Made for micro-transit and the urban environment **Jest Electric**

Halit Özgür ALTINSOY KARSAN





"There's no chance that iPhone is going to get any significant market share. No chance. "

> Steve Balmer,2007 Former Microsoft's CEO

" I believe in the horse. The automobile is only a passing phenomenon. "

Kaiser Wilhelm II, 1905 Last German Emperor

" I think there is a world market for maybe five computers. "

Thomas Watson, 1943

President of IBM









Connecting rate of improvement and reach today ...

\$5 million vs. \$400

Price of the fastest supercomputer in 1975¹ and an iPhone 4 with equal performance

230+ million

Knowledge workers in 2012

\$2.7 billion, 13 years

Cost and duration of the Human Genome Project, completed in 2003

300,000+

Miles driven by Google's autonomous cars with only one accident (human error)

Зx

Increase in efficiency of North American gas wells between 2007 and 2011

85%

Drop in cost per watt of a solar photovoltaic cell since 2000

... with economic potential in 2025

2–3 billion

More people with access to the Internet in 2025

\$5–7 trillion

Potential economic impact by 2025 of automation of knowledge work

\$100, 1 hour

Cost and time to sequence a human genome in the next decade²

1.5 million

Driver-caused deaths from car accidents in 2025, potentially addressable by autonomous vehicles

100-200%

Potential increase in North American oil production by 2025, driven by hydraulic fracturing and horizontal drilling

16%

Potential share of solar and wind in global electricity generation by 2025³

Source: McKinsey Global Instute 2013





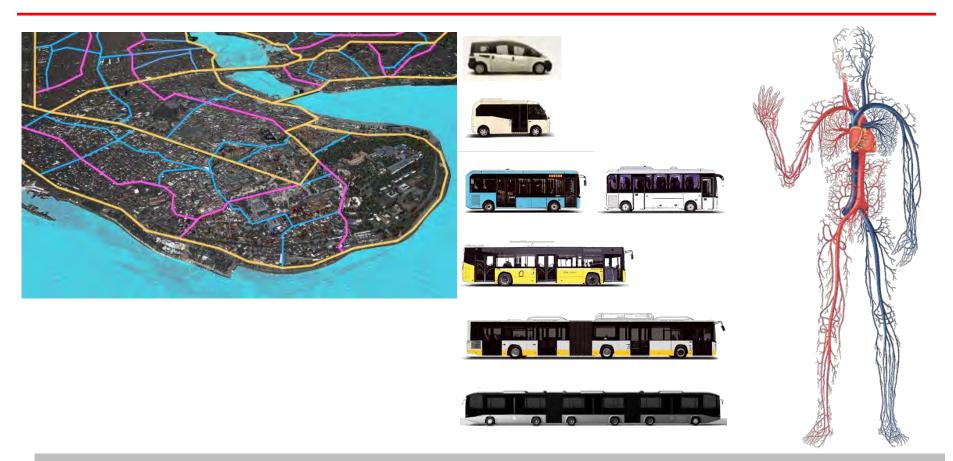
Karsan since 1966







Karsan as a Solution Provider

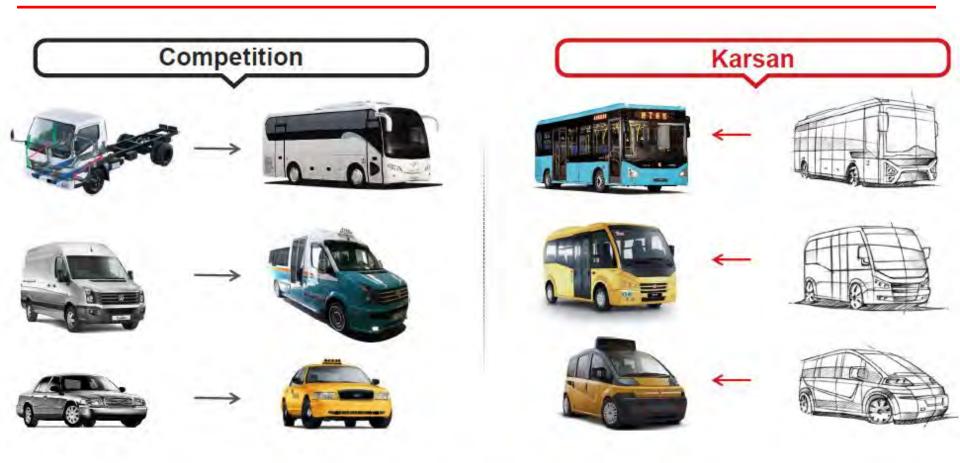


- > Inspired by the veins of a human body
- > A wide range of vehicles from 5 to 25 meters





Karsan Design Philosophy



Adapted solutions based on high volume, standard products



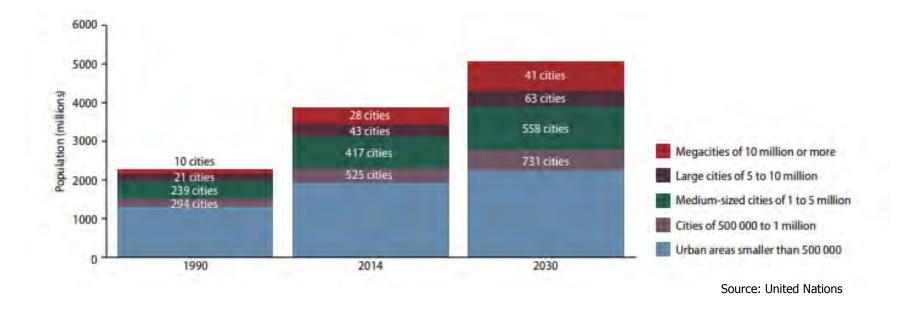


Customized solutions designed from scratch





Urbanization



- In 1900s, Only 15% of the world population was living in cities. By 2010, this rate has came up to 50
- > 12.5 % of the world urban dwellers live in Megacities

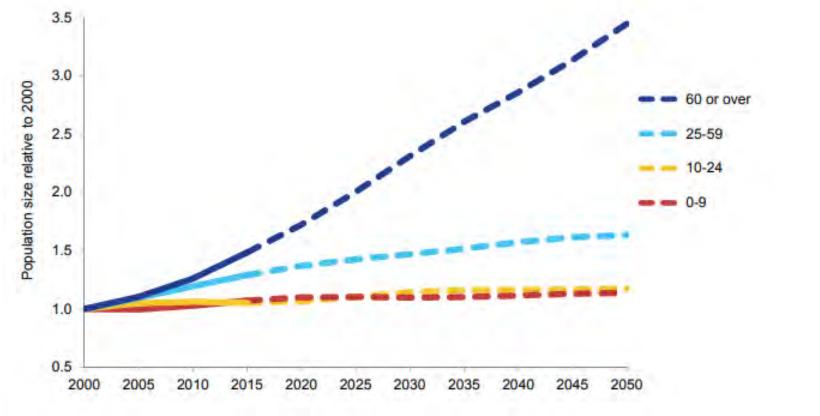






Aging world population

KARSAN



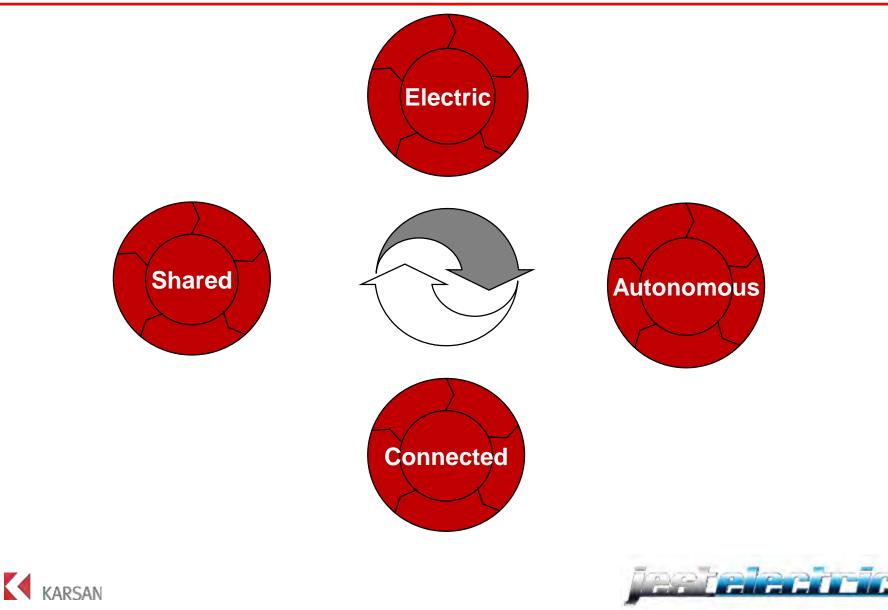
Source: United Nations (2015). World Population Prospects: The 2015

Population is poised to become one of the most significant social transformations of the

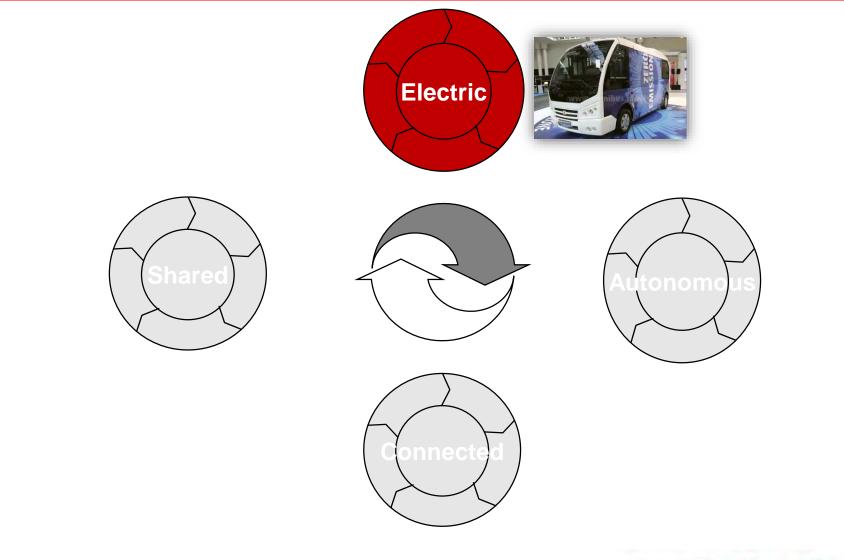
twenty-first century, with implications for nearly all sectors of society



Future of Automotive Industry



Electric

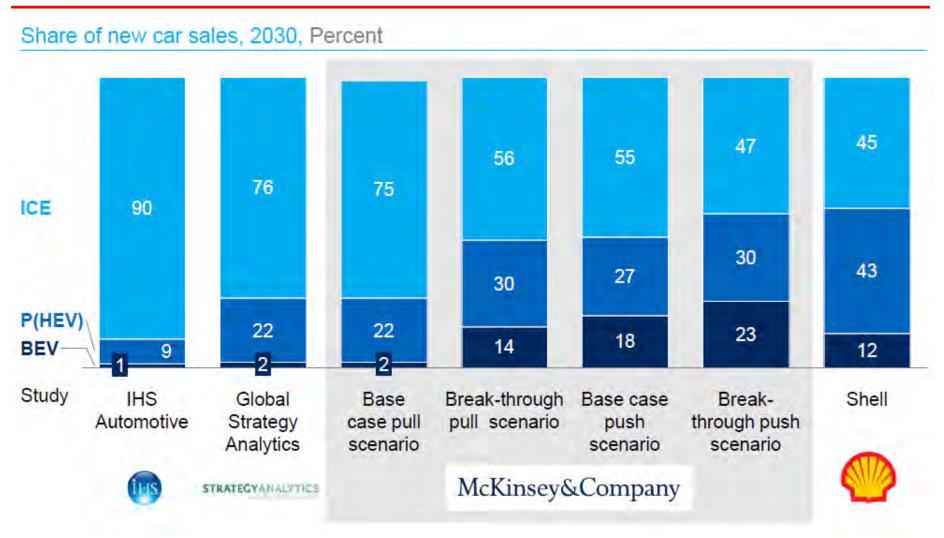






Market

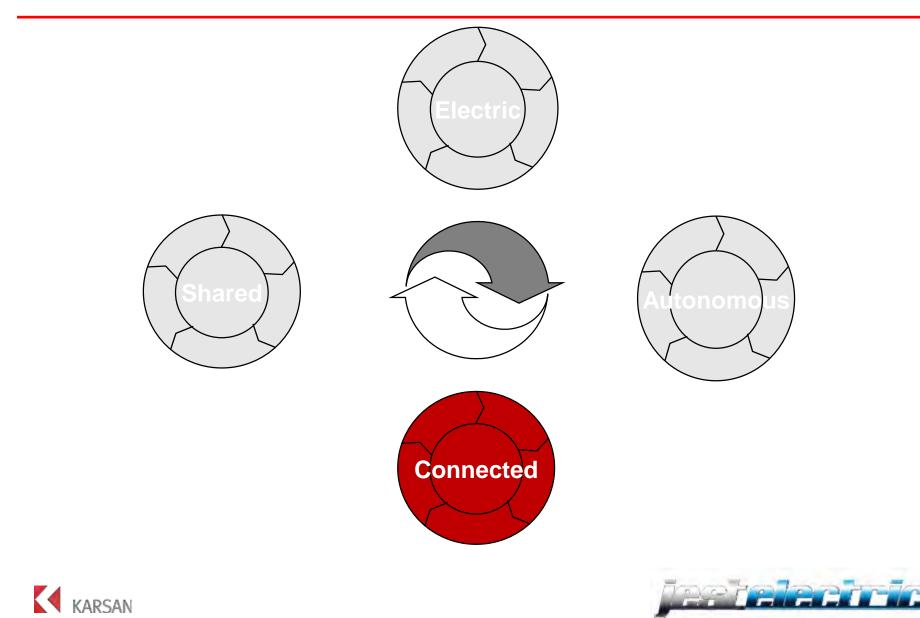
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Source: McKinsey&Company Analysis

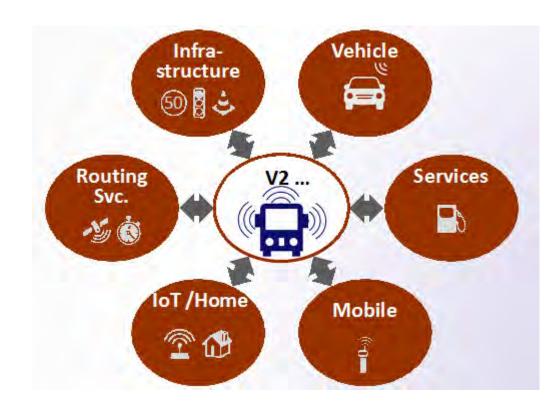


Connected

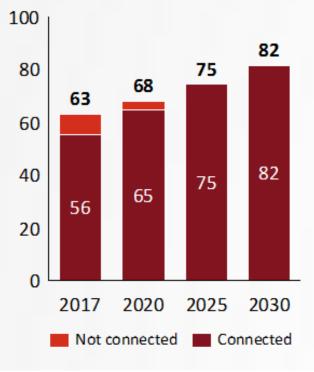


Connected

KARSAN



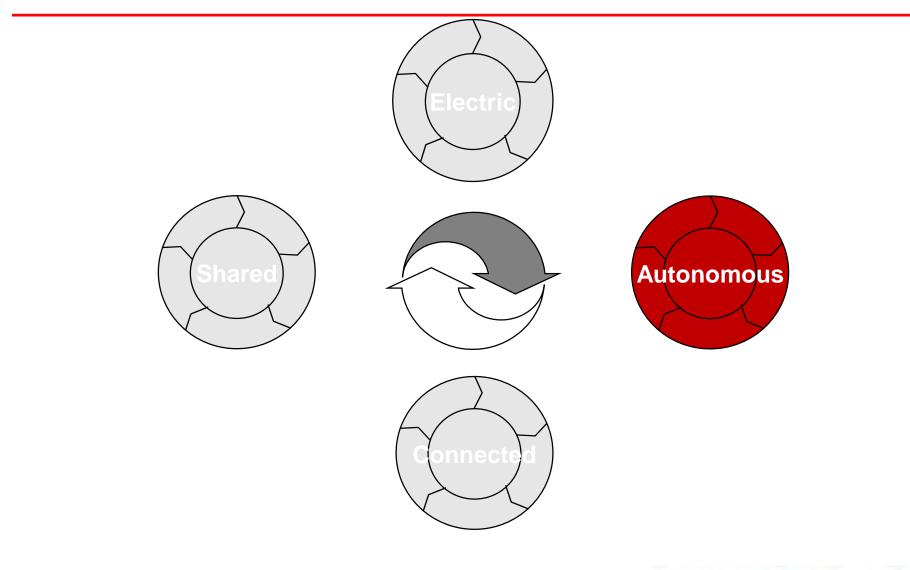
New car sales: Connected (US, EU, China), in millions



Source: Autofacts, PwC/ Strategy Analysis



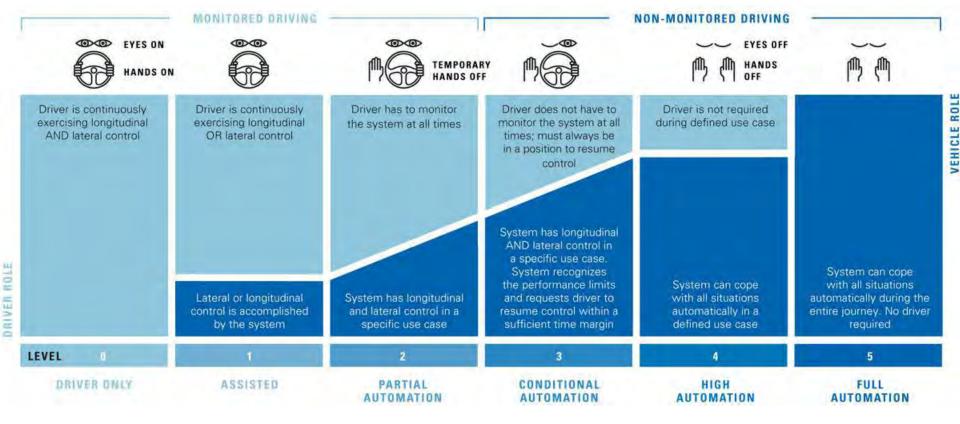
Autonomous







Definiton of Autonomy



Source: U.S. Department of Energy





Launch Status of AV's

OEM	Launch Date			
	Level 3	Level 4	Level 5	
	2017	2020	2020	
	2018	2020	2020s	
GM GM	2018&2019	2019	2019	
ΤΟΥΟΤΑ	2017	2020	Post 2025	
	2018	2021	Post 2025	
BMW 🇳	2021	2021	Post 2020	
PSA PSA	2020	2021	ND	
HONDA	2020	2025	ND	
HYUNDAI-KIA	2018	2021	ND	
FORD Ford	ND	2021	ND	

Legend

EARLY

AVERAGE

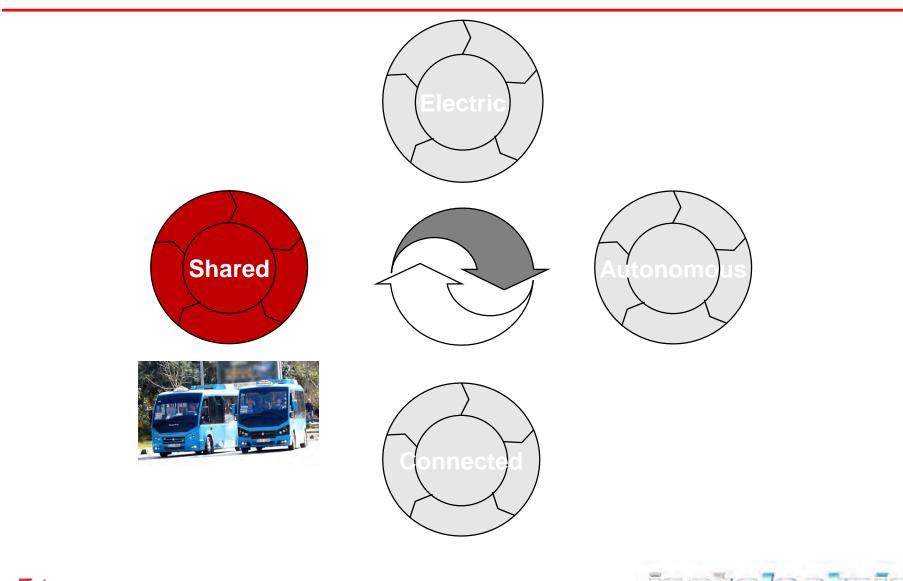
LATE

Source: Bloomberg Intelligence





Shared



KARSAN

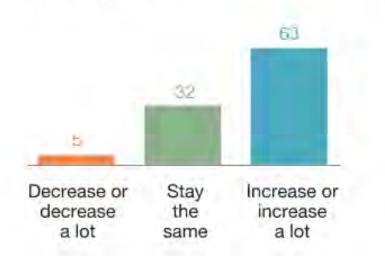
Shared

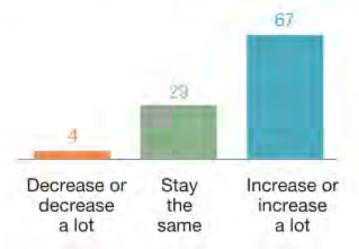
Using ride-hailing services, % of respondents

If you use ride-hailing services, how will your usage evolve in the next 2 years?

Using car-sharing services, % of respondents

If you use car-sharing services, how will your usage evolve in the next 2 years?





Source: McKinsey&Company



Share-economy in Turkey

Minibus Concept: Indispensable complement to modern urban transit



Istanbul Public Transportation

Transportation Mode	# of Line	# of Vehicle	# of Passenger per day (mio)	Percentage in motor vehicle transportation
Bus	763	5800	2.6	16
Minibus	461	7032	1.7	11

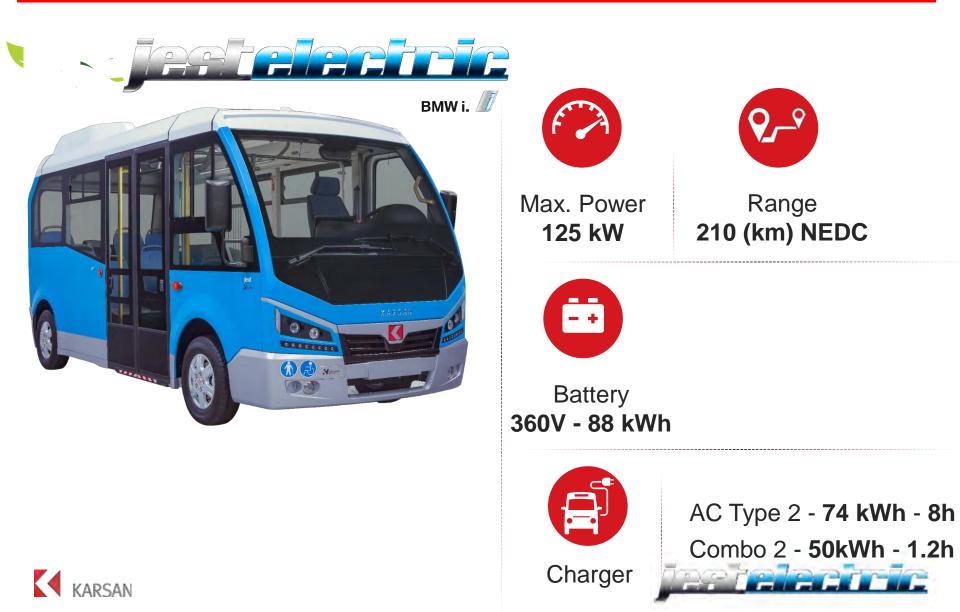
Source: Istanbul Annual Transportation Report 2016











Jest Electric



High Maneuverability



Superior Driving Compartment





Jest Electric



Panoramic view



Original **low floor** with **wheelchair accesibility**









Halit Özgür Altınsoy ozgur.altinsoy@karsan.com.tr



