



Corporate Overview

From habit to economic

Automotive ICT Product & Service Company

jastec**M**



Summary

Corporate Overview

Market Needs

Solution : Business area

Online Showcase

01 Chapter

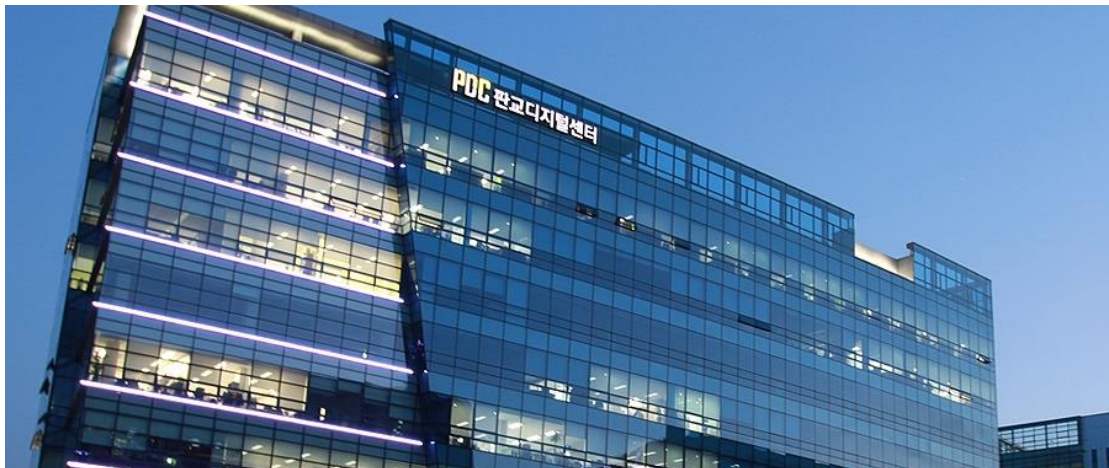
About JastecM

Chapter I Summary

From habit to economic
jastecM

JastecM Co., Ltd.

CEO	Yongbeom Baek
Founded	July 6, 2016
Capital	61,522 USD (Current) *Fundraising in Apr. 2019 (1,799,856 USD) & Jan.2021 (449,721 USD) / Pre-SeriesA - 2,249,577 USD in total
H.Q	PDC C-402, 242, Pangyo-ro, Bundang-gu, Seongnam-si, Gyeonggi-do, Republic of Korea
US Branch	JastecM USA, LLC 3003 N. First St., Suite 336, San Jose, CA 95134
Websites	Corporate – jastecm.com / Service - viewcar.net



2020	<ul style="list-style-type: none"> ✓ Nominated & awarded as the best IP-R&D company (Korea Intellectual Property Strategy Agency) ✓ Nominated as the company with excellent performance for data voucher project 'Waste pick-ups monitoring solution' (Korea Transport Institute) ✓ Nominated as the best industry integration company (Ministry of Trade, Industry and Energy)
2019	<ul style="list-style-type: none"> ✓ Nominated as the export frontier enterprise (Governor of Gyeonggi Province) ✓ Selected for Governmental R&D project – US device and platform development (Ministry of SMEs and Startups) ✓ Import started to US clients with Sprint ✓ Capital fund raised by 1,799,856 USD (Pre A) ✓ Waste pick-ups monitoring solution (City of Bucheon) ✓ Vehicle monitoring and car sharing solution for Star-Mobility and other rental corporates
2018	<ul style="list-style-type: none"> ✓ Master Purchase Agreement with Sprint (Million/yearly) ✓ Electrical delivery vehicle monitoring device (Korea Post) ✓ Carbon emission monitoring device for C-point service (Korea Environment Corp.) ✓ Energy efficiency monitoring device and service (Korea Transportation Safety Auth.) ✓ Commercial vehicle management system (Hanwha Total) ✓ B2B2C FMS device and service (SK Telecom)
2017	<ul style="list-style-type: none"> ✓ Connected car platform business (SK Telecom) ✓ Technical development project (SK Telecom) ✓ Connected Vehicle Platform project (Sprint) ✓ Nominated as the '2017 Export leading company' (KOTRA)
2016	<ul style="list-style-type: none"> ✓ K-Global Smart Mobile R&D (Ministry of Science and ICT) ✓ Acquired research facility accreditation (Korea Industrial Technology Association) ✓ Nominated as the best R&D entrepreneur (Ministry of SMEs and Startups) ✓ Merger between vehicle inspection specialist Jastec Co., Ltd. and platform development corporate Infinityplus Co., Ltd.

Research & Development

Development

- Vehicle-IoT wireless network(3G/L0Ra/LTE/LTE-M) connected device
- Firmware for vehicle sensors, GPS, Gyro/G-Sensor, Bluetooth
- Restful Open API for 3rd party business
- ViewCAR™ (Application & web service) for end user

International Standards

(Standard Essential Patents)

ISO / TC 204 WG17 standards in progress

- Emergency call feature related standard
(ISO 20530-1 Information for emergency service support via Personal ITS station) **ISO published (Dec. 2020)**
- Micro e-vehicle relate standardization work in progress
(Nomadic device service platform for micro mobility)
- Proposed emission monitoring standard
(Extracting trip data via nomadic device for estimating CO2 emissions)
- Proposed indoor & outdoor positioning based on sensor fusion method
(Seamless positioning for multimodal transportation in ITS stations)

Certification & IP's

Chapter III Business Area

From habit to economic

jastecM

Certification	Model	CertificationNo.
FCC	JTBT-1100	UK4JTBT1100
FCC	JTBT-2100	UK4JTBT2100
FCC	JTWF-1100	UK4JTWF1100
FCC	JTCM-1000	UK4JTCM1000
FCC	JTGM-1100	UK4JTGM-1100
FCC	JFCM-1000	UK4JFCM-1000
KC	JTBT-1100	KCC-CCM-JS0-JTBT1100
KC	JTBT-2100	KCC-CMM-JS0-JTBT2100
KC	JTWF-1100	KCC-CCM-JS0-JTWF1100
KIDI	JTBT-2100	KIDI-11-07
KIDI	JTUB-1000&	KIDI-18-**



Item	IP No.	Title
Trademark	4500481620000	ViewCAR™
Patent	10-1382498	System and method for motion-sensing automotive airbag systems
Patent	10-1618118	BCM Control system with external device
Patent	10-2074905	Apparatus for processing vehicle information
Patent	10-2020-0188585	Vehicle price estimating method (Korea & US)
Patent	10-2021-0032244	Information exchange system with messenger display (Korea & US)
Patent	10-2021-0041415	Indoor and Outdoor continuous positioning switching method (Korea & US)
Copyright	C-2016-008356	VDAS(Vehicle Driving Analysis System)
Certification	881	Location based business

+ Many others

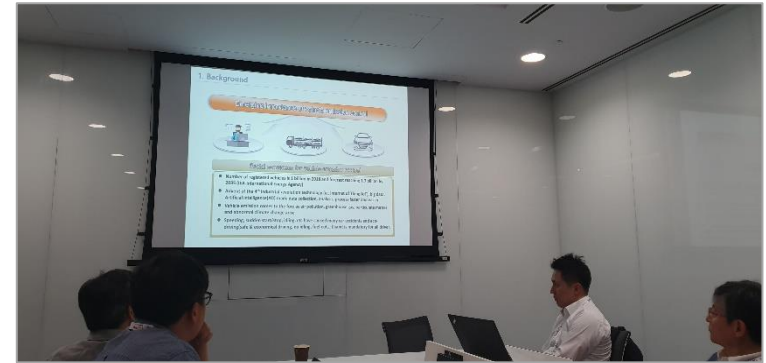
Overseas Activities

Chapter III Business Area

From habit to economic

jastecM

- ✓ Been participating in many ISO meetings & trade shows (TechCrunch, Melbourne ITS conference and ISO TC204)
- ✓ A registered expert of ISO TC204 WG16 / WG17 and published ISO 20530 as a proposer (Dec.2020)



A new era of 'Data / Network / AI' service & product based on IoT **Lack of asset & safety management systems** in mobility industry

Why mobility market needs our service & product?

Corporate

- ✓ **Asset management (Company cars)**
 - Increasing fuel cost, Preventing private use of company cars
- ✓ **Adjustment number of vehicle**
- ✓ **Vehicle health & repair management**
- ✓ **Increasing accident rate of company car** (5x higher than private vehicle)
 - Driver monitoring (Speeding • accident etc.)
- ✓ **Delivery or On-site repair service improvement**
 - Tracking drivers, task monitoring
- ✓ **Lack of fleet operating cost management system**

Individual Customers

- ✓ **Safe driving & efficient vehicle management**
- ✓ **Vehicle breakdown prevention, operating cost cutting** (Insurance)
- ✓ **Unfamiliar with connected car service**
- ✓ **High price of vehicle OEM's connected car service**
 - Service subscription rate: Under 5% (Hyundai Bluelink, KIA UVO etc.)

New business models



UBI
(Usage based Insurance)



In-vehicle payment



EWI
(Extended Warranty Insurance)



O2O
(Online to Offline)



Car depreciation analysis



V2V communication

JastecM has **vehicle-IoT device & platform** for **mobility big-data business**.



01

Vehicle-IoT Device Develop & Manufacture

“

Secure business flexibility with modular design

”

- ✓ Vehicle Sensors from all vehicle models
- ✓ G-sensor, GPS on board
- ✓ BCM control engineering
- ✓ Supports all networks (LoRa, 3G, LTE)



02

Data Platform Service

“

Optimized data platform for various development environment

”

- ✓ Flexible service structure with various sensor data
- ✓ Data search by timetable/specific Item
- ✓ Restful API provided per service model
- ✓ Development kit provided



03

Presentation Layer Service

“

Vehicle-IoT Convergence service such as FMS, O2O, UBI, EWI

”

- ✓ App & web service for vehicle admin & driver
- ✓ Driving behavior analytics & scoring service
- ✓ Location based service and diagnostic based service
- ✓ Auto insurance & O2O service

Online Showcase

Chapter I Summary

From habit to economic

jastecM





02

Chapter

Products

Tech : Product overview

von-Series features

North America models

Global models

von – P series

Connected Car service
platform

ViewCAR™ Web

Mobile app service

Mobile app features

JastecM already set up **API service structure** from device to platform.



ICT Device

OBID II standard protocol based vehicle data gathering technology



3G/GSM

LTECat.1/M1/Cat4

LoRa

OBID-II
Standard
Interface

+

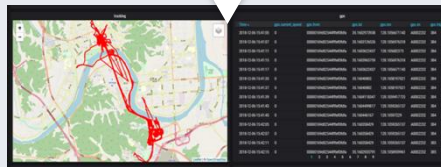
OEMPID

Device API



Vehicle Platform

Converting various vehicle sensor data gathered from OBID device as per platform specification



Tool



OS

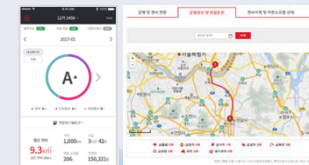
OEMPID
(Unix, Linux, Windows)

RestfulAPI



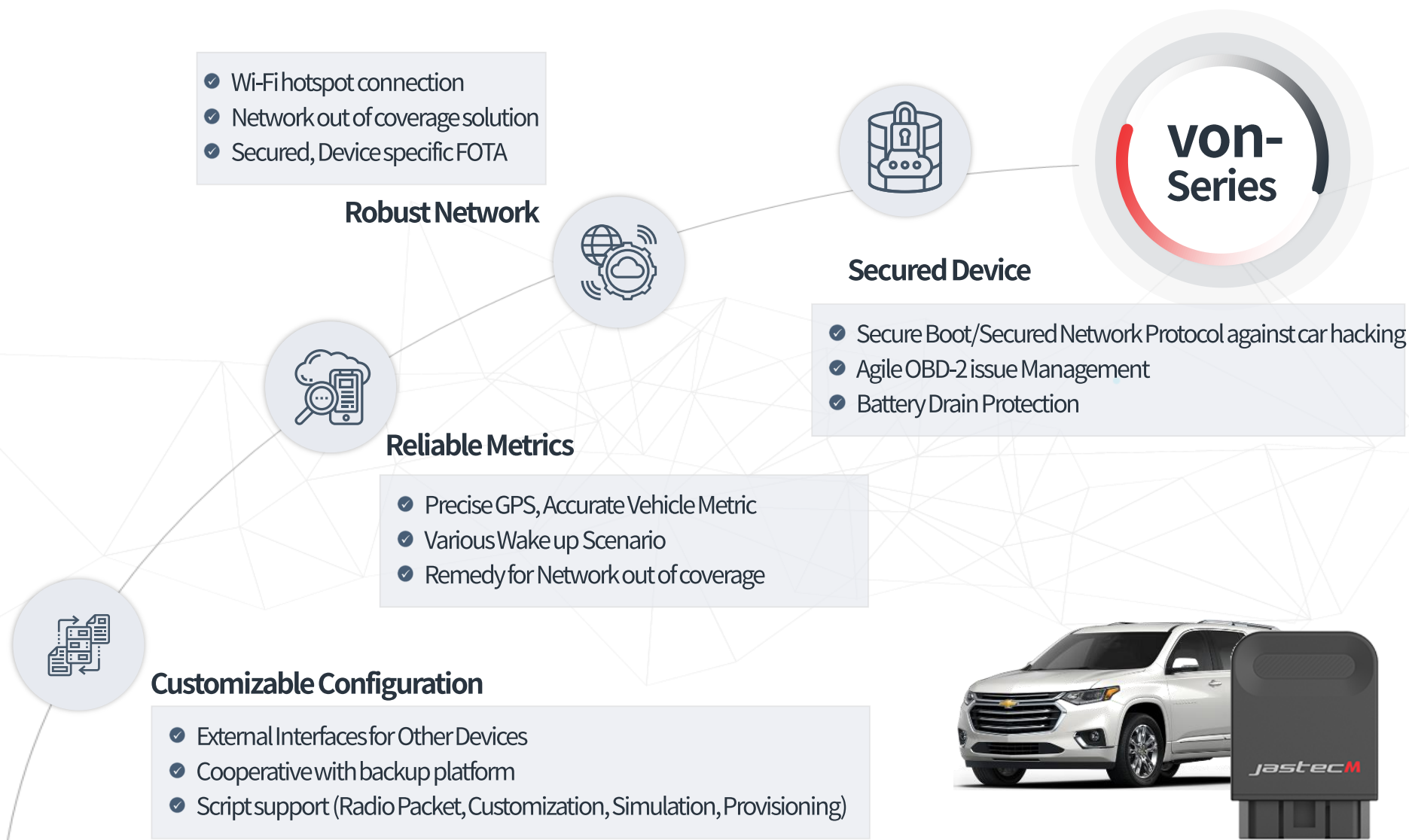
Presentation [ViewCAR Service]

Service level interface in app/web based on telemetry data platform



Server API

Key Features of von Series





von-U41

Launched (05.2019)



- ✓ T-Mobile network-based LTE Cat.1 device for U.S. connected car market.
- ✓ JastecM and Motus has prepared to launch **vehicle reimbursement service** for **Coca Cola, Papa John's Pizza and CVS** in **2020**, but it's been delayed due to pandemic impact on Rental Car industry in US.

Global Model

LTE Cat. M1 Price competitive device (Global roaming)

Chapter II Products

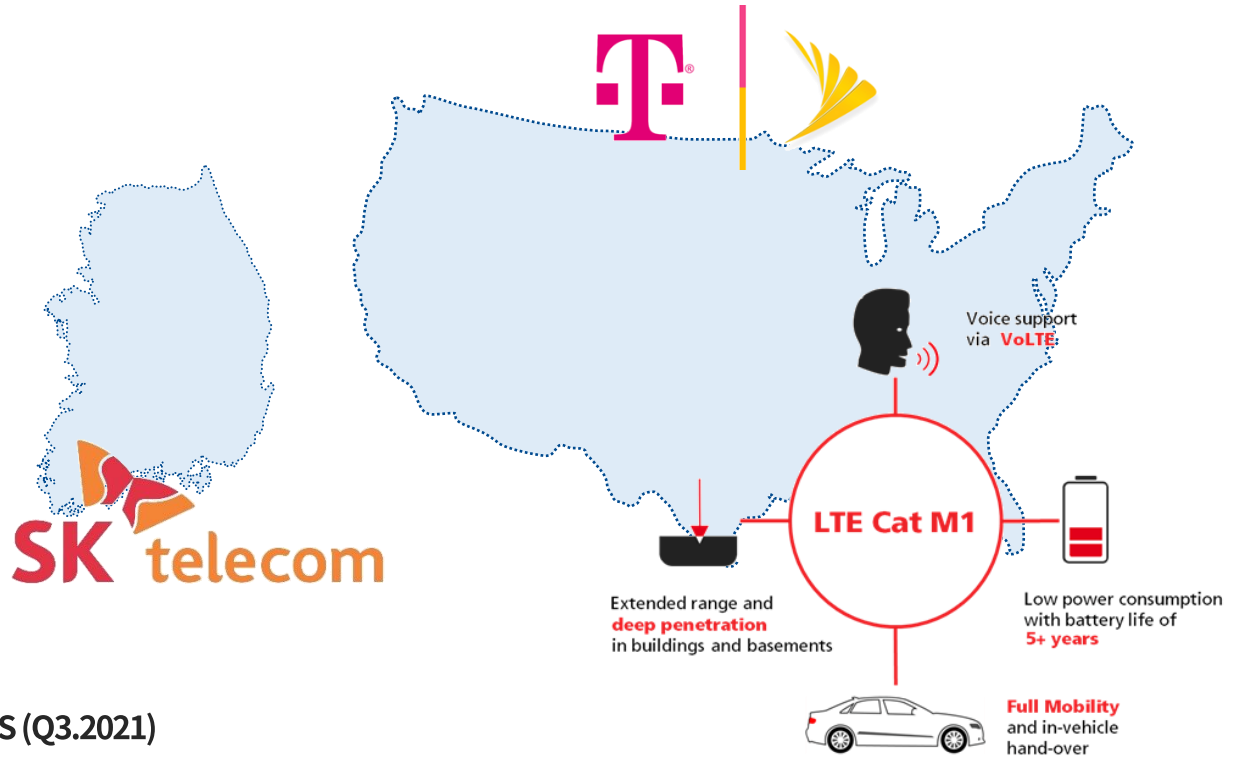
From habit to economic

jastecM



von-S51

KOREA certified (05.2021) & To be certified in US (Q3.2021)



- ✓ LTE Cat.M1 (**Global Band**) device to find more global business opportunity.
- ✓ Price competitive with **low data usage** of Cat.M1



von-U61

Certified & Launched (05.2021)



- ✓ von-U61 is to expand driver's experience in vehicle by interconnecting to various connected car features.
- ✓ von-U61 connects to multiple devices such as ELD*, ADAS, AI specker, dashcam etc.
- ✗ **Wi-Fi Hotspot available to connect with commercial vehicle's ELD, Driver status monitoring and FMS etc.**

* ELD: Electronic logging device that is mandatory for commercial vehicle in US to record driving time & hours.

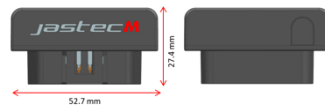
Products for network out of coverage area (Jungle/desert) & Doosan Infracore Co., Ltd.

von-P10 Series (Basic)

von-P 11

Basic Acts as a client which gathers essential vehicle data (Driving summary, G-sensor, vehicle condition)

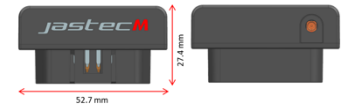
- ✓ Serial : RS232
- ✓ Wi-fi : IEEE 802.11 b/g/n
- ✓ Bluetooth : BT EDR / BLE v4.2
- ✓ G-Sensor: BMI 160 (6-axis)



von-P 12

Basic+
Wi-fi External Port Acts as a client which gathers essential vehicle data (Driving summary, G-sensor, vehicle condition) + external port available for Wi-fi antenna1

- ✓ Serial : RS232
- ✓ Wi-fi : IEEE 802.11 b/g/n
- ✓ Bluetooth : BT EDR / BLE v4.2
- ✓ G-Sensor: BMI 160 (6-axis)
- ✓ ※ External port for Wi-fi antenna

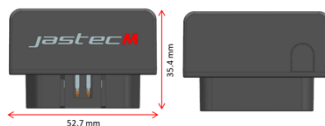


von-P20 Series (USB Onboard)

von-P 11

USB Onboard USB host board is added to interlock with another connected device

- ✓ Serial : RS232
- ✓ Wi-fi : IEEE 802.11 b/g/n
- ✓ Bluetooth : BT EDR / BLE v4.2
- ✓ G-Sensor: BMI 160 (6-axis)
- ✓ USB Host Board

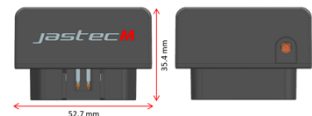


von-P 12

USB + Wi-fi External Port USB host board is added to interlock with another connected device + external port available for Wi-fi antenna

- ✓ Serial : RS232
- ✓ Wi-fi : IEEE 802.11 b/g/n
- ✓ Bluetooth : BT EDR / BLE v4.2
- ✓ G-Sensor: BMI 160 (6-axis)
- ✓ USB Host Board

※ External port for Wi-fi antenna



Features of Platform Service

Vehicle service models based on 'Shared Data'

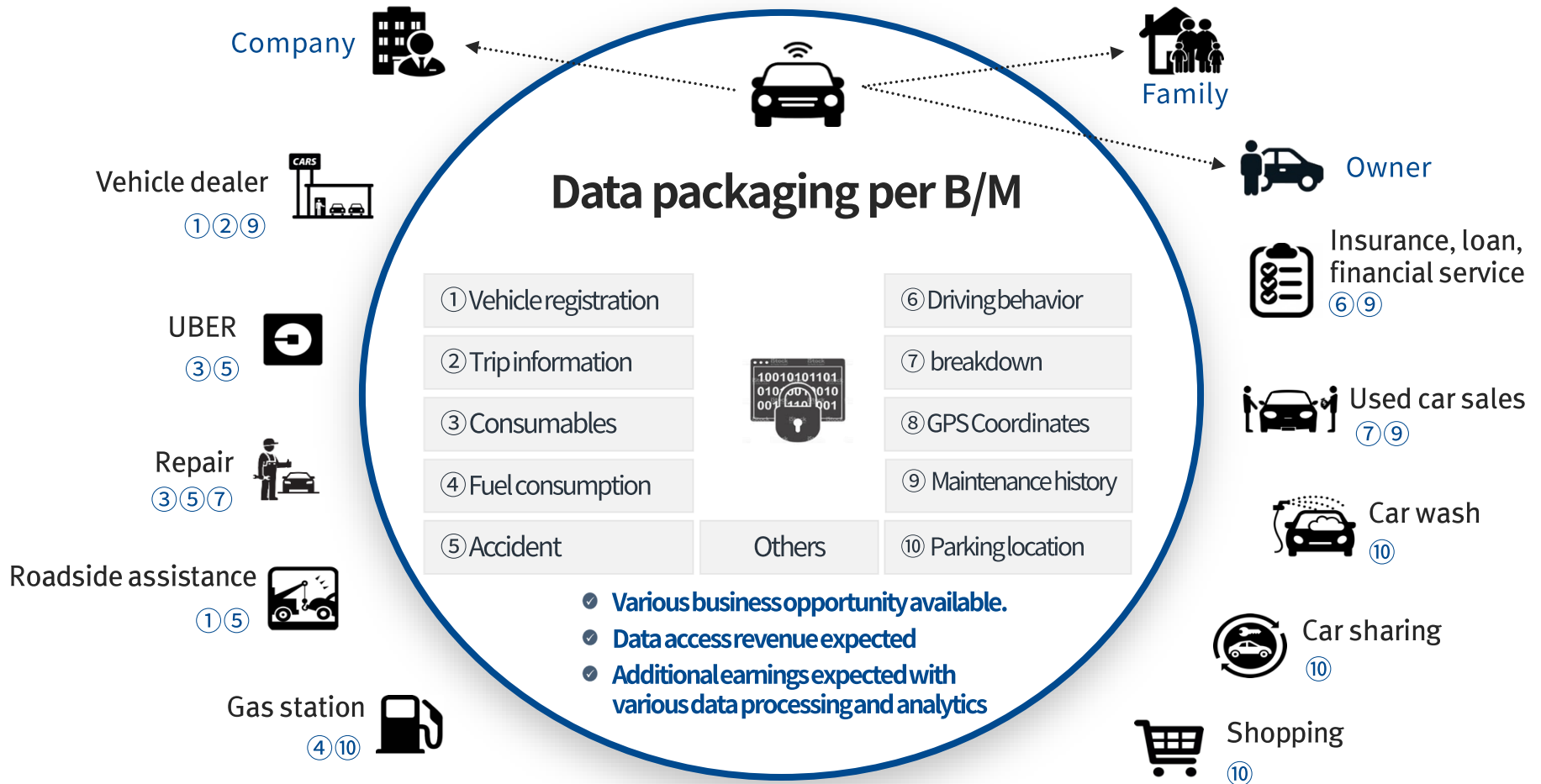
From habit to economic

jastecM

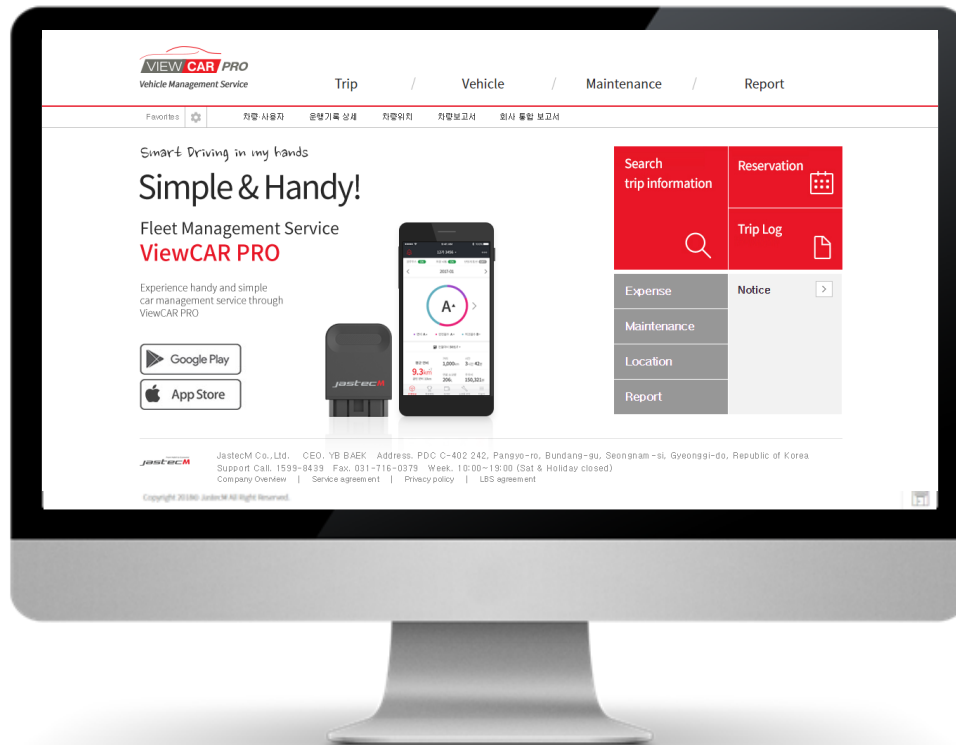
Chapter II Products

Data collected based on user verification & consent of data use

Up-to-date technology trend



ViewCAR is a tool for gaining an access to vehicle related services as shown below.



Vehicle use reservation



Trip route & Event location monitoring service



Vehicle breakdown monitoring



Real time accident report

Mobile App for Drivers

Chapter II Products

From habit to economic

jastecM



Trip information (Location, route, event, distance)

Driving behavior • Scoring feature

Tool kit for efficient cost management

Diagnostics / Consumables management

Location based even features

O2O Business

- ✓ Trip log management and vehicle use reservation feature for commercial clients
- ✓ Vehicle management in detail

Available on the
App Store

ANDROID APP ON
Google play

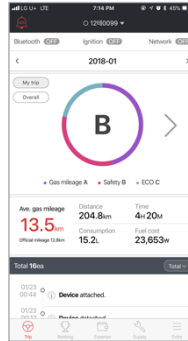
Key Features of Application

Chapter II Products

From habit to economic
jastecM

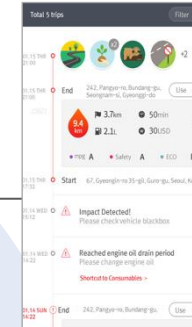
Safety & Eco Score

Driving score based on OBD metric data (Speed, RPM, Gyro) gathered from a vehicle.



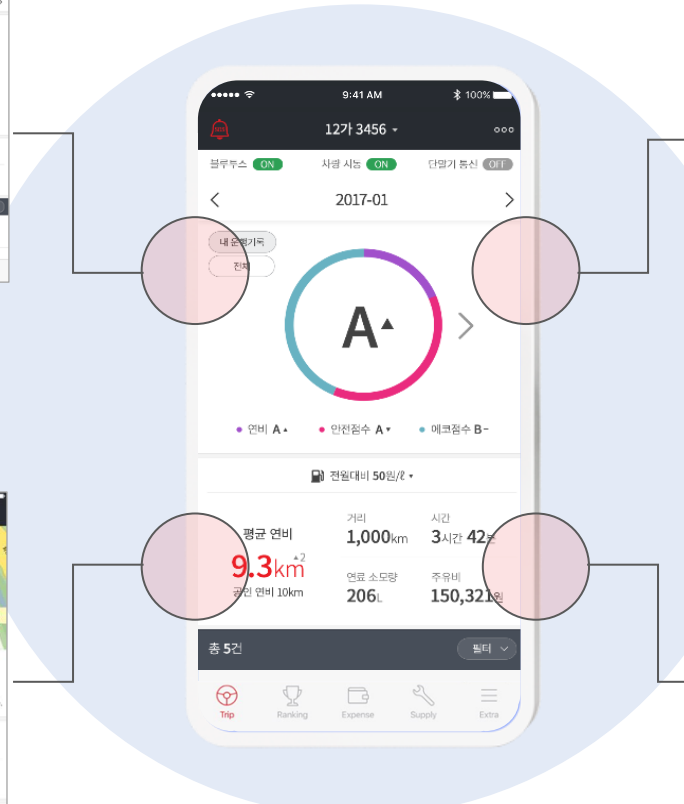
Trip summary

The driving history by timeline available. (Mileage, MPG, Time, Route)



Hard acceleration & deceleration push notification

Each time a driver accelerates or brakes harshly, a push message is appeared on driver's device.



Driving Behavior Analysis

The actual driving patterns of a vehicle operator to identify unsafe practices or policy violations.





Business Area

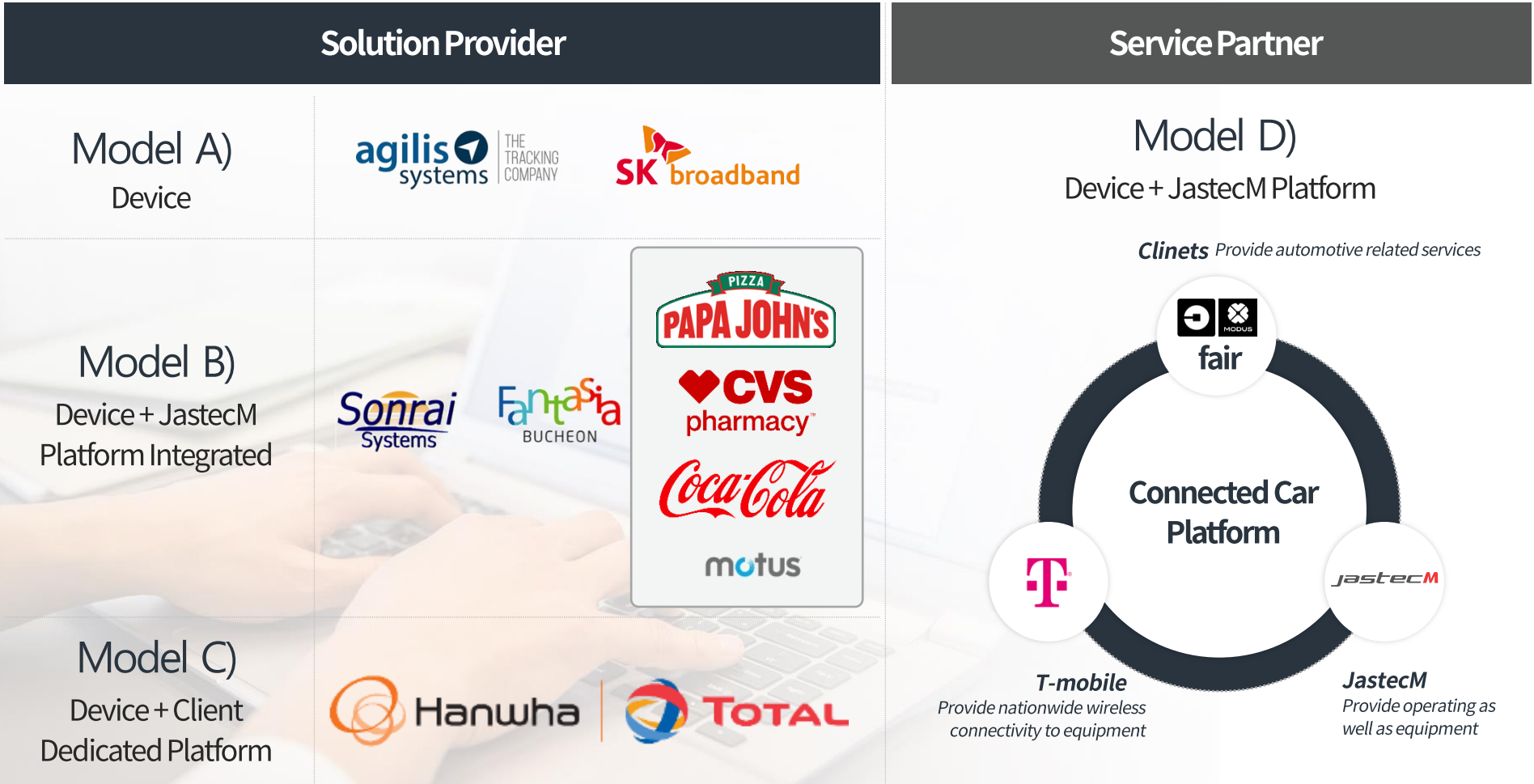
Business Model Overview

Business Strategy Roadmap

03 Chapter

Market Needs

Flexible • **Quick** B/M development by customer type (B2B, B2B2C etc.)



Business Strategy Roadmap

Chapter III Business Area

From habit to economic

jastecM

Build mid & long-term roadmap for market expansion

~2019
Groundwork

2020
Commercialize

2022
Application

※ Projects delayed due to COVID-19 & Global chip shortage

Device · Service development & Market test



- ✓ **Connected car platform provider in Korea**
: Hanwha Total, Kakao VX, City of Bucheon, Incheon airport limousine
- ✓ **Reliable and trustworthy service**
: Service delivered to many governmental research facilities (ie, KoRoad, KECO, TS, etc.)
- ✓ **Ongoing projects with expandability**
: PoC with various features (Heavy-duty, Special use, electric vehicles etc.)

North America Market



- ✓ **Breaking into N.A. market**
: Build a business model with T-Mobile
- ✓ **Affiliate programs proposed to transport industry (ie, Uber, motus, Sonrai, etc.)**
- ✓ **Projects in progress (Motus, Sonrai, Agilis systems)**
- ✓ **Plan to advance into ASEAN market**

Service Models

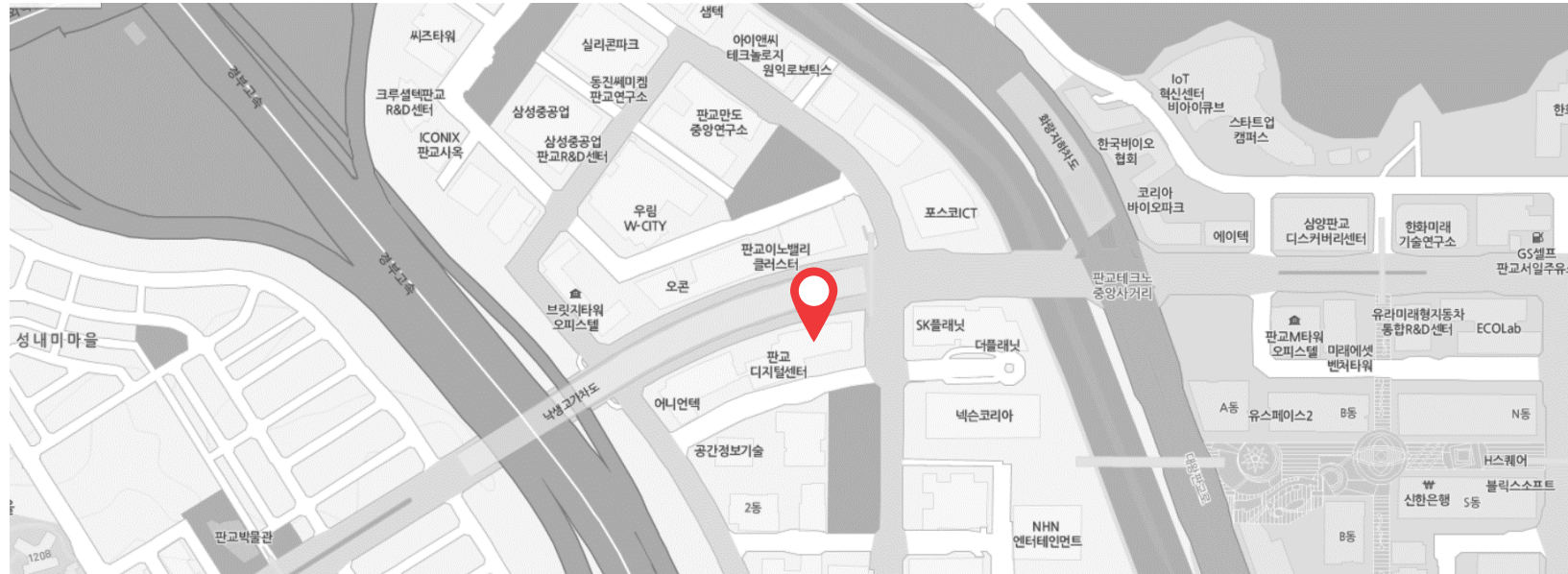


- ✓ **Various service models based on platform**
: Usage based insurance (UBI), Extended warranty insurance (EWI), etc.
- ✓ **Expecting various business models**
- ✓ **Expand business into Europe market**

Contact Us

From habit to economic

jastecM



JastecM Co., Ltd.

H.Q : PDC C-402, 242, Pangyo-ro, Bundang-gu, Seongnam-si, Gyeonggi-do, Republic of Korea

Tel : +82-70-4755-5565

E-Mail : triplog@jastecm.com