contactless cards issuance started early 2017, with no mandates on banks from local government or SAMA. Since then SAMA, Visa and the banks have worked together to better support the roll-out and development of Contactless in Saudi Arabia. This collaboration covers three main themes, all ultimately designed to contribute to delivery of the Vision 2030 national strategy.



## Saudi Arabia Government and SAMA Regulation

As part of this national strategy, under the Financial Sector Development Program (FSDP), in 2017 the government set a target to increase the share of cashless transactions.

In support of this wider strategy, further regulation has followed, including:

- Q1 2019, the Ministry of Municipal, Rural Affairs and Housing announced that all fuel stations must accept electronic payments by July 2019.
- In July 2019, SAMA in collaboration with a number of competent authorities in KSA announced an electronic payment acceptance mandate for all commercial activities by the end of August 2020.

Separately, in 2015, SAMA issued a mandate to increase the number of electronic payment terminals from roughly 150,000 to 270,000 units by early 2017, targeting QSR, Fuel and Grocery merchant segments. This focus on 'terminalization' and evolution of the terminals to accept Contactless payments, via the mada NFC on Point of Sale and ATM Operating Rules published February 2019, has continued such that today 95%<sup>23</sup> of terminals (approx. 721k as of December 2020) in Saudi Arabia are Contactless enabled.

## Visa Contactless development

In support of the mada NFC on Point of Sale and ATM Operating Rules, with effect from April 2019, Visa set out a mandate for all POS terminals and new cards in CEMEA markets to be Contactless. This mandate was branded "Enabling Digital Commerce Roadmap" and implemented the following key elements:

- Stronger authentication processes
- The introduction of "Push Payments"
- Tokenization
- The introduction of Contactless and EMV
- Driving the pace of Contactless issuance and acceptance penetration
- The provision of cashback at point of sale
- The acceleration of Issuer capability to support "Push Payments"

In addition to its Enabling Digital Commerce Roadmap, Visa has also implemented and continued the rollout of mobile wallets in Saudi Arabia. First came the launch of mada Pay Wallet in 2018 on Android phones, based on Saudi Payments' developed infrastructure to tokenize mada co-badged cards in conjunction with the Visa tokenization service. As a result of this launch, Contactless penetration grew from less than 3% in January 2018 to 11% by December 2018, with a total of 169M Contactless transactions in Saudi (including Debit). This was followed in early 2019 by the launch of Apple Pay, also in conjunction with the mada and Visa tokenization services, after which Contactless penetration grew rapidly from 32% in January 2019 to 74% by December 2019, with a total of 918M Contactless transactions (+443% YOY).

## Merchant training and cardholder education campaigns

NFC launch for plastic cards followed by the introduction of mada Pay led to a series of merchant training workshops and awareness campaigns, which helped increase the number of Contactless transactions. The measures taken by mada helped to motivate consumers to become more accustomed to the service as an efficient and easy alternative to cash payments. In addition to raising the Contactless limit for high value payments of more than SAR 100, these measures were put in place through the direct collaboration between Saudi Payments and both the acquiring banks and POS vendors in order to change POS behavior. The effort also helped to stop merchants from dipping in the card prior to keying in the amount of purchase on the POS terminal.

23. Saudi Payments Data (November 2020).

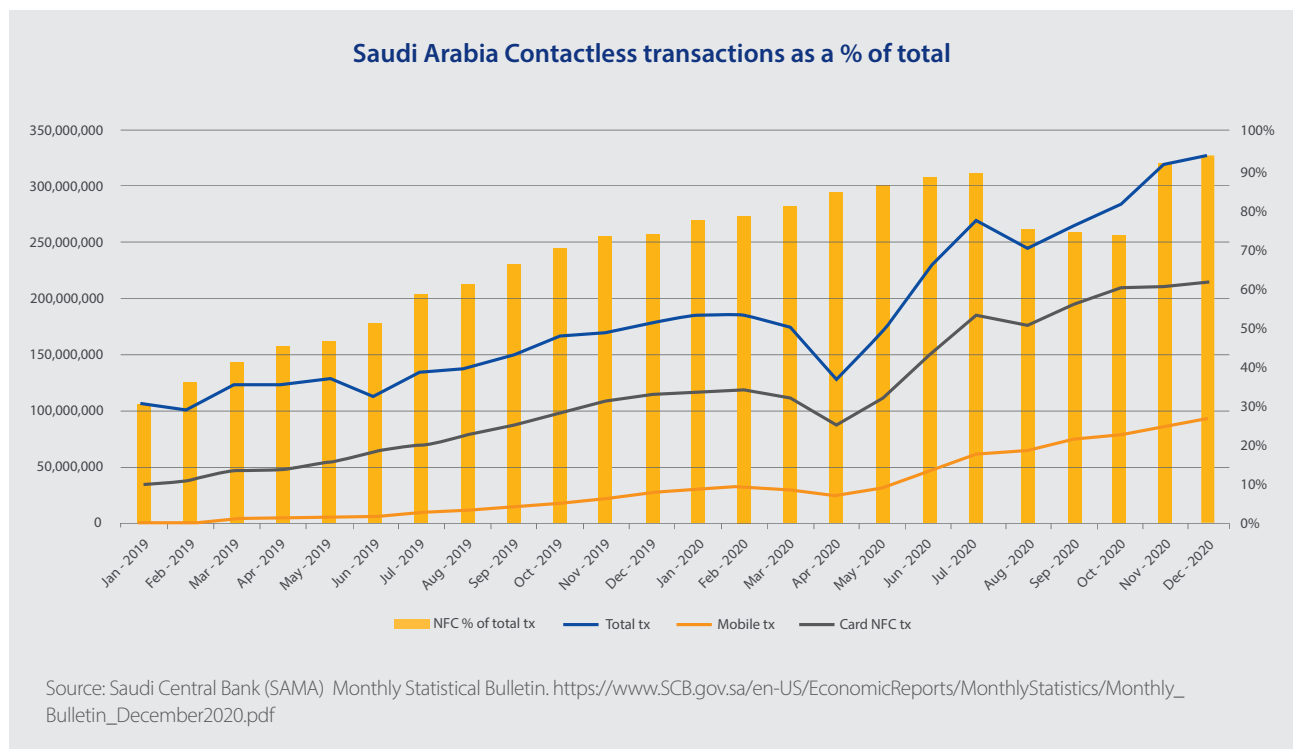


## Part 3

# Summary and key learnings

Contactless has made a significant difference to the way that hundreds of millions of people pay. In many countries around the world, Contactless has quickly become deeply embedded into everyday payment habits and critical mass has been achieved.

In Saudi Arabia the growth in Contactless has been exceptional, driven by a true collaborative approach across the industry that was led by SAMA, Saudi Payments, and Visa. The below chart<sup>24</sup> shows the extent of the growth of Contactless since the start of 2019 – both Contactless cards and mobile payments have grown strongly as a percentage of total transactions, but it is mobile which has shown the largest increases.



This chart shows that consumer purchasing habits in Saudi Arabia are changing. This exponential growth of Contactless in the last few years offers the following conclusions:

- People's preference is undoubtedly shifting towards Contactless payment. This has been reinforced by the COVID-19 pandemic this year;
- The migration to using Contactless has been rapid, with a high proportion of mobile payments;
- Contactless cardholders have significantly higher spend and transactions per card.

24. Saudi Payments industry statistics to July 2020.

To support this delivery there are a number of important actions that the payments ecosystem of a country can adopt to successfully deliver NFC:



Embed a common and consistent customer journey.



Close collaboration with central banks to establish enabling regulations.



Partner with transport providers as a behavior change trigger.



Develop a cross-industry awareness campaign.



Implement best practice guidelines for merchants.



Clearly demonstrate the benefits of Contactless to retailers and their value chain.



Expand spend pool opportunities to as many merchant categories as possible.



Expand Contactless usage opportunities by expanding form factors, for example wearables such as Fitbit Pay and Garmin Pay are in the pipeline for upcoming launches.

Perhaps most important though, in order to successfully deliver and embed the usage of Contactless, Government and regulators need to work in partnership with payment technology companies. In order to facilitate the adoption and usage of electronic payments, and more specifically Contactless payments, governments should consider a number of approaches for driving growth. Below are some of the example of mandates and policy recommendations taken by SAMA and Saudi Payments to increase electronic payments and facilitate the development of Contactless solutions:

1. The policies from SAMA and other government authorities to support and encourage digital transformation; for example Government mandates to increase acceptance.
2. Development of fully integrated mobile payments infrastructure.
3. Launch of mada Pay Wallet and participation from the different issuers.
4. Direct collaboration between Saudi Payments and both the acquiring banks and POS vendors to grow the number of POS terminals with NFC technology to reach more than 93% penetration.
5. Merchant Training and Cardholder Education campaigns.
6. Government support for transit open loop Contactless solutions.
7. Enabled issuers in Saudi Arabia to adopt and launch Apple Pay functionality.

When industry and regulators maintain dialogue and close collaboration, the result is far more likely to be successful. The performance of Contactless in Saudi Arabia - and the collaboration between SAMA and Visa that made it possible - clearly demonstrates this.

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“At Visa we are proud to be at the forefront for the development of Saudi Arabia’s modern digital payments infrastructure and are committed to collaborating with our local partners to bring Visa’s global experience and cutting edge solutions to support the long term growth of Saudi Arabia’s economy.”

**Ali Bailoun – KSA General Manager, Visa**

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## Glossary of Common Terms

**SAMA** – Saudi Central Bank

**CEMEA** – Central Europe Middle East and Africa

**MENA** – Middle East and North Africa

**POS** – Point of Sale

**KSA** – Kingdom of Saudi Arabia

**F2F** – Face-to-face

**GBP** – Great British Pound

**USD** – United States Dollar

**WHO** – World Health Organisation

**CIF** – Cards in Force

**FSDP** – Financial Sector Development Program

**NFC** – Near Field Communication

**EMV** – Chip payment cards carrying an embedded microchip

**Contactless** – Touch your card to the reader, no need to enter you PIN or hand over your card



**VISA** everywhere  
you want to be