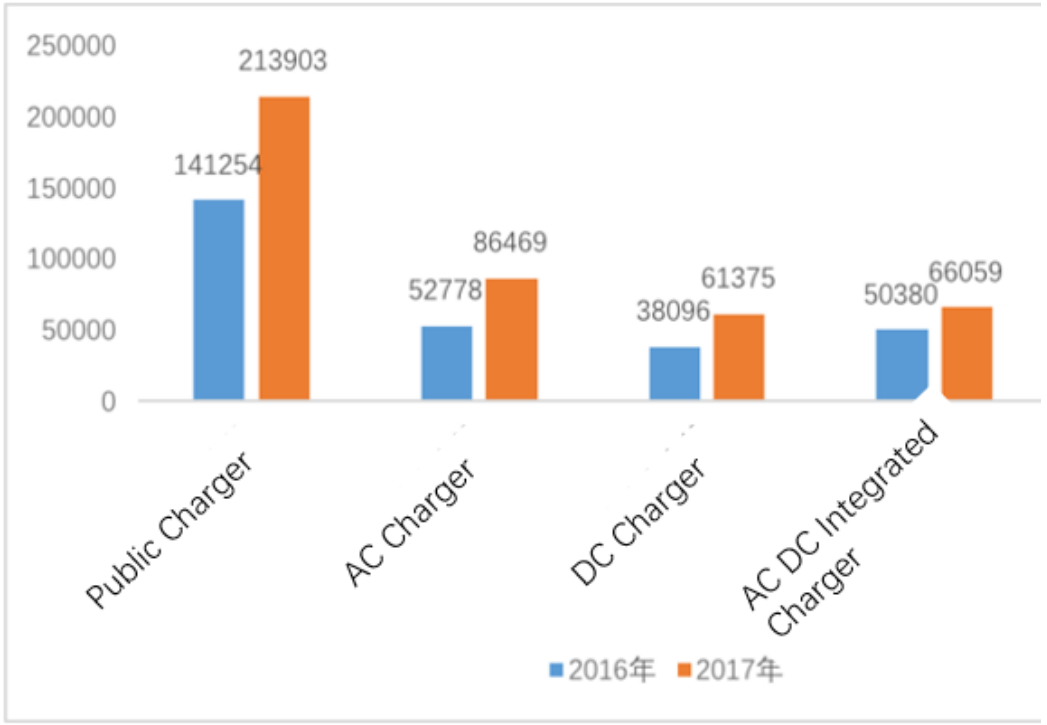
XCHARGE PRESENTATION

X-CHARGE

High Power Charging and EV Experience from China

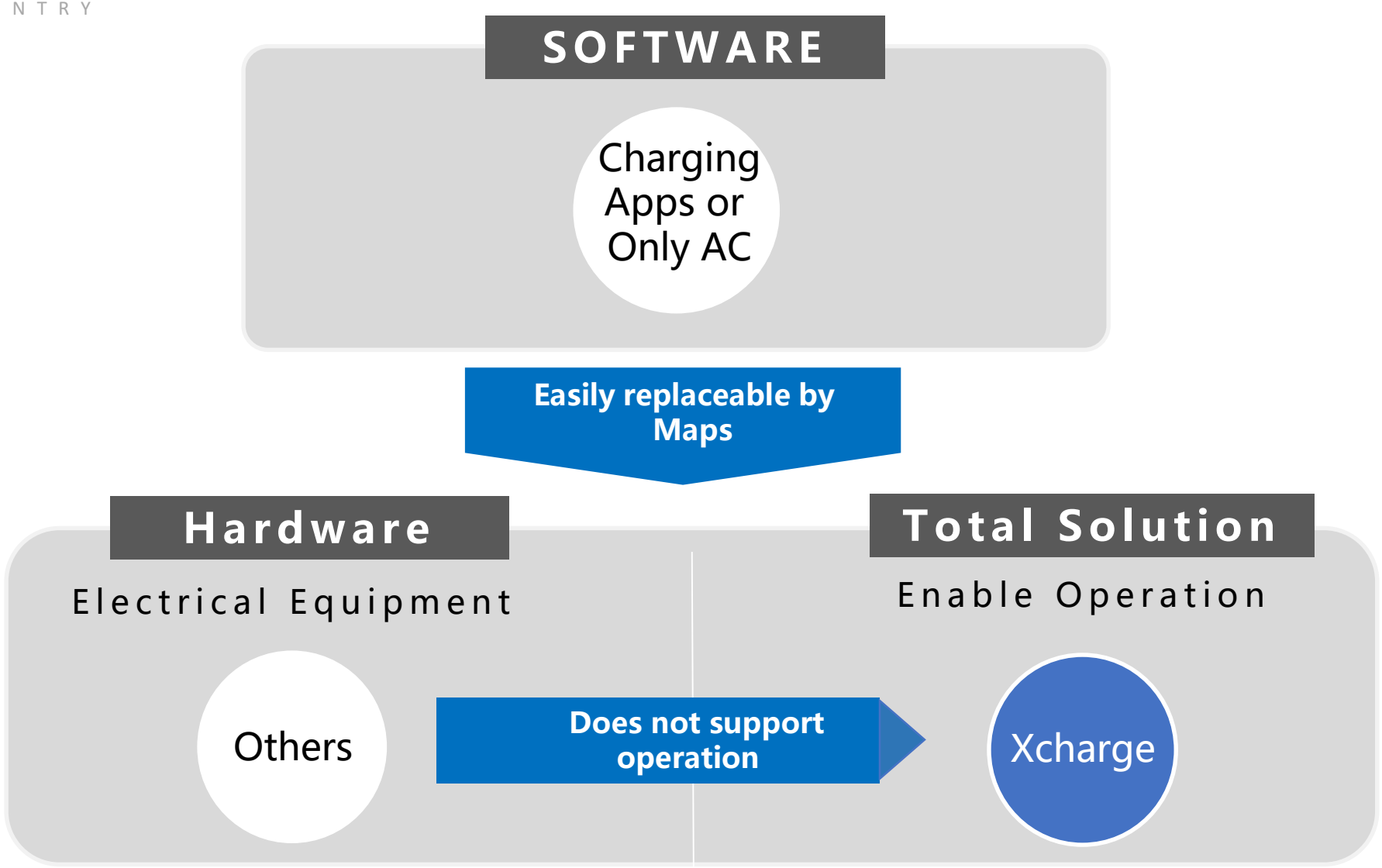
FIGURES FROM CHINA

- Nationwide, total number of chargers (public and private) has reached **450,000** by the end of 2017, reported by members of CCTIA.
- Among which **210,000 public chargers** has been deployed and operated, achieving a 51% of annual increase. (**150,000** public chargers has been recorded in operation by Dec. 2016, increased by over 2 times from 49,000 public chargers by the end of 2015.)
- Out of **240,000 private chargers** (all being slow AC chargers), 83,000 located in Beijing, 78,000 in Shanghai and 39,000 in Guangdong, together accounting for over 80% of overall private chargers.
- By 2020, public and private chargers are aimed to reach over **4.3 million** in total, matching each EV with one charger.



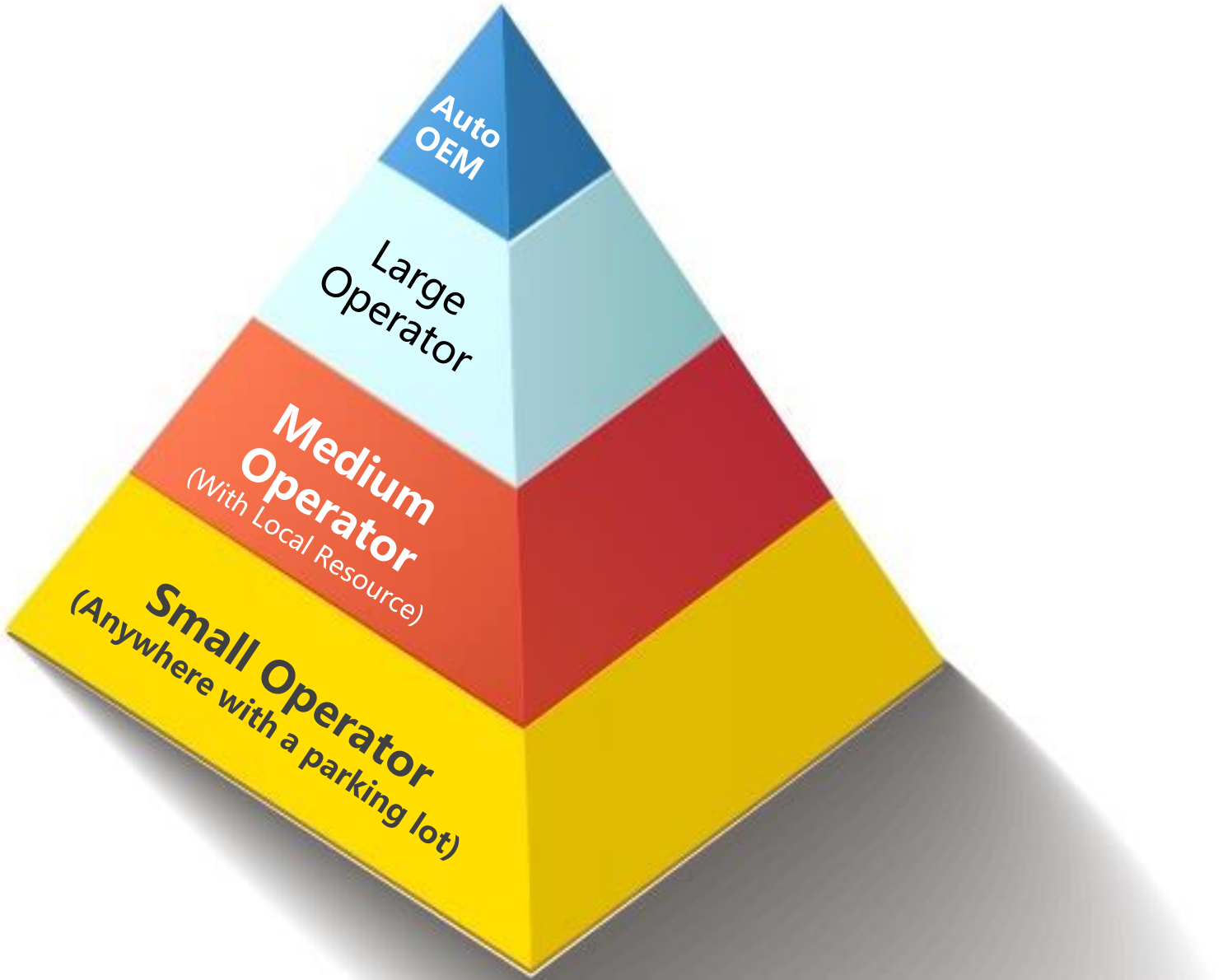
PENETRATION

WAY OF ENTRY



THE CHARGING SOLUTION MARKET

STRUCTURE



CURRENT PRODUCTS NEED IMPROVEMENTS

#STATUS QUO

Lack of Design

Lack of User Experience

Lack of Platform Compatibility

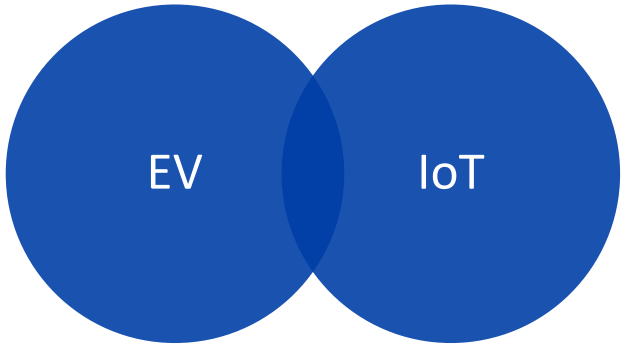
Lack of Operation Features

Lack of International View

PRODUCT DEFINITION

PRODUCT

At A Time When Electric Vehicle Meets Internet of Things



Charging Equipment Physically Connects Power to Transportation

Energy Industry

Charger

Transportation Industry

C Series

IoT Gene

Energy thinking

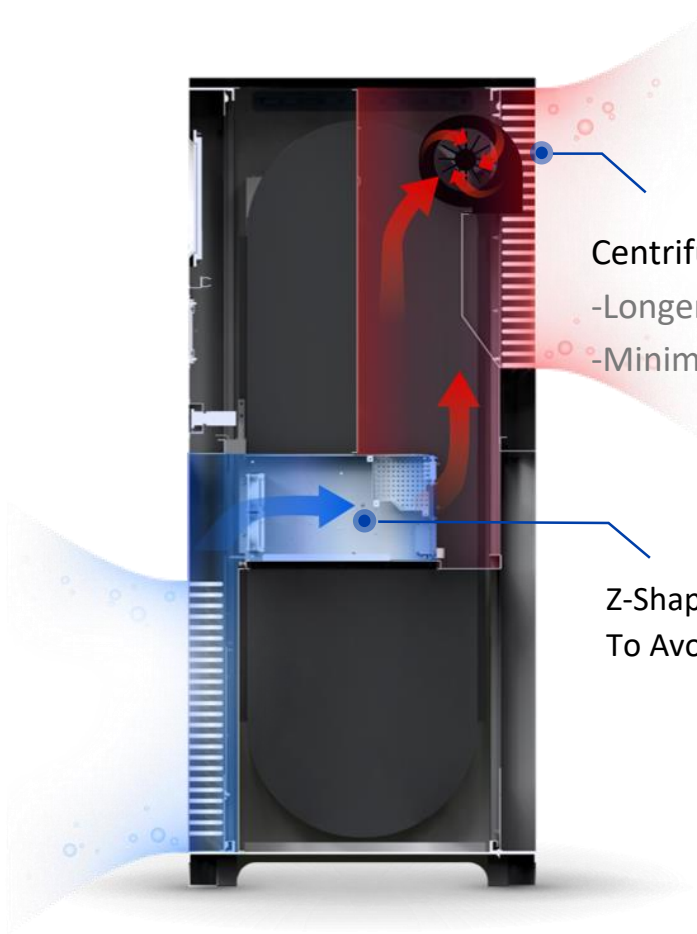
C6 DUAL NOZZLE HPC CHARGER

HARDWARE

Process indicator lights

15 Inch Split LED
Interactive Display

U-Shaped Nozzle Placement
To Avoid Twists



Centrifugal Ventilator
-Longer Life
-Minimize Dust Cumulation

Z-Shaped Wind Channel
To Avoid Rotary Airflow

C9 SATELLITES HPC CHARGER

HARDWARE

Initiate with NFC, RFID, or QR code

MOBILE PLATFORM

SOFTWARE

ALL KINDS OF CUSTOMER MOBILE END CAN BE FULLY INTEGRATED WITH X-CHARGE HARDWARE PRODUCTS

APP (to C)

Navigation

Real-time price

Payment initiation
(APP / NFC / RFID / VIN)

Remote reservation and queueing

Cloud

Platform (to B)

Station management
Price management
Load management
User management
Time management
Turnover management
Remote diagnosis

OCPP OCPP OCPP

Hardware

Over the Air upgrades
Cortex A8 smart chip
Android OS
Future proof modular power

Smart AC Charger C2

7 / 21kW

Smart DC Supercharger C6EU
(2 plugs)

60 – 240kW

ISO 15118

Smart DC Supercharger C9
(Satellite charger with 2 plugs)

240 – 480kW

reddot award 2016
best of the best

Far more than products

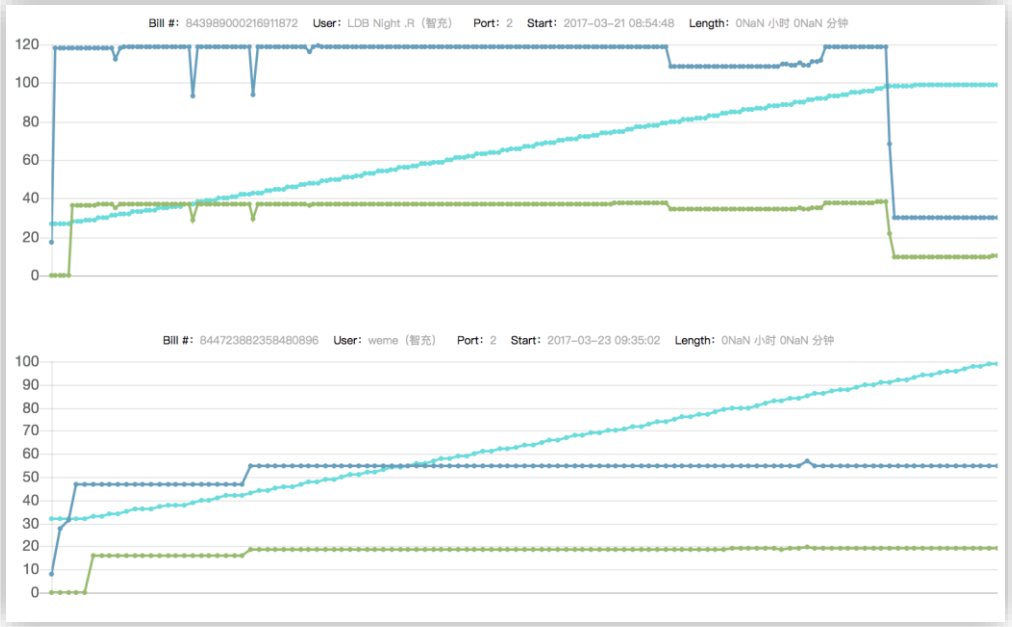
VEHICLE BATTERY DATA AND IMPLICATIONS

#IOT ADVANTAGE

X-CHARGE System is able to takes record of battery charging curve of each charging process for big data Analysis.

Ex. Through variance analysis a data system Can detect the change in battery conditions.

Actual Vehicle Battery Data Collected



SOC Voltage Current

X-CHARGE'S A8 PROCESSOR AND ANDROID SYSTEM ENSURES INTEGRITY, ACCURACY, AND SPEED OF DATA TRANSFER

SOME OF THE HIGHEST USAGE RATE IN THE INDUSTRY

HARDWARE

A Sample Station：

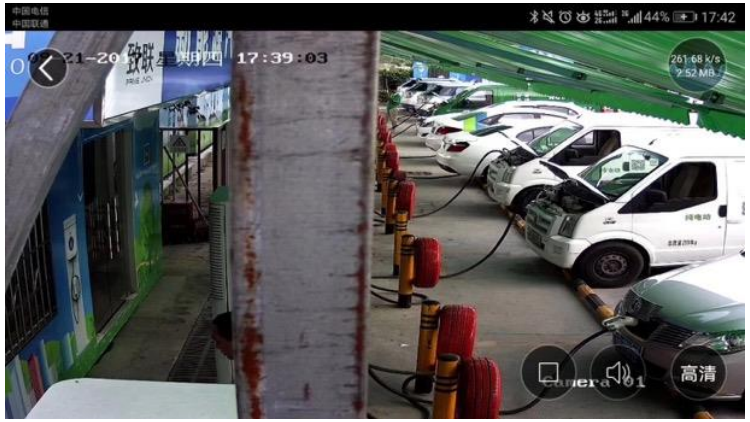
15DC(30 Nozzles) and 20AC

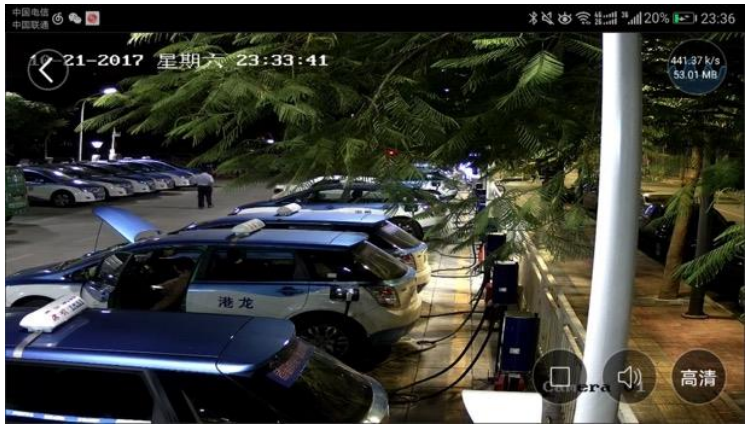
Usage Over：

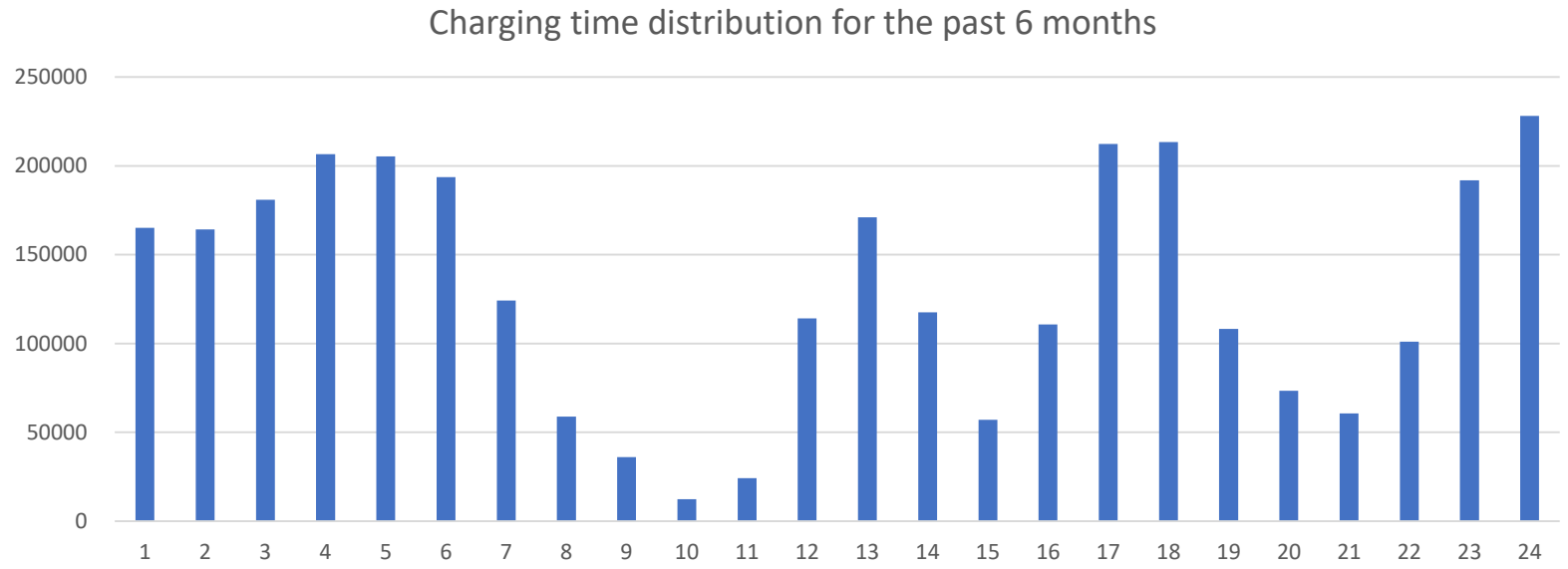
-16,000kWh/day
-560 charges/day

On Average:

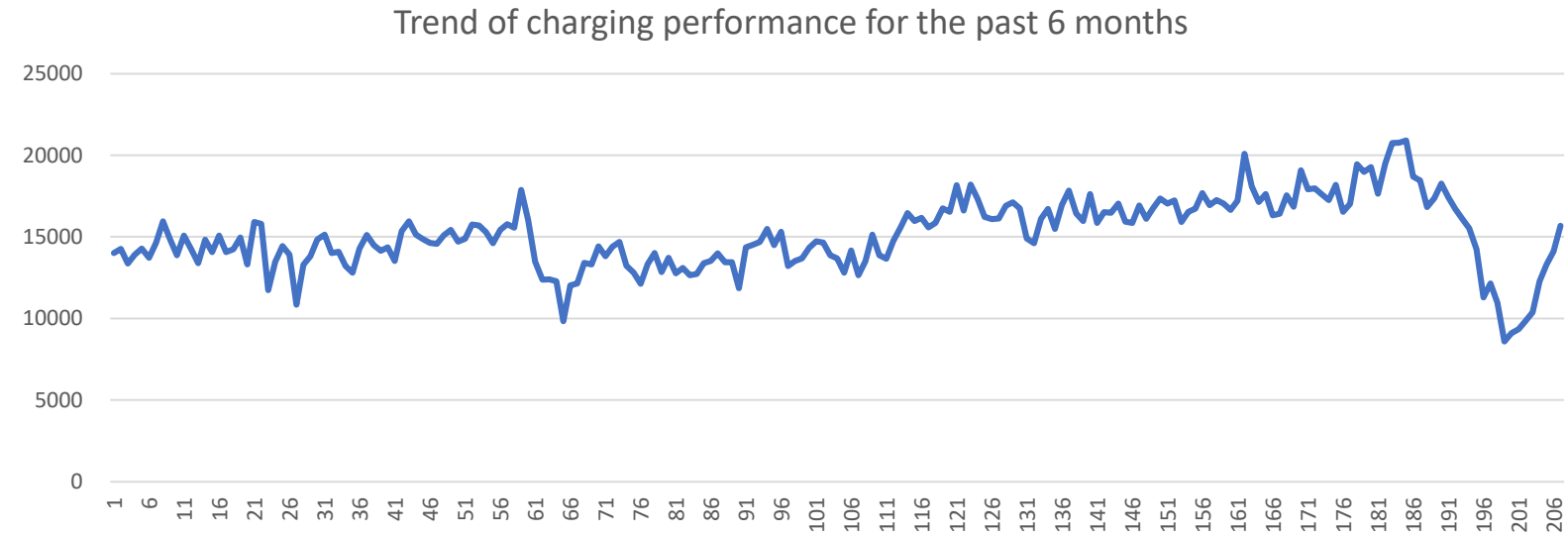
-28.5 kW/charge
-35 Min/charge
-11.2 Charge/Nozzle/day







- Peak charging hours are: 23pm – 7am, 12pm-15pm, 17pm-19pm.
- Full capacity operation during off-peak electricity times (after 16pm & during night time).
- Taxi drivers prefer charging early in the morning, resulting in the peak hours occurring during 4am-7am.



- Relatively steady growing trend generally speaking.
- Recent drop due to Chinese spring festival, especially when taxi and logistic car drivers all taking a break.

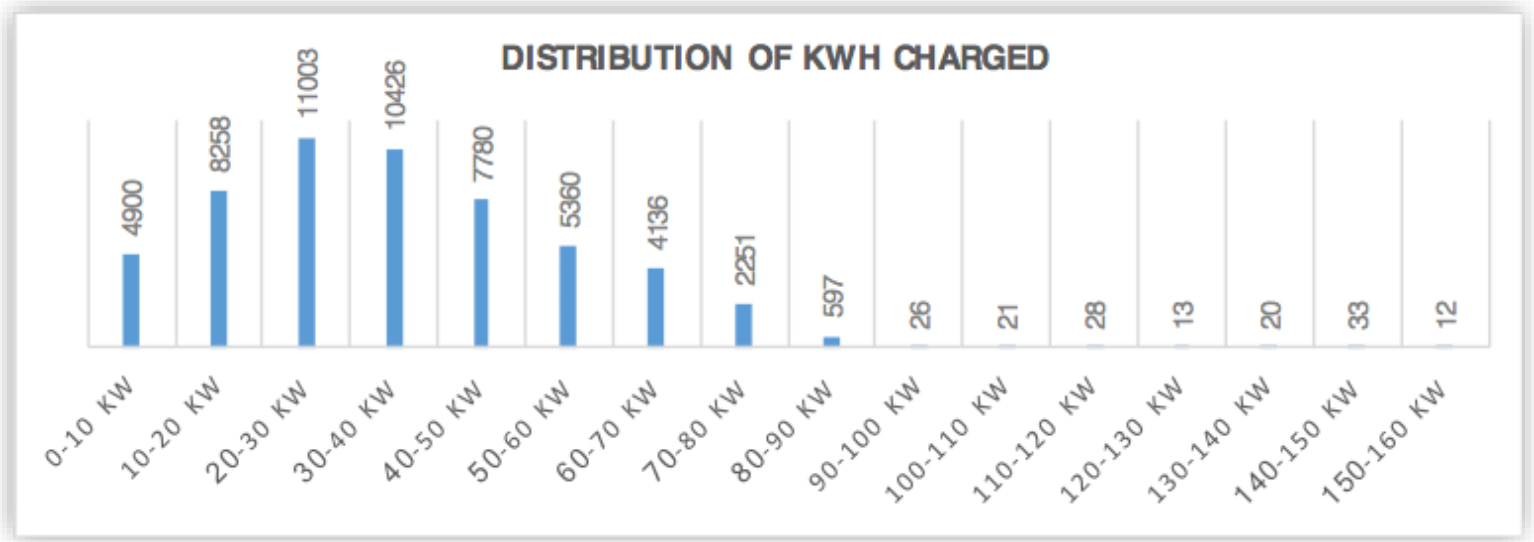
* raw data attached in a separate excel

CHARGING DATA ANALYSIS AND IMPLICATION

SOFTWARE

Distribution of kWh Charged

kWh Charged in Transaction
Vs. Number of Transactions
(Data taken from a city over 30 days)



We Expect this curve to move right as batteries get larger

By Mobile Charging Trucks

* THIS DATA CAN HELP DETERMINE THE TYPE OF CHARGERS TO PROVIDE IN DIFFERENT LOCATIONS

THE CLIENTS WE SERVICE

#IOT ADVANTAGE

OEM

Grid

Energy

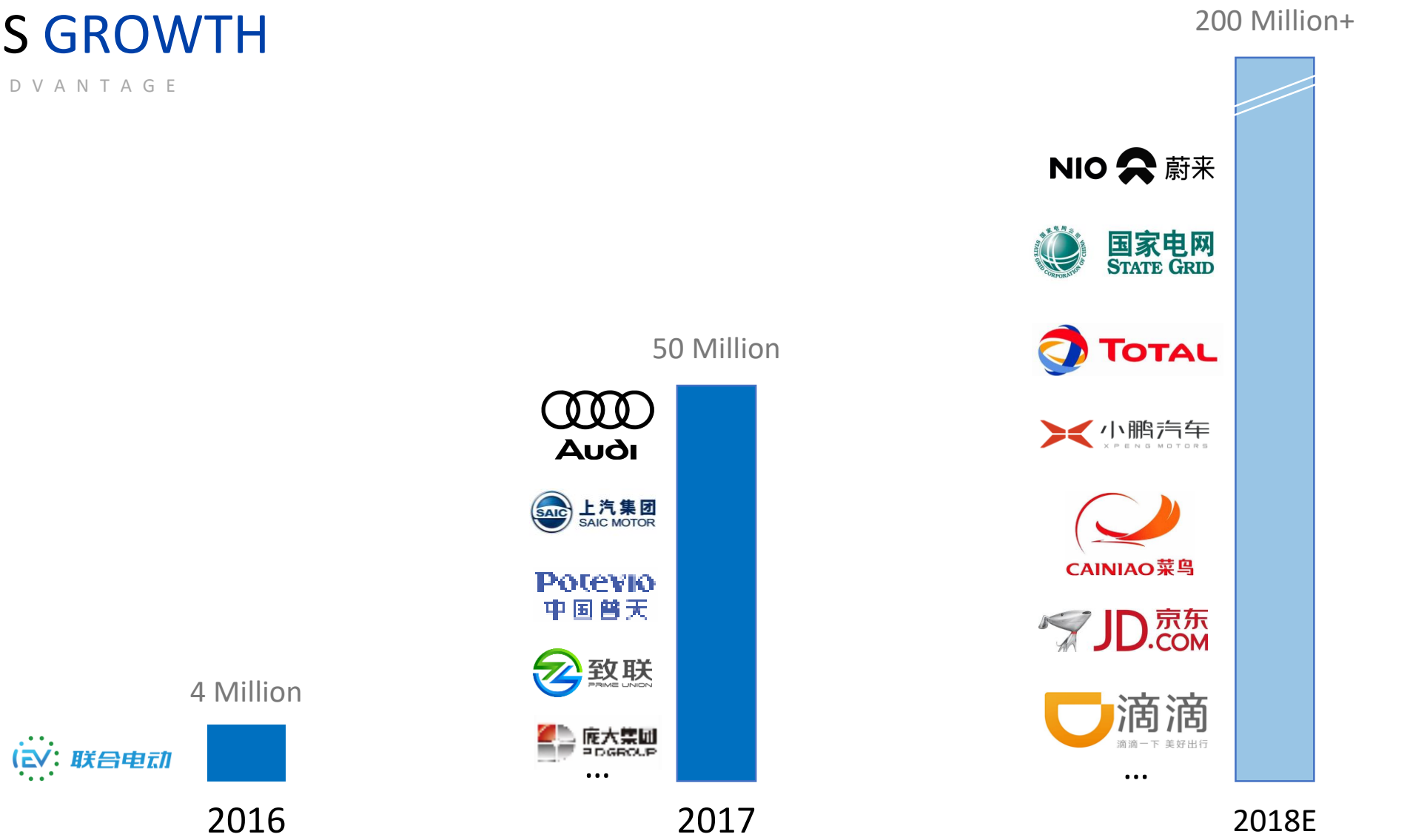
Operator

Logistic

EV Share

SALES GROWTH

#IOT ADVANTAGE



*FIRST YEAR DC PRODUCT LINE

*"CHARGE ANYWHERE" KICK OFF

“CHARGE ANYWHERE” PROJECT

#IOT ADVANTAGE

2ND HALF 2018

A scalable, standardized charging solution aimed at the mass medium& small operators.









NEXT

VISION

Our vision is to be a next generation energy solution company.

Total to B solution

Battery storage

Power Vendors

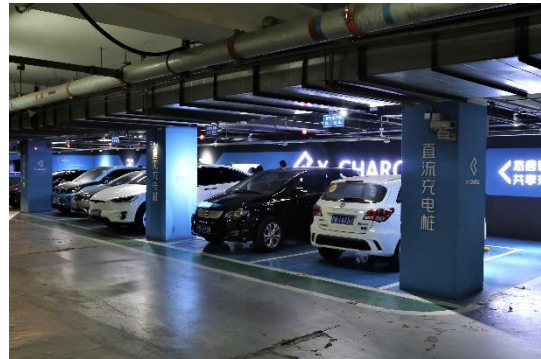
Power Trading on spot market and reserve market

Electricity retailer

PV Solar and wind combined project

Virtual Power Plant

PRACTICAL SECTION



Beijing U-Town Charging Station

		Plugs	Power Supply (kWh/day)	Vehicle Flow (vehicle/charger/day)
C2	AC	3	97	3
C6	DC	4	385	10

2017 statistics

		Plugs	Power Supply (kWh/day)	Vehicle Flow (vehicle/charger/day)
C2	AC	12	4229	10
C4	AC	8	2180	11
C6	DC	42	8714	17

2017 statistics. Four C6s were installed in January 2018.

Shenzhen Qianhai Charging Station

		Plugs	Power Supply (kWh/day)	Vehicle Flow (vehicle/charger/day)
C2	AC	13	7021	15
C4	AC	4	1657	17
C6	DC	15	8557	24

2017 statistics

Shenzhen Baifuhui Charging Station

Guangzhou Xiaopeng Supercharging Station

Customized Design

XCHARGE

CHARGE THE WORLD WITH X!