

CONTACTLESS TICKETING

MULTIMODAL TRANSPORT AND PAYMENT

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EXTERNAL USE



SECURE CONNECTIONS
FOR A SMARTER WORLD

e-Ticketing – Fundamental need for a Transport System

- **Fastest throughput at the gate**

- **Form factor independence**



- **Cost Savings**

- Maintenance Costs
- Eliminate Handling Of Cash
- Fare Evasion / Fraud Protection



- **Extendable Infrastructure**

- C'less Bank Cards
- Multi-application cards
- NFC Enabled Mobile Devices



What PTOs Needs

- Individual Fare Models
- Multimodal Transport
- Flexibility & Scalability
- New Biz Models
- Acquire New Users

PTOs and Smart City Needs



FUTURE



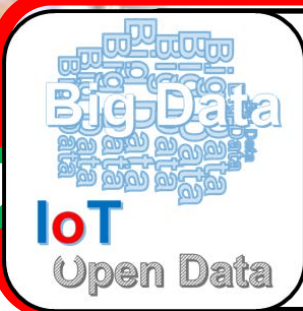
MASS TRANSIT



INDIVIDUAL / SHARED



TOLLS & Others..



CITY INTELLIGENCE



Smart City Device

Form Factor Agnostic

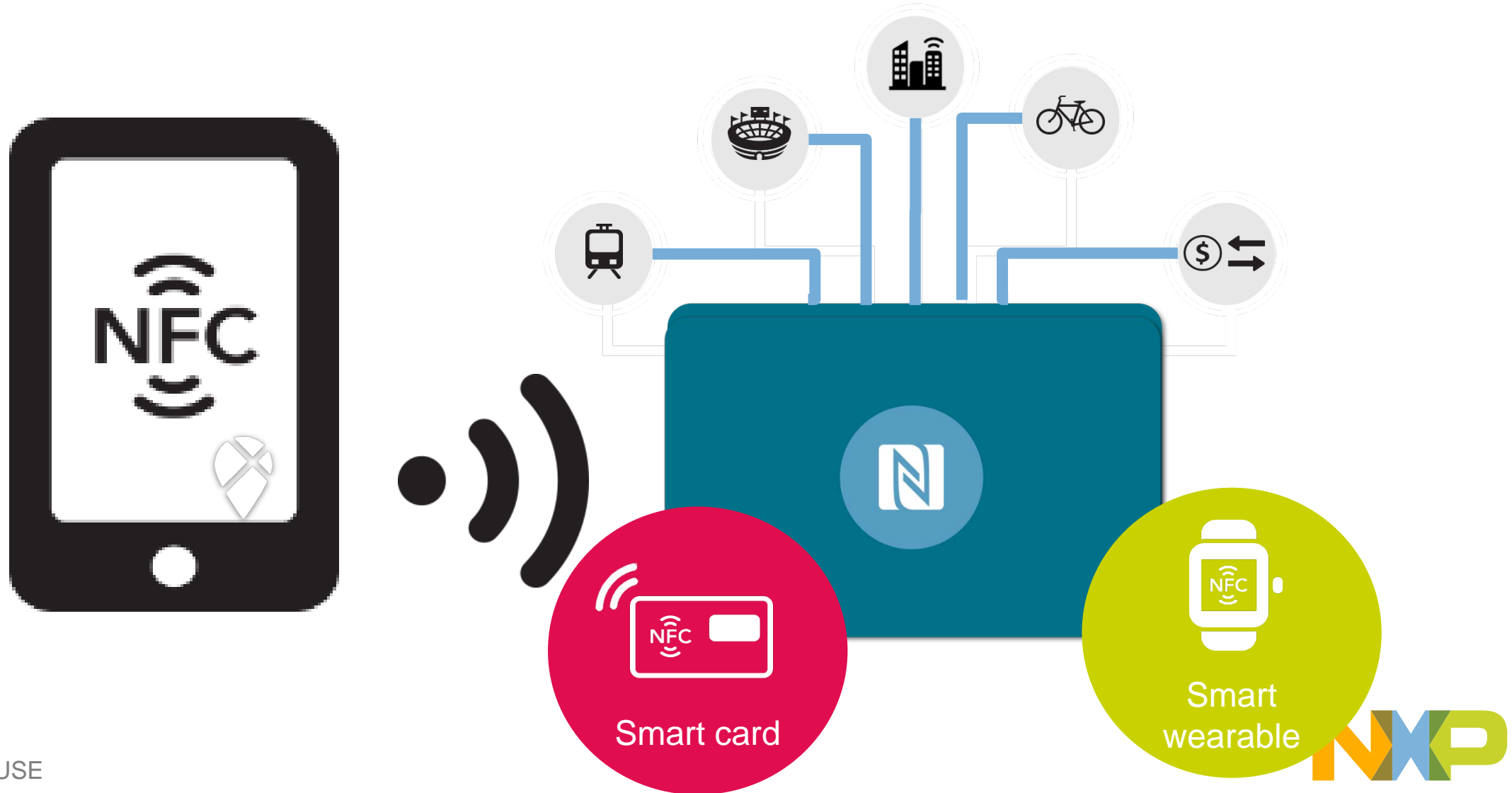


Application Agnostic



- New Biz Models
- Big Data
- Customer Ownership
- Flexibility

Smart City Technology



Who owns the customer?



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System Ownership

- Fare Medium and Reader
 - Fare Model
 - Security and Flexibility
- Backend
 - Fare Models
 - Customer Data
 - Analytics
- Payment Methods

Public Transport

Managed by PTO

Payment Providers



A flexible ticketing platform benefits PTOs and Smart Cities

- Adapt New Business Models
- Complete Flexibility
- Payment Provider of Choice
- Service Partner Network
- Enabling Regional and Countrywide Deployments
- Sustainable Technology – Growing with your Smart City

Large cities - building a smart city on top of mobility

Istanbulkart – MIFARE DESFire EV1

- 19M cards in circulation
- Max load value 300 TL ~ 100 USD
- Initial use with Bus, Metrobus, Trams, LRT, Funiculars, Subway, Commuter rail, Ferry, Seabus
- 2016 – BELBIM was awarded 15 years e-money license
- Payment at parking lots, theaters, taxis, movie theaters, cafes, restaurants, shopping malls and any other urban activities



Manila BEEP – MIFARE DESFire EV1

- 1M cards deployed – after 6 months 100 M transactions
- Max load value 10000 PHP ~ 214 USD
- Initial use with LRT, MRT, P2P bus, airport transfer, Jeepneys,
- 2016 – AFPayments expanding to tollways, convenience stores
- Banks, mobile company now selling beep cards
 - GlobeCash, PayMaya (used for UBER)



Small cities - maximizing value by going smart



WEIZCARD *Deluxe*

- ✓ Gleiche Grundfunktionen wie bestehende WEIZCARD
- ✓ Kontaktlose Identifikation durch zukunftssträchtige NFC Technologie


ZUSÄTZLICHE Funktionen:

- | | |
|----------|-------------------------------------|
| Phase 1: | Fahrradverleih |
| Phase 2: | Weiz Linien |
| Phase 3: | Öffnung der Schrank
neuen Bauhof |



WEIZCARD *Deluxe* - Anmeldefolder





WEIZCARD Deluxe Nummer

9816000000000000???

Nach Aktivierung Ihrer WEIZCARD Deluxe erhalten sie von uns ein Schreiben mit Passwort für das Login auf weizcard.at oder der WEIZCARD-App. Hier können Sie dann das Passwort abändern und Ihre aktuellen Guthaben abfragen.

Für Entleihung eines WeizBike an einer der Biketerminals benötigen Sie diesen PIN-Code. Bitte freirubbeln.

8160

Ihre WEIZCARD Deluxe Anmeldung

☐ Ja, ich will von den Vorteilen der WEIZCARD Deluxe profitieren und durch die einmaligen Kostenbeitrag von € 5,- zur Nutzung des WeizBike berechtigt sein.

☐ Ja, ich will meine bestehende WEIZCARD durch Aufzahlung von € 3,- auf eine WEIZCARD Deluxe tauschen. Daten und Guthaben werden übertragen.

WEIZCARD Nummer (Alt)

WEIZCARD Deluxe Nummer

9816000000000000???

Frau ☐ Herr ☐ Titel

Vorname

Nachname

Straße/Hausnummer

PLZ/Ort

Telefon Geburtsdatum


E-Mail

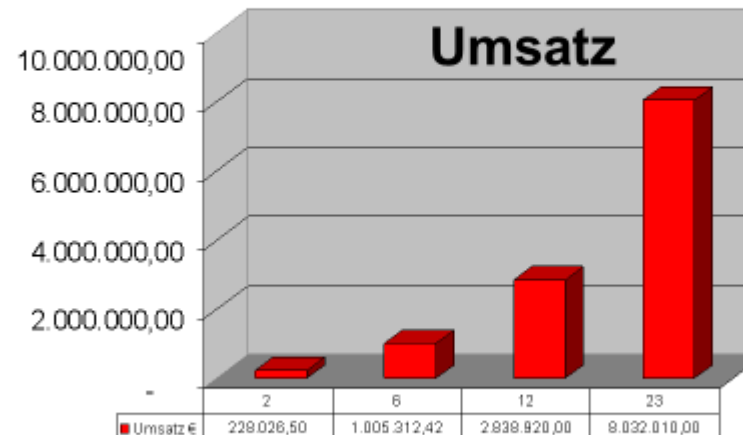
Nummer Reisepass, Führerschein oder Personalausweis

Behörde und Ausstellungsdatum des Ausweises

Datum, Unterschrift

Ich bestätige mit meiner Unterschrift die Teilnahmebedingungen für WeizBike und WEIZCARD Deluxe





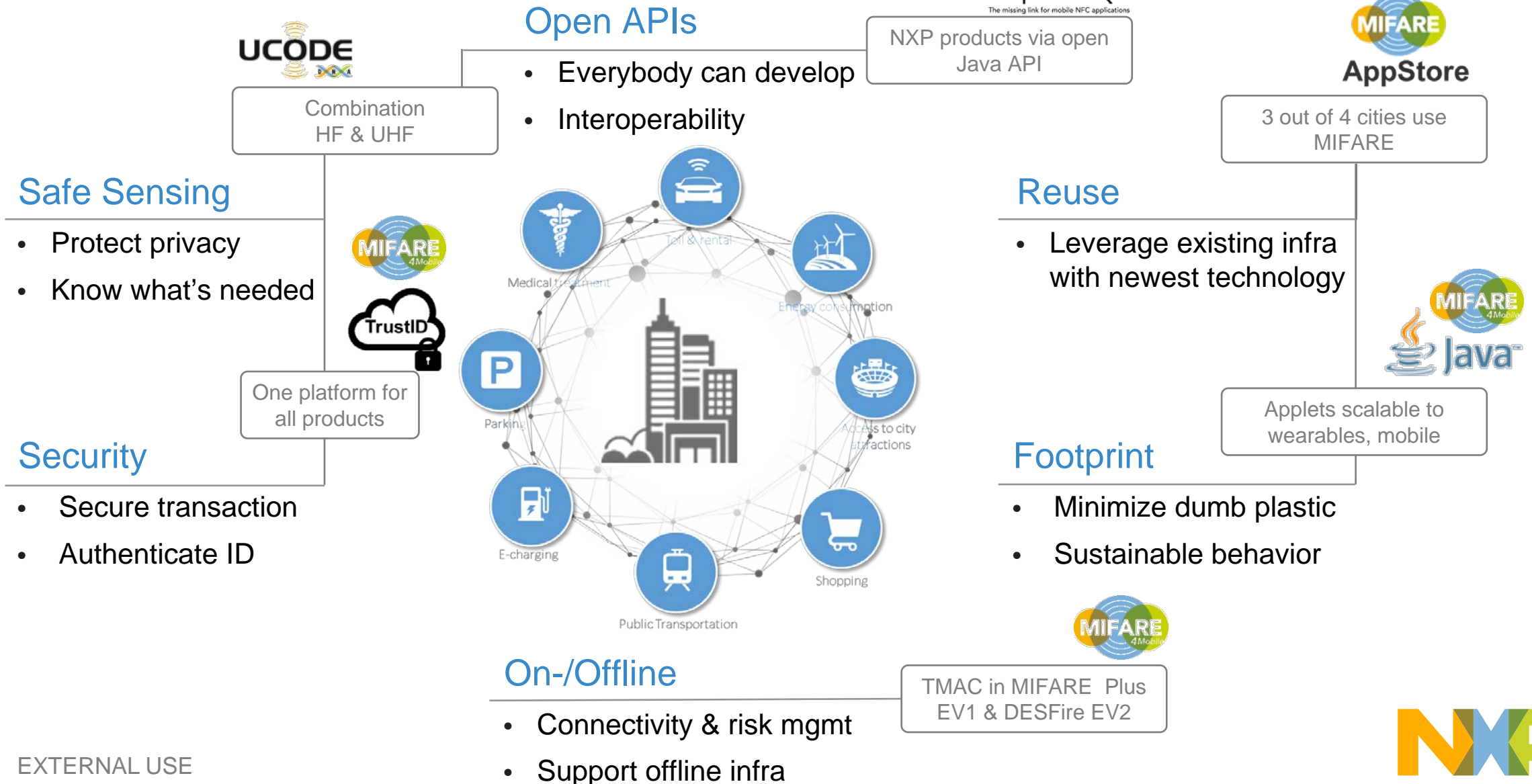


50.000 cities below 500k citizens

- 1000 cities with above 500k citizens in focus
- Investement 2nd & 3rd tier cities is a challenge
- Needs custom of the shelf solution (COTS)
 - Wallet management – onboard existing offering
 - Account managment – online ID authentication
 - Customer relationship management platform
- NXP invites partners helping 2nd & 3rd tier cities to become smart



NXP solutions to master challenges



MIFARE® DESFire® by the numbers

More than

500M pcs

shipped

Also available in

**banking
& mobile
convergence
platform**

from multiple vendors

**NFC
TagType4**

compliant

Powering eTicketing in

> 90 cities

including

Evolving platform
MIFARE DESFire EVx
- staying ahead in

**security,
privacy,
performance
&
multi-
application**

**> 65%
annual
growth**

on average for
the last 10 years

Preferred platform
by leading
system integrators for

**AFC,
access,
micro
payment
&
loyalty**

**> 10
schemes**
regional & countrywide

Compliant to

**> 10
standards**

and industry best
practices

Licensed to

**> 10
companies**

Proven in

**> 30
applications**

Extendable to

- banking
- eGov
- mobile NFC

MIFARE® DESFire® serves many different applications

Closed-loop Payment



Taxi Cards



Home Access



Transport Ticketing



Event Ticketing



Car Rentals



Corporate Access



University Cards



Hotel Access



Bike Rentals



Library Cards



Road Tolling



Museum Cards



City Cards



Tourist Cards



Loyalty Schemes



Document Authentication



Amusement Park



Stadium



Door Access



Membership Cards



Parking



Student Cards



Fuel Cards



Thank You



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