



GSMA Shanghai

**Identifying the Key Elements to make your
M2M SIM a Commercial Success**

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Why do we need to use M2M SIM card?



M2M Market Overview

Addressable M2M market – Strategy 2018



M2M Segment	Description	Devices	Use Cases (Examples)	Form Factor	
				2012	2018
 Automotive	OEM automotive, telematic systems (eCall); commercial fleet management; stolen vehicle recovery (SVR), motor insurance telematics navigation (real-time infos)	Cars Trucks Busses Metro	Automatic emergency call in case of accident. Motor insurance telematics (motor insurance company gets access to trip data for risk analysis and price reduction)		
  Consumer Electronics & Health Care	<p>Delivery of service or content available from the internet to the consumer.</p> <p>Consumer health care (HC), mobile cardiac monitoring, governmental HC</p>	<p>e-readers (Kindle) Tablets (iPad) Notebooks Digital frames, Cameras</p> <p>Blood pressure gauge Heartbeat monitoring</p>	<p>Lifestyle and personal convenience</p> <p>Therapy of heart disease according to registered data. Transmission of fitness data to compose the perfect training schedule</p>		
 Security Sector	Utilities, payments; POS terminals, connected buildings security alarms	POS terminals Alarm systems	Fire alarm / Burglar alarm Remote Monitoring of buildings.		
 Industrial	Smart meters, energy meter (electricity/gas); smart home Industrial process control	Metering device / concentrator vending machine	Remote usage data transmission to energy supplier etc. Control of energy/water etc. consumption		



Why do we need to use M2M SIM card?

Life Time

Temperature Grade

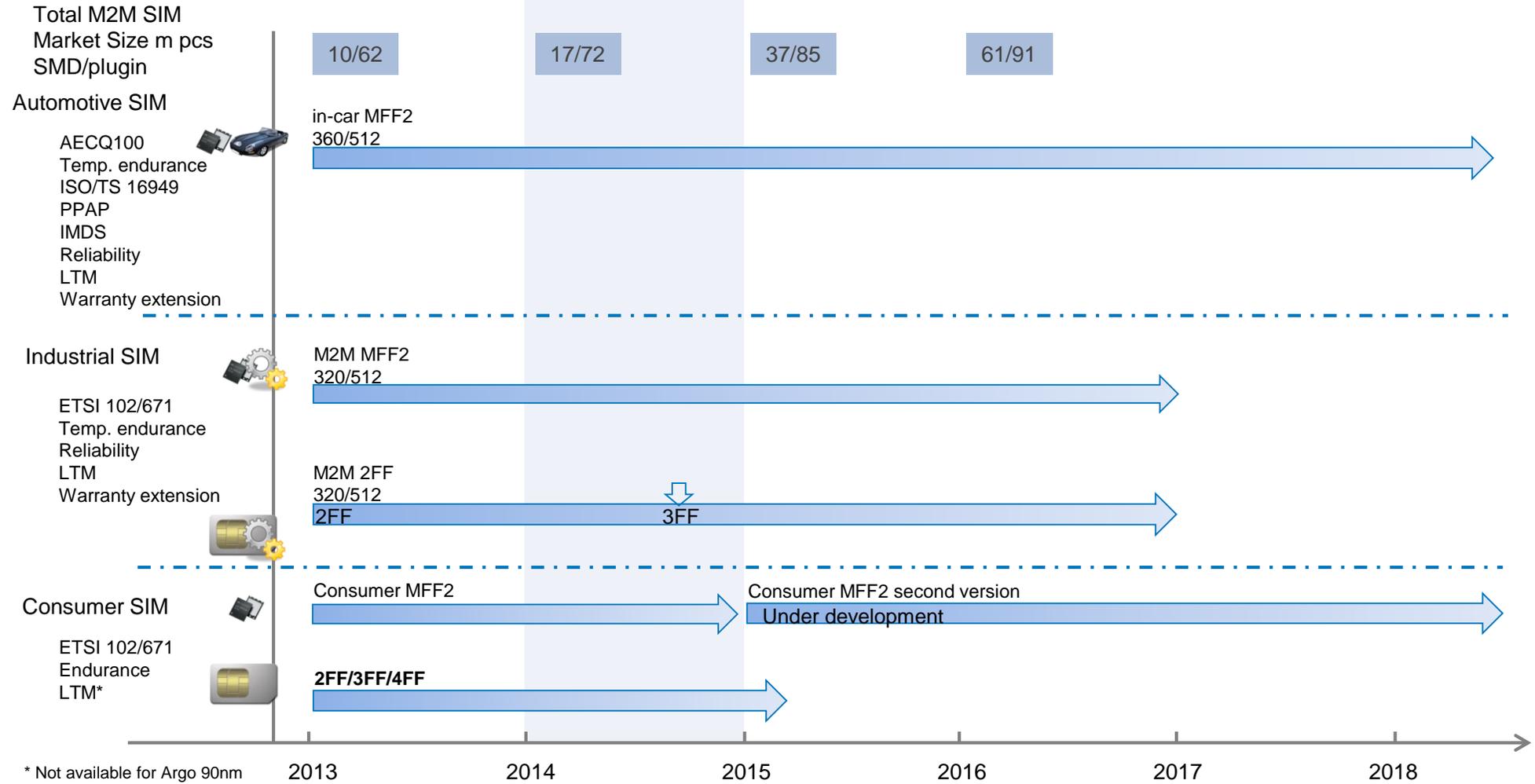
Vibration

Humidity

Form Factor



M2M product offering 2013-2018



How to manage the Subscriptions in M2M SIM card?



Welcome To The Connected Society Where Everything Intelligently Connects

605 Million

Global Wireless M2M Connections by 2018, with Automotive and Transportation 137 Million, and Utilities 152 Million

USD 28 Billion

The revenue of Global Wireless M2M Connections in 2018. Almost 5 Billion in Western Europe

1 Billion

is the number of Smart Connected Devices shipped worldwide in 2012



Source Signals and Systems 2013 and IDC

Introduction

Industry-leading Subscription Management platform with open API and third party eUICC interoperability

- G&D solution is proven commercially

AT&T Global SIM (2012)



Selected AirOn™ technology to enhance AT&T's single worldwide SIM solution for wireless enabled global products

Vodafone (2013)



G&D's Subscription Management enables 'Simple Out of the Box Experience' service for smart device users.

SFR Connecté Partout (2013)



G&D's Subscription Management - SmartTrust® AirOn™ helps improve logistics and the customer experience.

G&D is the thought-leader in Subscription Management

- Pioneered Subscription Management in 2010
- Deployed v1.0 with multiple customers since 2012
- Commercial launch of v2.0 based on GSMA specification in 2Q 2014
- Strong influencer in ETSI standardization efforts



Solution include all elements

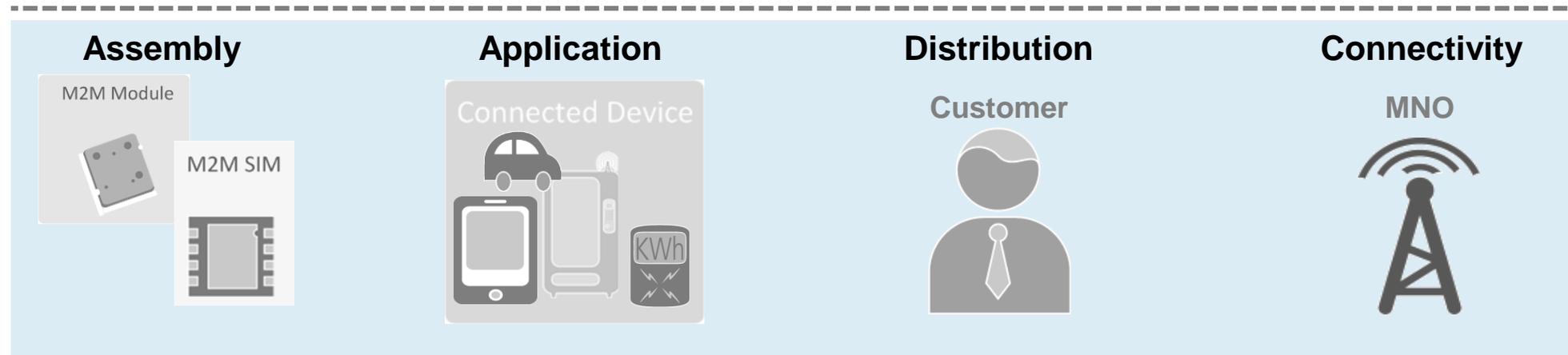
Subscription management in an End-2-End view

eUICC technology offered as horizontal service for several verticals

Testing and approval of functionality e.g. within automotive ecosystem

Incident management policies

Learning curve for all parties such as EUM, SM, MNO, SP or OEM



Meet Fundamental Subscription Manager Operations

Activate subscription

- Load & Enable Subscription and eUICC data
- Activate/Switch



Remove subscription

- Delete from eUICC
- Move subscription to a quarantine state



Transfer subscription to new UICC

- Remove + Assign + Activate



Terminate eUICC (remove last subscription)

Enhanced policy management

Additional functionality than the GSMA specifications, such as flexible fallback, conditional switching, Initial Subscription Management and multi-vendor support



Connecting Global Devices with Subscription Management

- Global devices are assembled and shipped anywhere in the world
- Device is “provisioned” Over The Air with a local subscription

1 Device manufactured with a generic eUICC with provisioning subscription

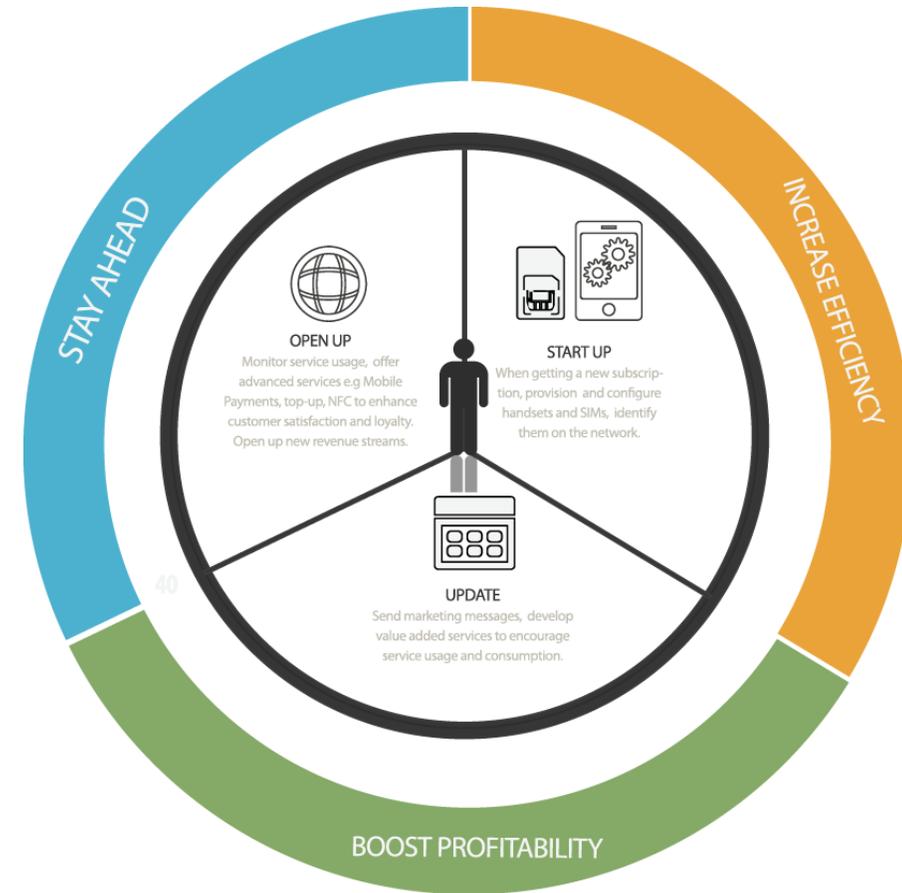
2 Over-the-Air provisioning of first commercial subscription of target MNO

3 Dynamic change of subscription data in a later stage of the eUICC lifecycle



Meet the variety of different Use Cases

- E.g. Batch operation feature
 - Migration of entire SIM fleet
- E.g. Era Glonass
 - Advanced interface to the In-Vehicle System (IVS) will send trigger
 - Swap back mechanisms
- E.g. smart metering
 - Challenging lifetime and low traffic volume
 - Subscription management as an option in a later stage of the lifetime
- Support mass market low end "Non-BIP" M2M devices
- SIM, subscription and Device Management
 - Platform to manage subscribers, SIMs and devices OTA, OTW, OTI, across all access technologies (2G, 3G, LTE) and all types of handsets.



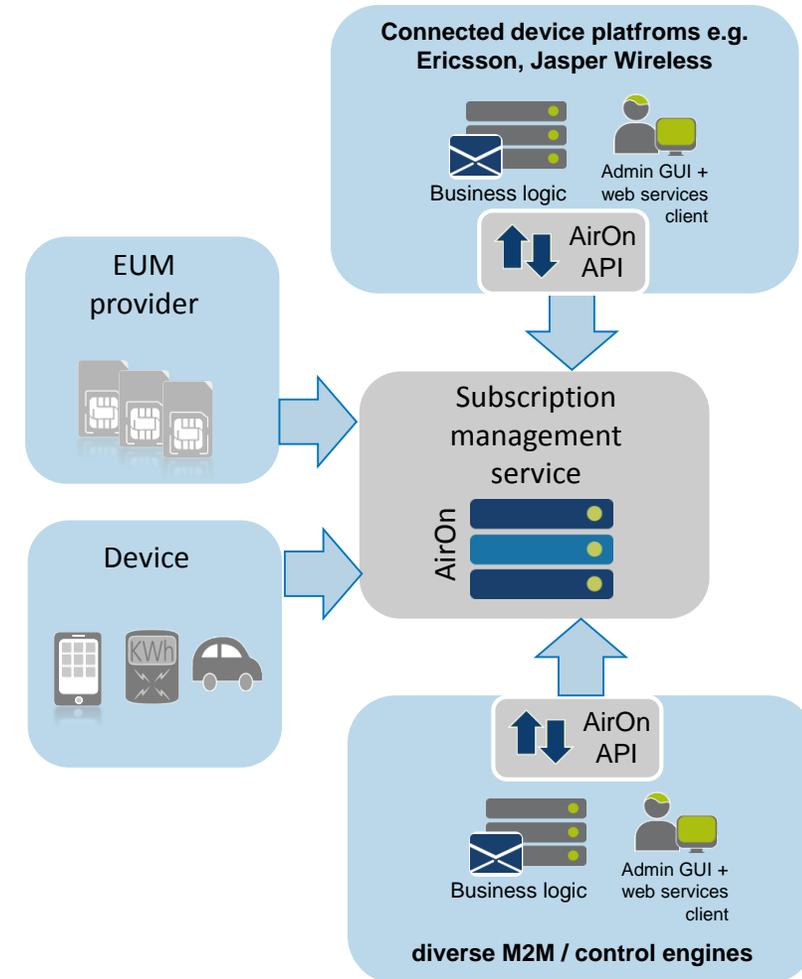
Interoperable and interacting Subscription Management platform

Subscription management is per se requesting **interaction** with multiple entities in the ecosystem

- Different CDPs or business logic engines
- Different EUMs
- Devices with proper support for eUICC technology e.g. STK, BIP, IP, APN, refresh handling

Interoperability of subscription management service

- Standardisation is defining the fundamentals
- Learning curve for all players



Why is it always G&D?



Since 1852



Hermann Giesecke



Alphonse Devrient



- Established in 1852
- Head Quarter locates in Munich Germany
- 58 subsidiaries in 32 countries
- 1.8 billion in 2013
- 11,660 employees
- 1,282 in R&D
- 128 million R&D investment
- 7,500 patents





捷德在华成立20周年

— Since 1852 —

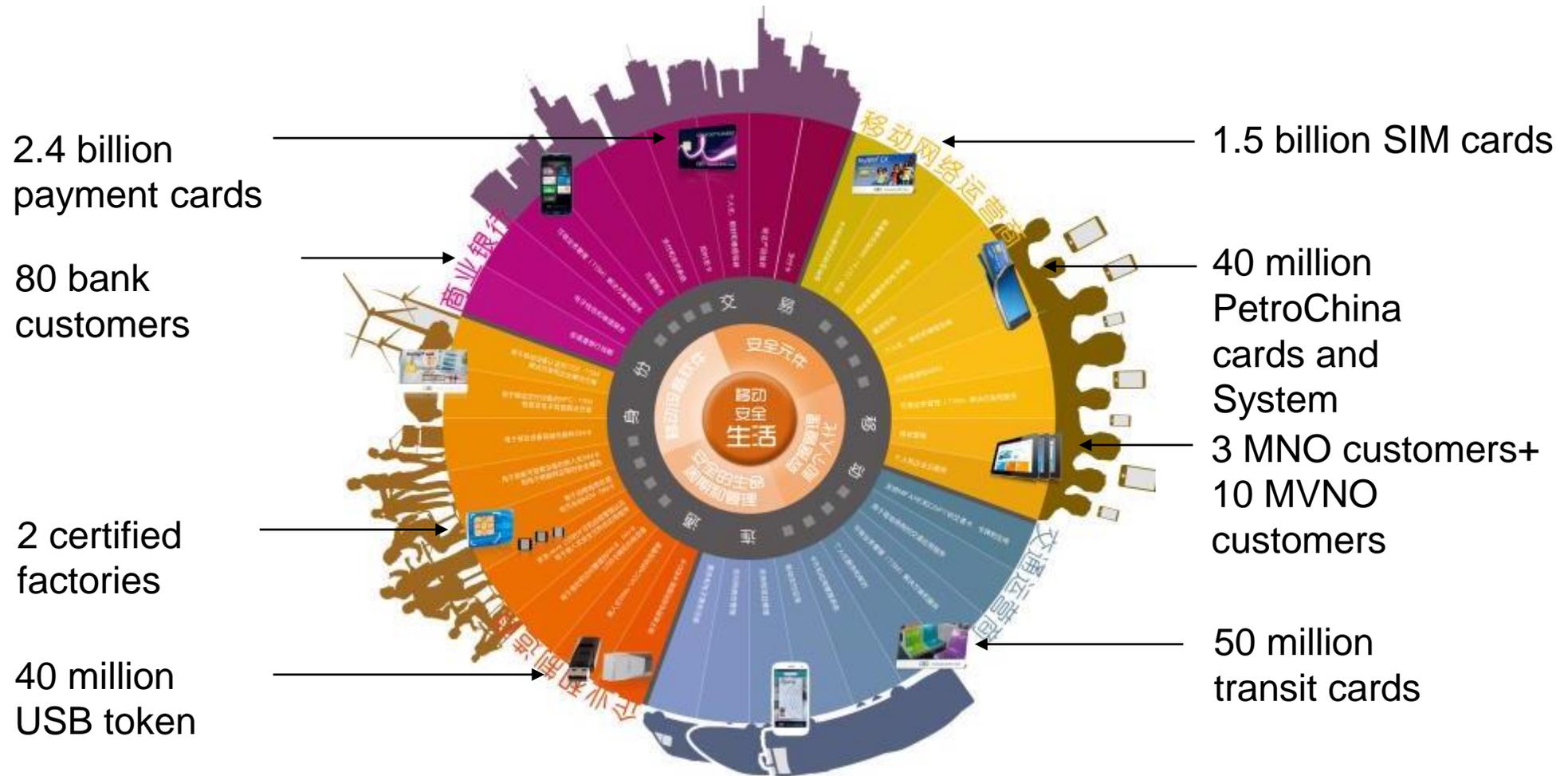


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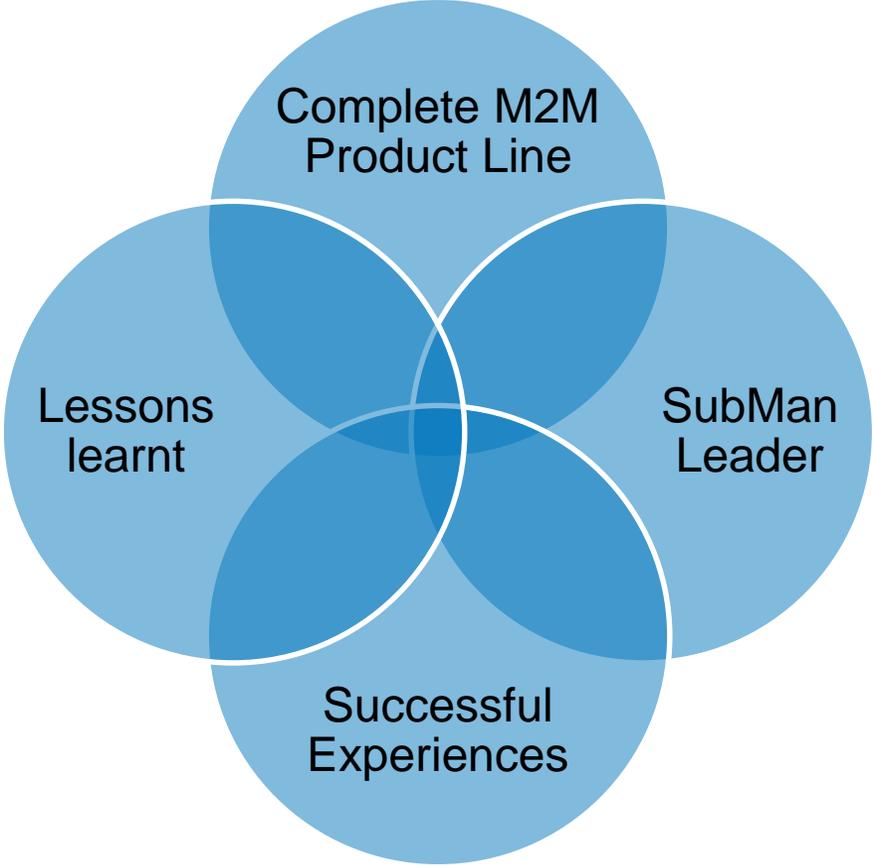
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Achievements in 20 years



Why is it always G&D?



Thank you!

Questions?

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