IFSF Technical Conference 2014

Meeting the needs of the connected customer – on the forecourt and for payment

MOBILE PAYMENT IN THE EU: ROLE OF NFC

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READY FOR MOBILE PAYMENT AT THE PUMP?

Germany : One in three willing to pay for petrol using their smartphones.

Smartphone owners are more open: 43% ready for m-payments to pay for fuel

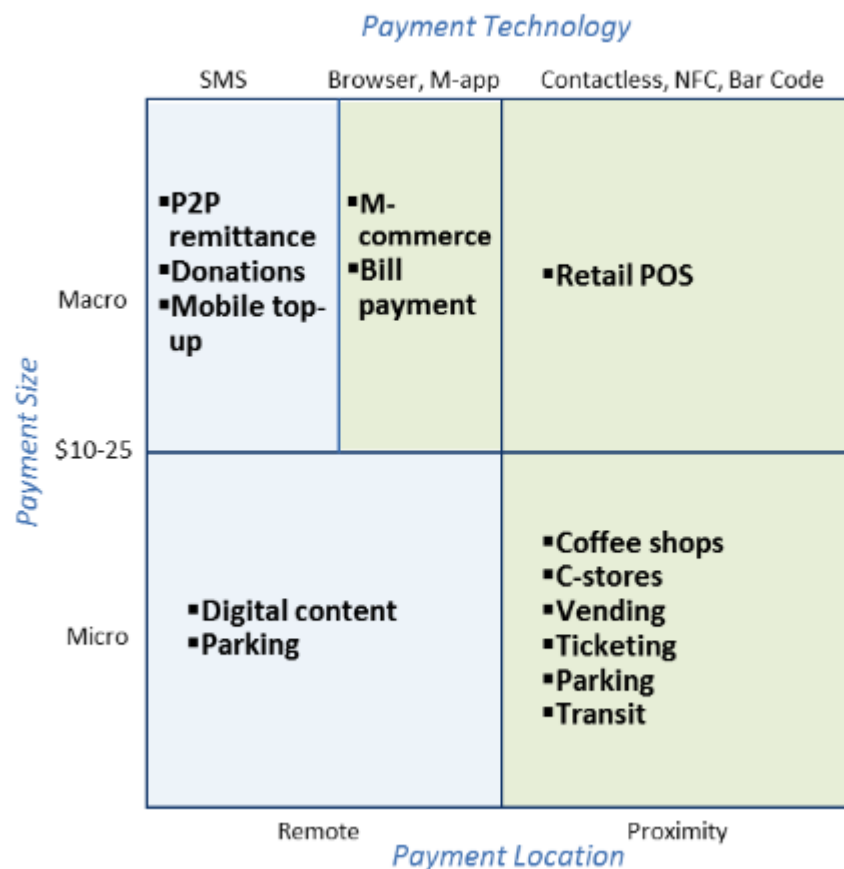Also apparently a thirst for mCommerce among non-smartphone owners [*]

Roy Ford (IT Controller, Spar)[**] : Higher value contactless payments could be driven in the UK by mobile payment on petrol forecourts

[*] Survey by TNS Infratest (on behalf of Yapital – July 2014)

[**] Essential Retail (Feb 2014)

Mobile Payment

Payment Technology

	SMS	Browser, M-app	Contactless, NFC, Bar Code
Macro	▪P2P remittance ▪Donations ▪Mobile top-up	▪M-commerce ▪Bill payment	▪Retail POS
$10-25			
Micro	▪Digital content ▪Parking		▪Coffee shops ▪C-stores ▪Vending ▪Ticketing ▪Parking ▪Transit
	Remote		Proximity

Payment Size

Payment Location

http://www.smartcardalliance.org/resources/pdf/Mobile_Payments_White_Paper_091611.pdf

USING THE MOBILE FOR PAYMENT

Embed payment in shopping experience

Include additional Services

Geolocation

Wallets - Seamless integration of

Loyalty

Discounts / Offers / Coupons

Electronic Receipts

The last 12 months...

'NFC' PAYMENT SHIFTING GEAR?

Sep 2013
Apple: iBeacon (BLE)

Mar 2014
EMVCo: Tokenization Framework

Sep 2014
Apple: Apple Pay (NFC)

Oct 2013
Google: Android Kitkat (HCE)

Mar 2014
NFC Forum: 10th anniversary

Sep 2014
MasterCard: Contactless POS Mandate in Europe

Jan 2014
Global Platform: E2E Simplified Framework

Feb 2014
VISA & MasterCard endorse HCE
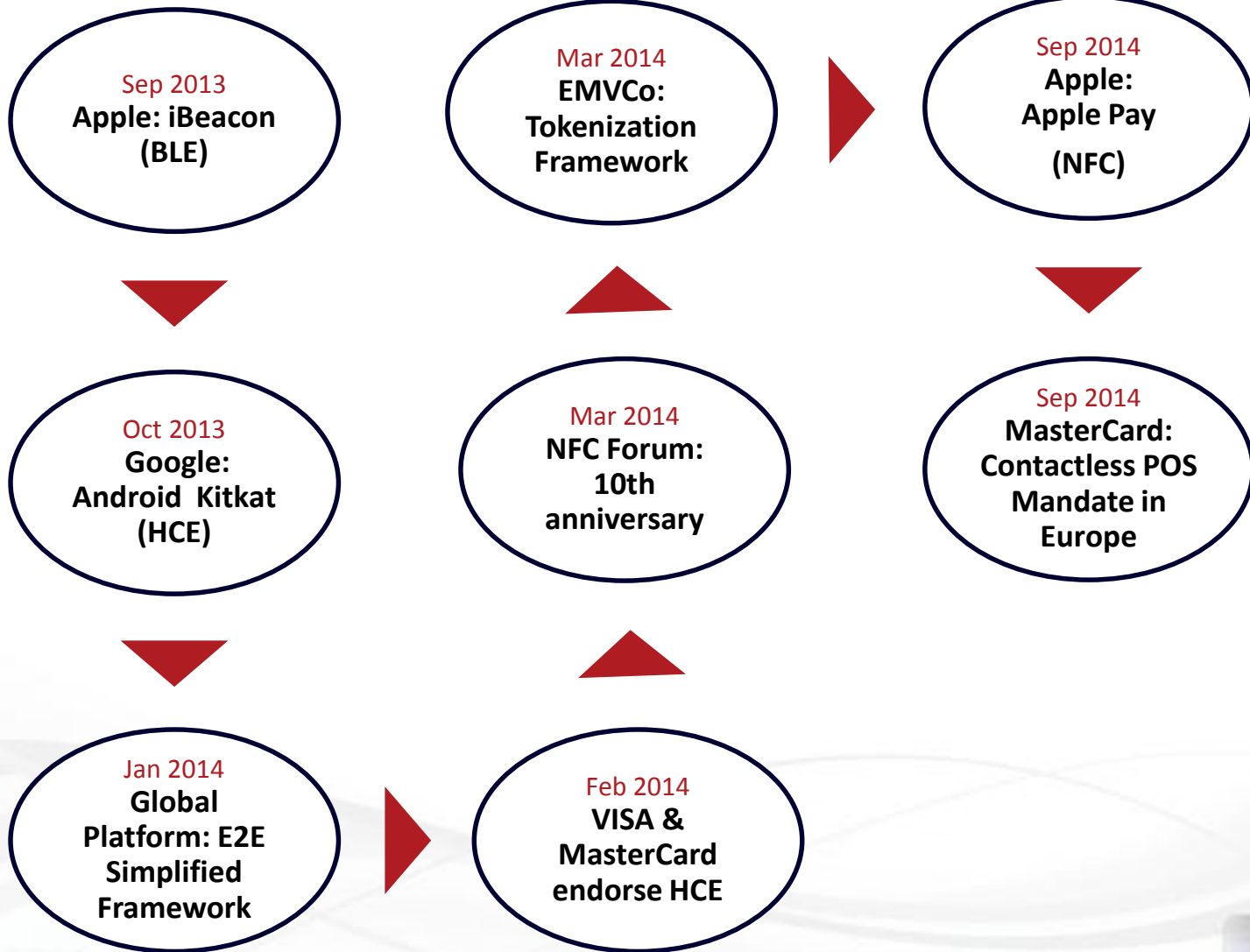
Hosted Card Emulation
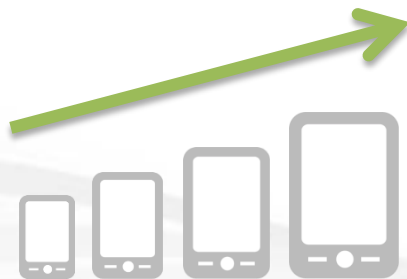
+

Tokenization

THE SILVER BULLET...FOR SIMPLER, STANDARDISED, SECURE MOBILE PAYMENTS?

KEY DRIVERS ACCORDING TO JUNIPER

HCE and Apple Pay

3bn NFC Phones in 2014
18bn NFC Phones in 2018

Android dominates

36,1% **69,3%** **79,6%** **84,7%**
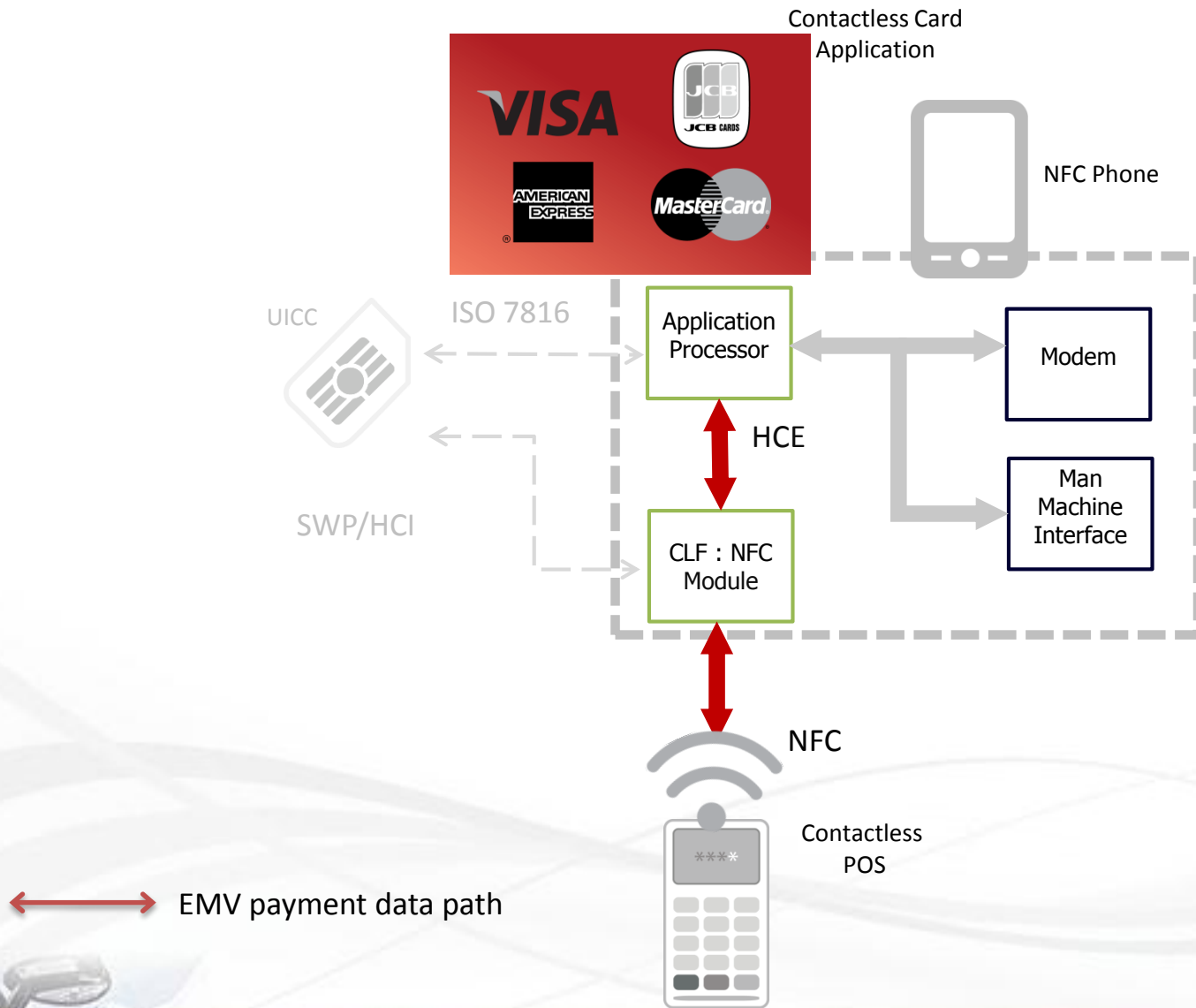(2011) (2012) (2013) (2014)
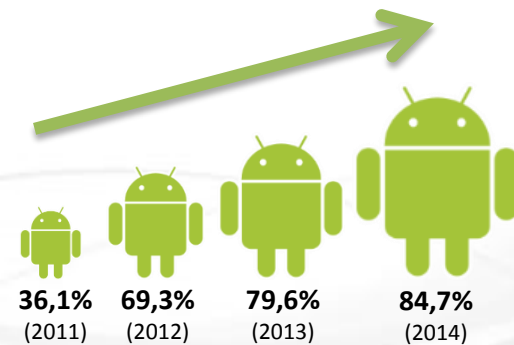
HCE – FAST FACTS

Mobile (payment) applications can now emulate contactless cards.

Mobile devices become contactless cards that can be used to pay, collect loyalty points, access buildings,…

Allows users to initiate a transaction without secure element. Credentials are stored in the cloud.

Contactless Card Application

NFC Phone

UICC

ISO 7816

Application Processor

Modem

HCE

SWP/HCI

CLF : NFC Module

Man Machine Interface

NFC

Contactless POS

⟷ EMV payment data path

Reduces number of players: simplified ecosystem

Lighter delivery process

Banks have direct access to virtual cards

No changes to EMV contactless terminals

Only 20% of Android users have upgraded to KitKat

No hardware-based security

TOKENIZATION – FAST FACTS

Framework published by EMVCo, March 2014.

Added security for mobile & e-commerce payments

Substitutes sensitive credentials with a unique equivalent.

Avoids storing payment data on servers

Token has no value

Customisable: one time use, limited use, restrict to select channels or merchants

Online authentication required

A NEW GAME, DIFFERENT RULES

- ## Token Requestor
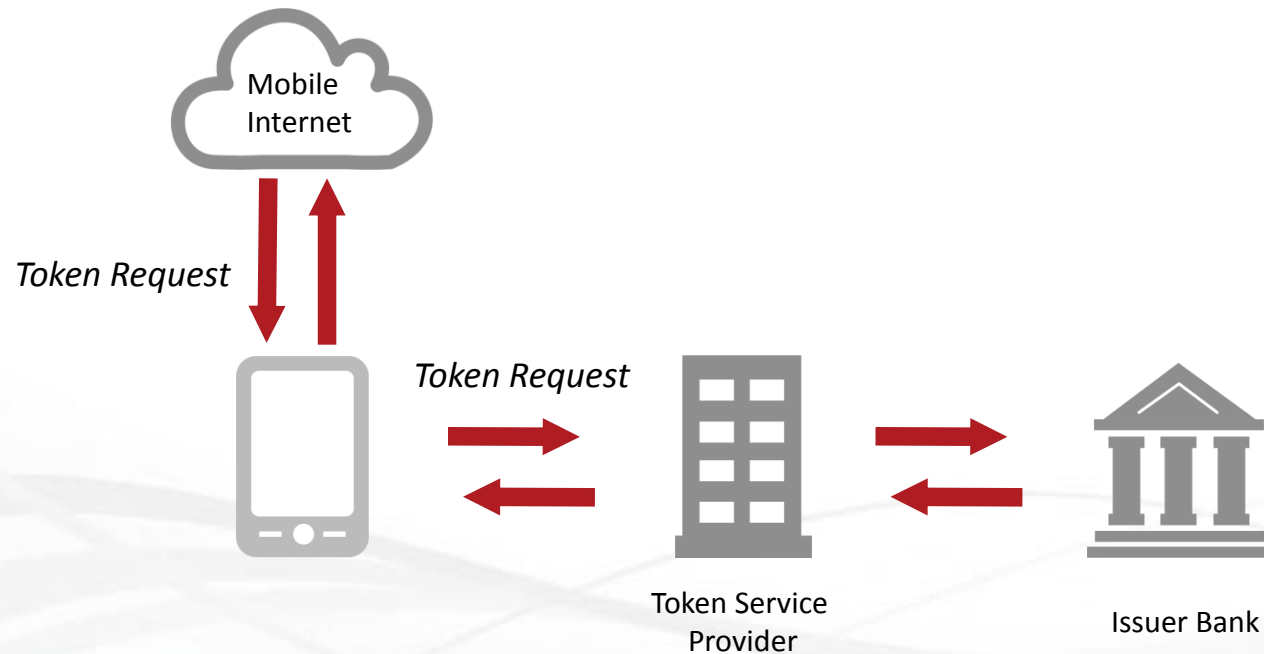 - Initiates request to tokenize PAN
  - Can be:
    Card-on-File Merchant (eCommerce)
    Acquirer (or entity on behalf of Merchant)
    Payment Enabler (Paypal, Square,...)?
    Digital Wallet Providers
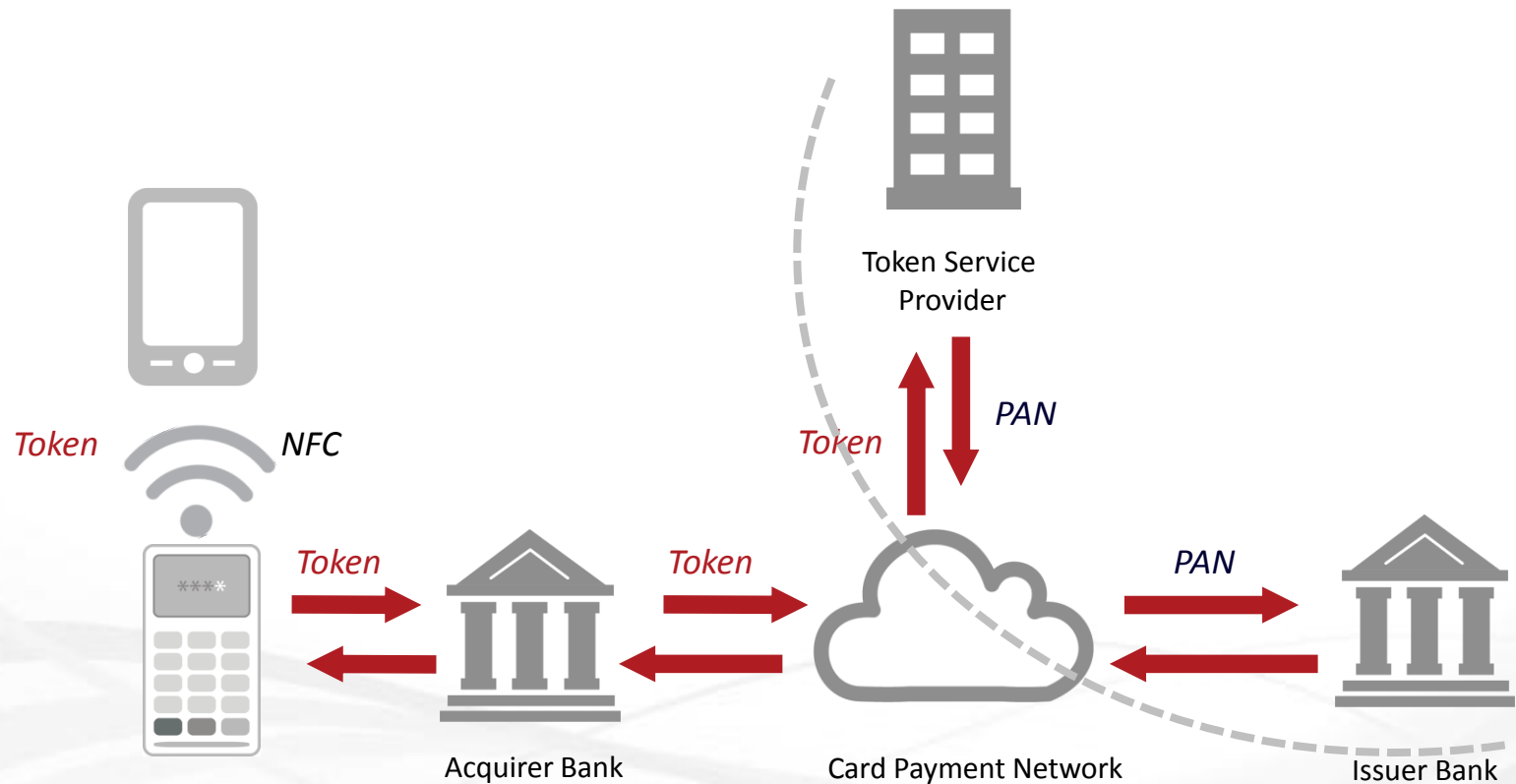   Issuers

- ## Token Service Provider
  - Provider of Token Services
  - Tokenises PAN – PAN/Token mapping stored in Token Vault
  - Used for de-tokenisation during authorisation, chargeback etc

Token request: an example

Mobile Internet

Token Request

Token Request

Token Service Provider

Issuer Bank

Token usage: an authorisation example

Token Service Provider

PAN

Token   *NFC*

Toren   *PAN*

Token   *Token*   *PAN*

Acquirer Bank   Card Payment Network   Issuer Bank

MEANWHILE ... IN EUROPE
(AND A LITTLE BEYOND)

MICROS MIFUEL (UK)

Remote Mobile Payment

1. Log in using smartphone (Authorisation before fueling)
2. Select pump on phone
3. Tank
4. PayPal payment once the nozzle is replaced
5. Instant delivery of electronic receipt on phone

Marketing capabilities (Offers and promotions)

IKO APPLICATION (POLAND)

Remote Mobile Payment

6 digit single-use code generated in the cloud and seen in the app right after logging in.

Code is then entered by the user on the specific website, on the ATM keyboard or on the POS terminal

Includes acceptance at Shell

WORAPAY (LITHUANIA)
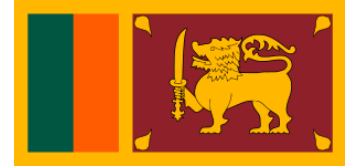
Proximity Mobile Payment

Scan QR code specific to every pump

After pumping the cash register will send you a bill
Bill needs to be confirmed and payment is done

Includes acceptance at Lukoil

DIALOG TOUCH CORPORATE FUEL CARD (SRI LANKA)

Proximity Mobile Payment

NFC Corporate Fuel Card Mobile App

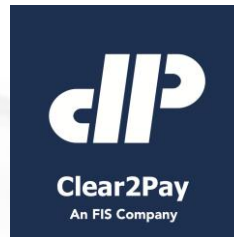Corporate fuel cardholders

150 Sri Lankan companies and 4,000 users

102 'Touch' enabled Lankan Indian Oil Co and Laugfs fuel stations

Geo-location to locate fuel stations from their mobile device

Thank You !

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Clear2Pay
An FIS Company