

Automotive Africa – Mega Trends

An Industry Paper highlighting the key trends impacting the future growth of African continent and its Automotive Industry

Authored for Automechanika Dubai 2014

"50 Years of Growth, Innovation and Leadership".
June, 2014



F R O S T  S U L L I V A N

INTRODUCTION – AFRICAN CONTINENT OVERVIEW



Top 10 Fast Forward Facts for Africa: Did You Know That....

1. By 2020, about **43%** of the people living on the African continent will live in **urban areas**.
2. Africa as a region will account for **15% of the world's urban population by 2020**.
3. The African **middle class** population will be approximately **360.0 million by 2020**.
4. **220 million Africans** are only able to **meet basic needs** now, but **will become consumers** by 2017.
5. The **combined spending power** from the continent's **top 18 cities** by 2020 will be \$1.3 trillion
6. **Regional Trade Integration** in Africa will bring about \$216.00 billion in trade value from Intra-Trade.
7. **Mobile penetration** in Africa will reach 90% by 2020 with **internet penetration** also exceeding 60% rate by 2020.
8. **Mobile Transactions to account for 75% of all banking transactions by 2020**.
9. e-Government Initiatives will receive \$9.60 billion in investments from the African Governments over the next decade.
10. Renewable energy capacity of Africa will reach 12,000 MW by 2017.

Source: Frost & Sullivan analysis.

Top Mega Trends in Africa



Photo Credits: Dreamstime. Source: Frost & Sullivan analysis.

Three Main Trends in Urbanisation: **Development of Mega Cities, Mega Regions, Mega Corridors**

Mega Cities, Regions, Corridors - Global



MEGA CITY

City with a minimum population of 8.0 million and a GDP of \$250.0 billion in 2025 (14 Mega Cities in 2013 and 25 Mega Cities in 2025)

EXAMPLE: Cairo



MEGA REGIONS

Cities combining with suburbs to form regions (Population over 15.0 million)

EXAMPLE: Lagos and Kinshasa



MEGA CORRIDORS

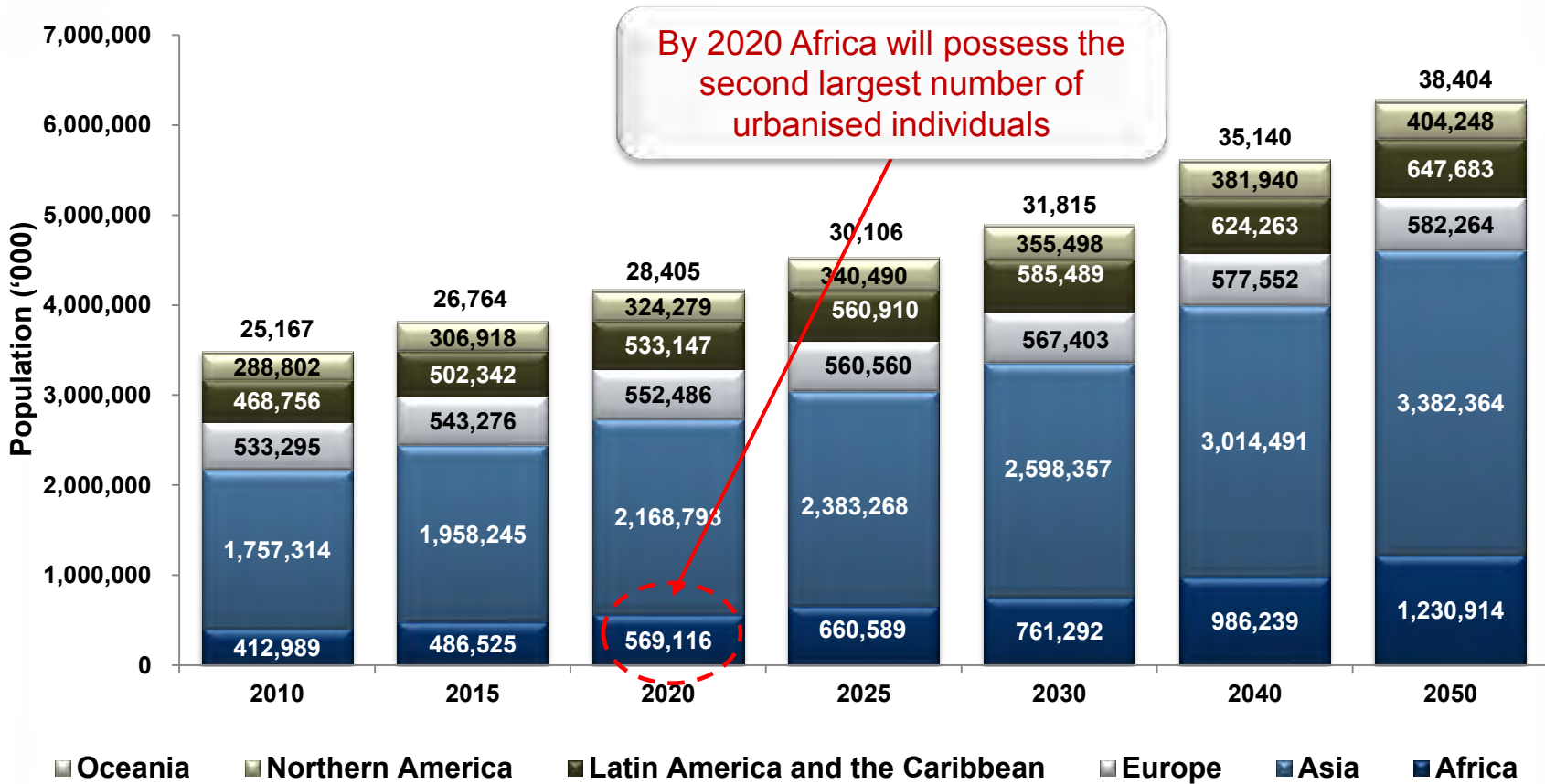
The corridors connecting two major cities or Mega Regions (60 km or more apart, and with a combined population of 25.0 million or more)

EXAMPLE: North-South Corridor

Photo Credits: Dreamstime. Source: Frost & Sullivan analysis.

By 2020 Africa Will Account for 15% of the World's Urban Occupants; Africa's Resources Will Remain the Primary Driver of Urbanisation

Global Urban Population by Region, 2010-2050



Source: UN Department of Economic & Social Affairs, Frost & Sullivan analysis.

Corridors will Unlock Economic Potential of Landlocked Countries Leading to Better Inter-Dependence Among Cities and Regional Growth

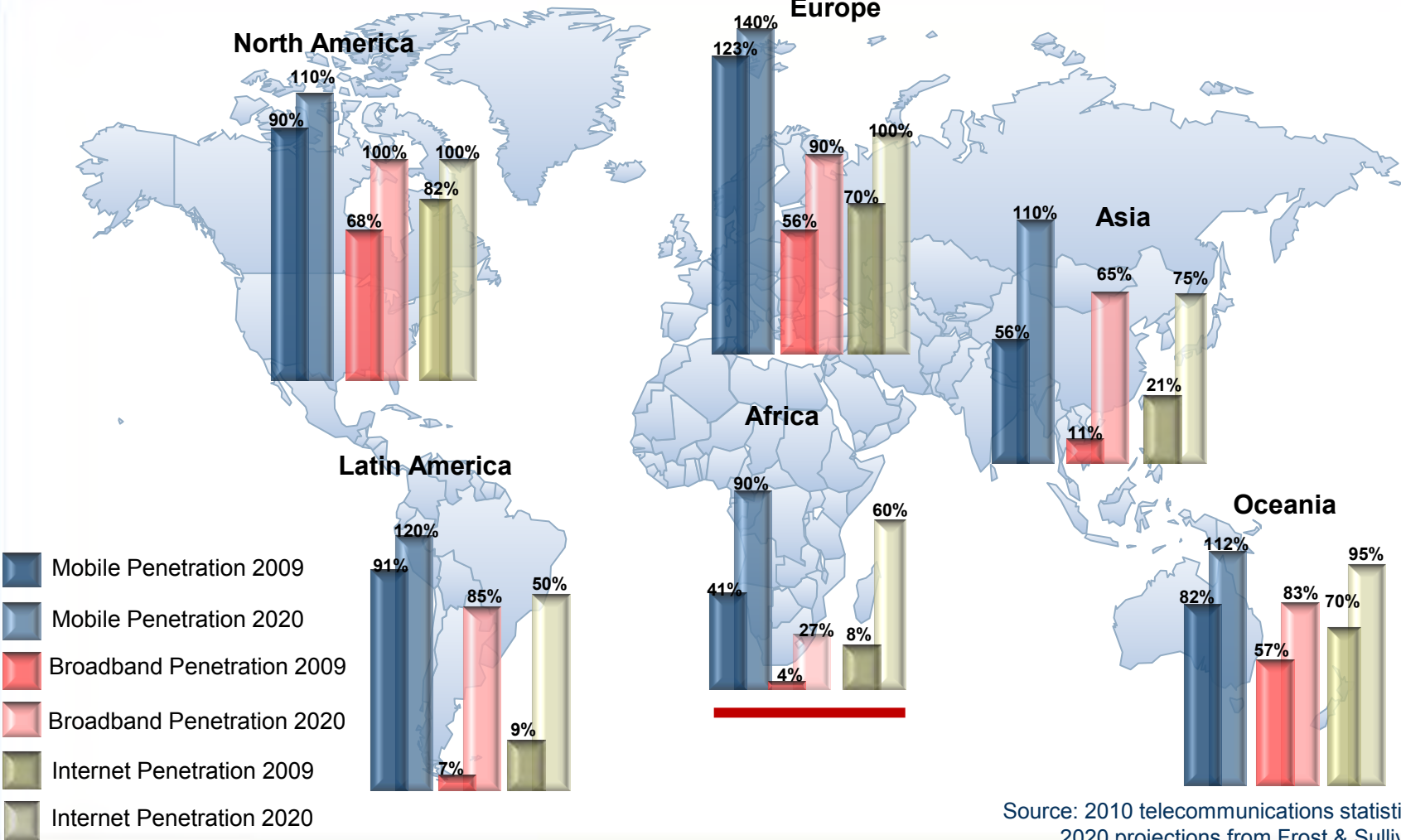
Mega Corridors, Africa, 2050



Source: UN-Habitat, 2010; Frost & Sullivan analysis.

Markets with 80% Broadband Penetration are More Than Twice as Innovative as Countries with 40% Penetration

Mobile, Broadband, and Internet Penetration per Region, Global, 2010 and 2020
 Currently, 77% of the World's Population Holds a Mobile Subscription



Source: 2010 telecommunications statistics from ITU, 2020 projections from Frost & Sullivan analysis.

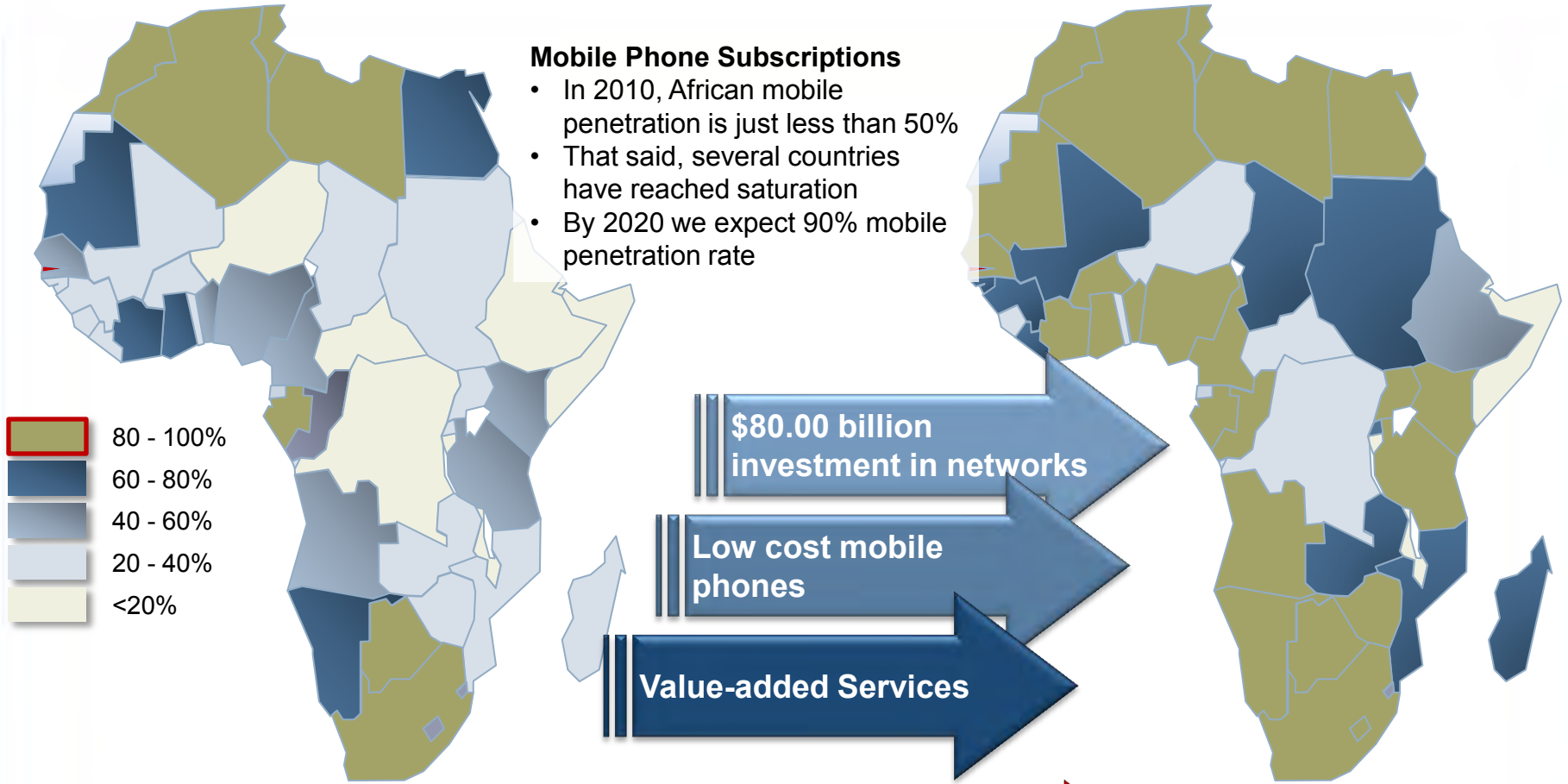
Annual Growth Rate of 9% till 2020 will allow Africa to reach **Mobile Penetration Rate Close to Market Saturation**

Mobile Telephone Penetration Rates: 2011

Mobile Telephone Penetration Rates: 2020

Mobile Phone Subscriptions

- In 2010, African mobile penetration is just less than 50%
- That said, several countries have reached saturation
- By 2020 we expect 90% mobile penetration rate



Mobile subscribers 2011
550.0 million

Mobile subscribers 2020
1,170.0 million

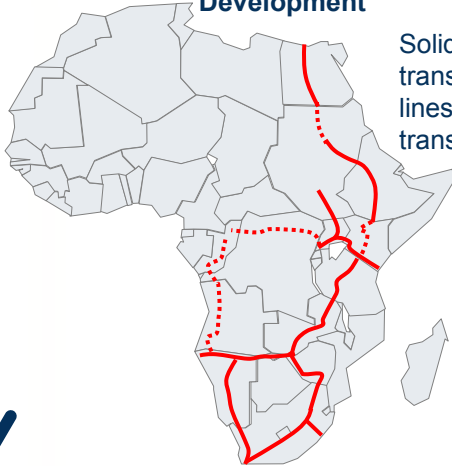
Growth Opportunities

Source: Frost & Sullivan analysis.

Transport Route Integration Across the African Continent will increase Inter-Continental Trade and Drive Economic Growth

Numerous projects are aimed at improving Africa's transport infrastructure

African Transport Infrastructure Development



Solid red line - existing transport routes, dotted lines - planned transport routes

<i>Southern Sudan Roads</i>	<i>Value (\$ Million)</i>
Current rail projects	225.0

<i>Uganda Roads</i>	<i>Value (\$ Million)</i>
Current road projects	548.8
Future road projects	2,952.0

Transport projects in Africa will drive down the current high cost of transport, which is hindering growth and is among the highest globally...

<i>Kenya Roads</i>	<i>Value (\$ Million)</i>
Current road projects	807.0
Future road projects	313.0

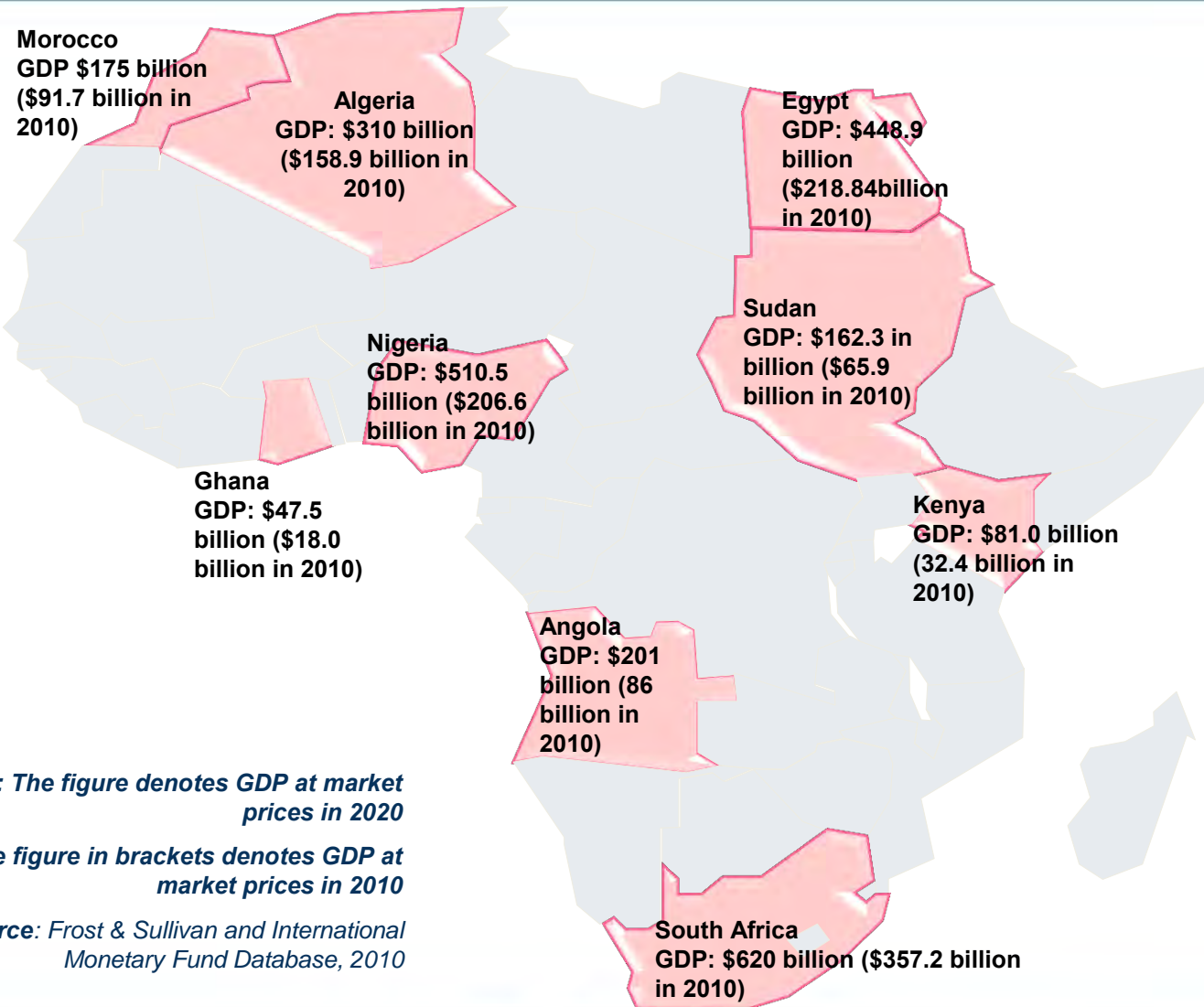
<i>Kenya Ports</i>	<i>Value (\$ Million)</i>
Current rail projects	332.0

Transport Costs (US cents per km)

West Africa	11c	China	5c
East Africa	8c	France	5c
Southern Africa	6c	USA	4c

Source: World Bank; Frost & Sullivan analysis.

Africa's Largest Economies and Engines of Growth to 2020



Note: The figure denotes GDP at market prices in 2020

The figure in brackets denotes GDP at market prices in 2010

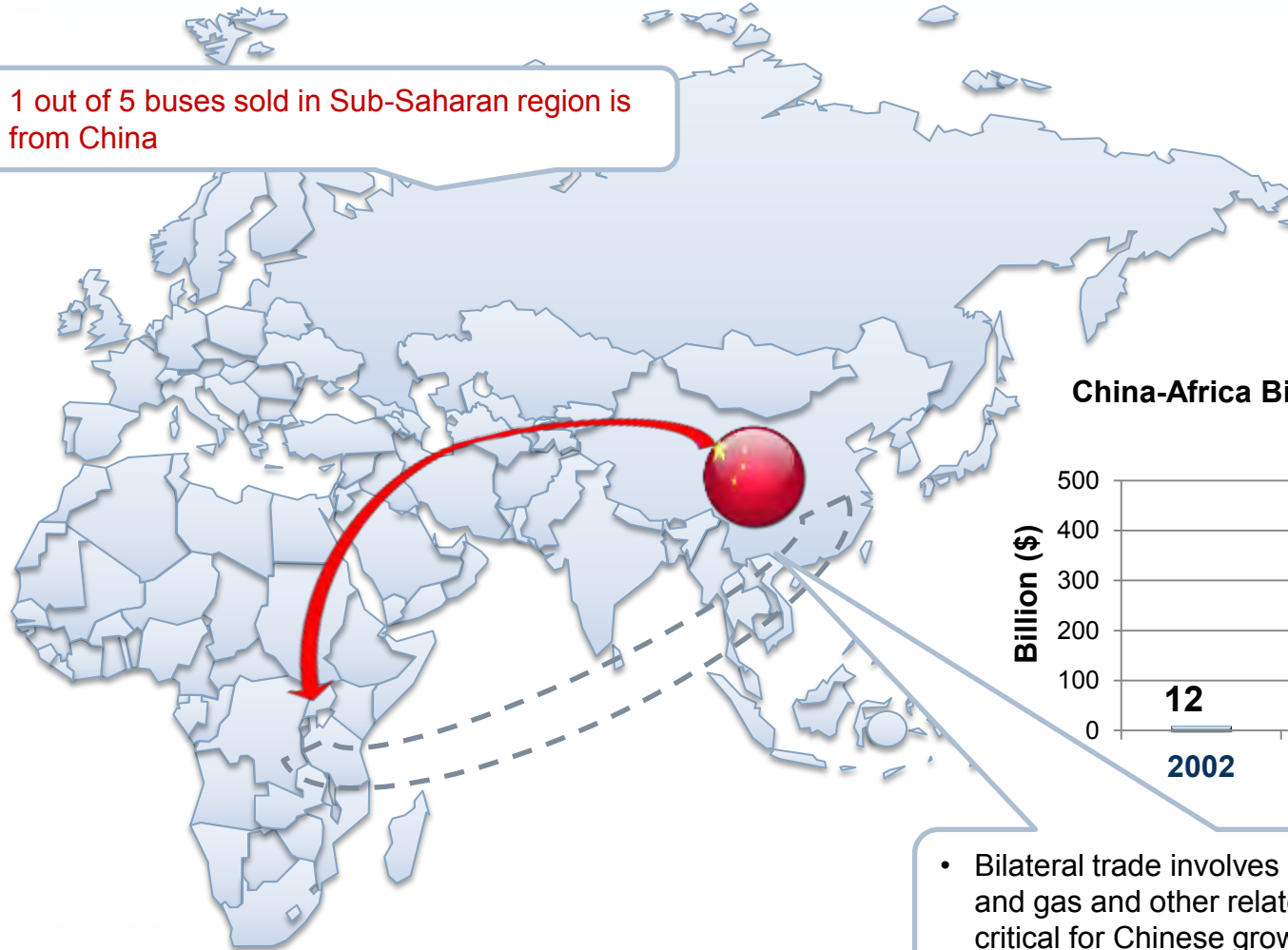
Source: Frost & Sullivan and International Monetary Fund Database, 2010

Foreign Investment

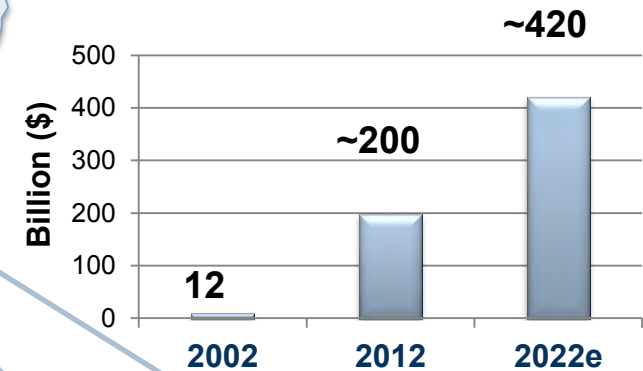
Increasing Foreign Investment Especially from China to Influence the Economical and Political Environment in African Nations;

Global CV Vision 2020: Chinese Investments—Africa: 2012–2013

- 1 out of 5 buses sold in Sub-Saharan region is from China



China-Africa Bilateral Trade, 2002-2022



- Bilateral trade involves export of minerals, oil and gas and other related materials which are critical for Chinese growth.

Dedicated Vehicles Being Developed for African Terrain



Flat-pack OX truck

<http://www.independent.co.uk/life-style/motoring/features/sir-torquil-norman-has-designed-a-flatpack-ox-truck-for-the-developing-world-8617814.html>



Mobius Motors - Expected launch price 10k

<http://www.mobiusmotors.com/vehicles/>

Same vehicle, multiple functions



AFRICAN AUTOMOTIVE MARKET OVERVIEW

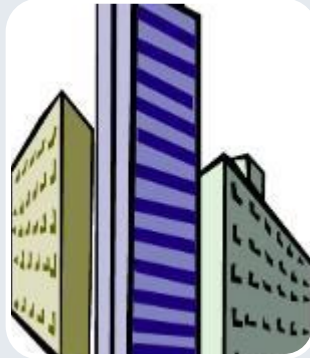


African Automotive Market Characteristics

A Battleground for Market Share and Customers in a low Volumes Market



4x4's, SUV's and Pickups continue to dominate across Africa



Government & corporate sales for major industries remain dominant channels



European & US brands are leading in North Africa but now Chinese and Korean are increasing their dominance



Japanese & Korean brands occupy top spots across **West and Sub-Saharan Africa**

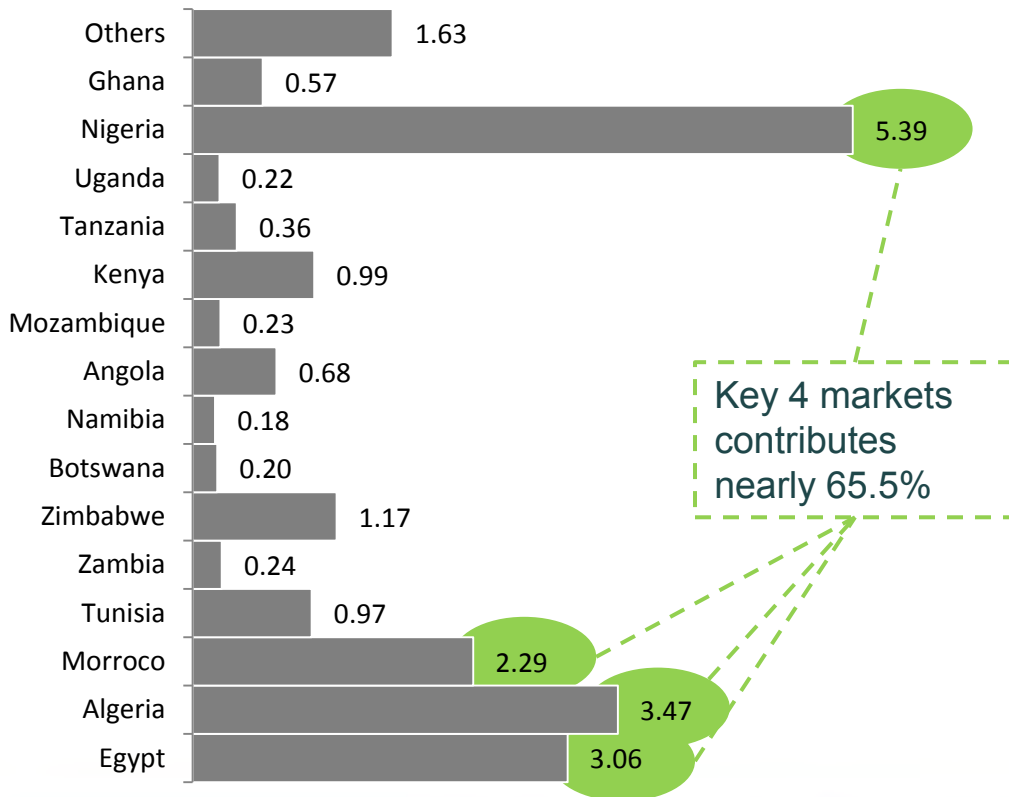


Competition is intense across the continent with new entrants from emerging brands from China and India

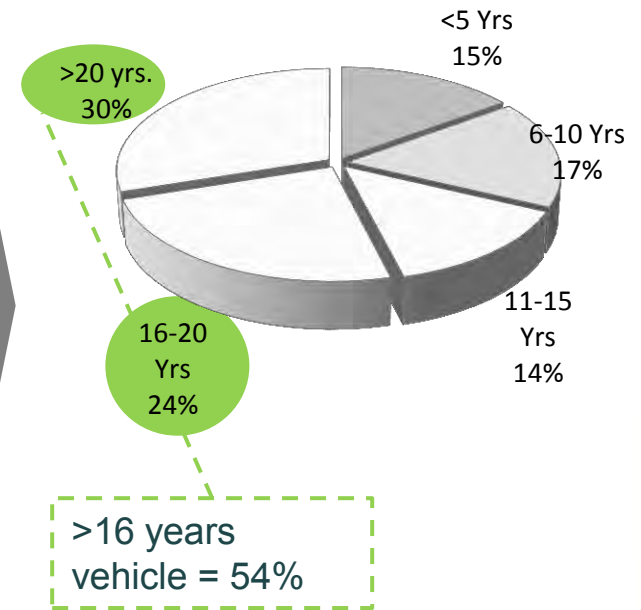
More than 21.6 million vehicles operational in Africa

The Top 4 account for more than 65% of all vehicles in Africa

- North Africa = nearly 11.0 Million
- Sub-Saharan Africa (excluding South Africa) = 10.6 million



- In Sub-Saharan countries more than 30 year old vehicle are still available in UIO



Base Year 2013; Source: Frost & Sullivan Analysis

These vehicles generate demand for nearly \$7.68 billion*

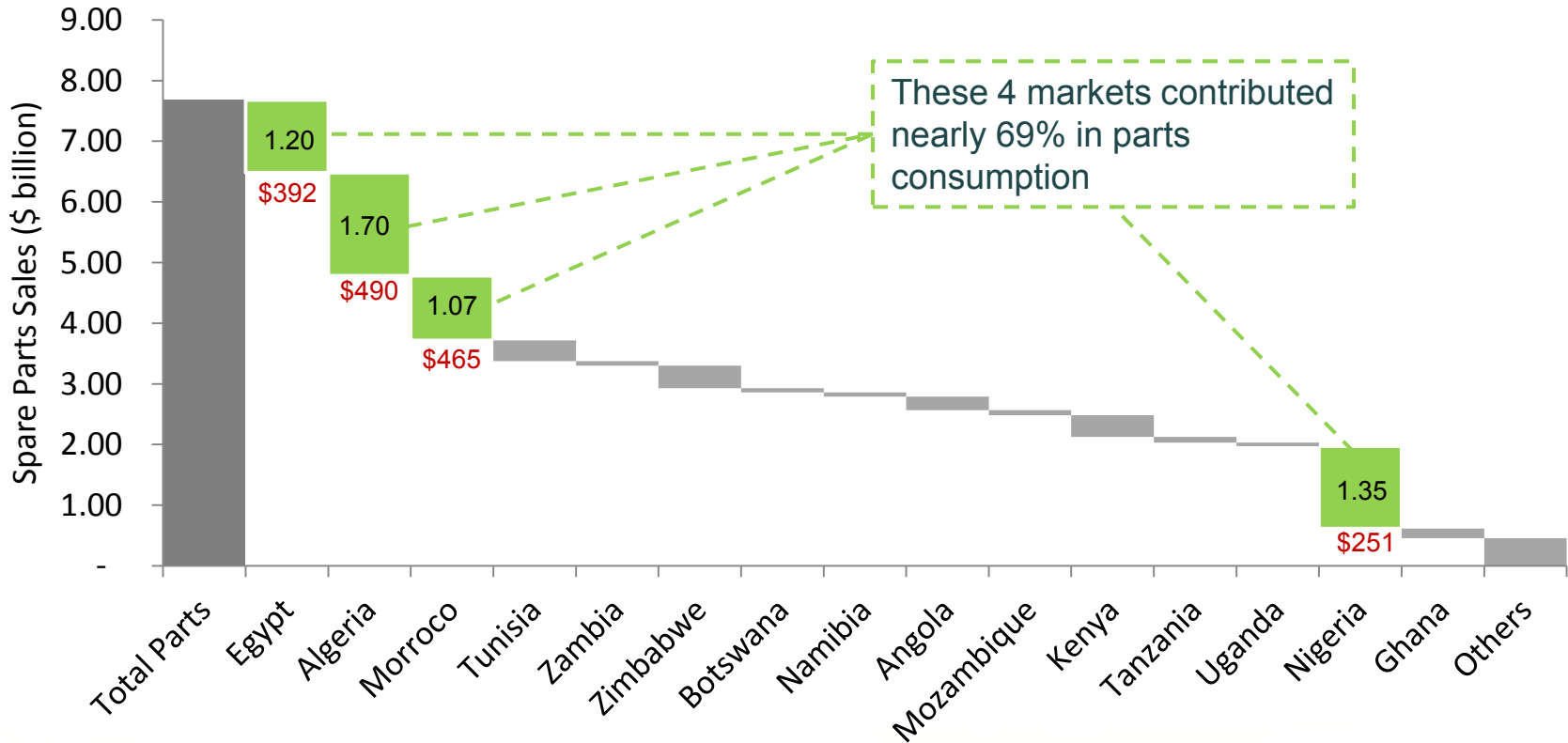
Average cost of repair in North Africa = \$423 per vehicle/year

Average cost of repair in Sub Saharan Africa = \$285 per vehicle/year

- North Africa = nearly \$4.65 billion (60.6%)
- Sub-Saharan Countries (excluding South Africa) = \$3.03 billion (39.4%)

Overall per vehicle repair cost = \$355

Vehicle Repair Cost



(*) this does not include tires, batteries and lubricants

Base Year 2013; Source: Frost & Sullivan Analysis

African New Car Market Dynamics

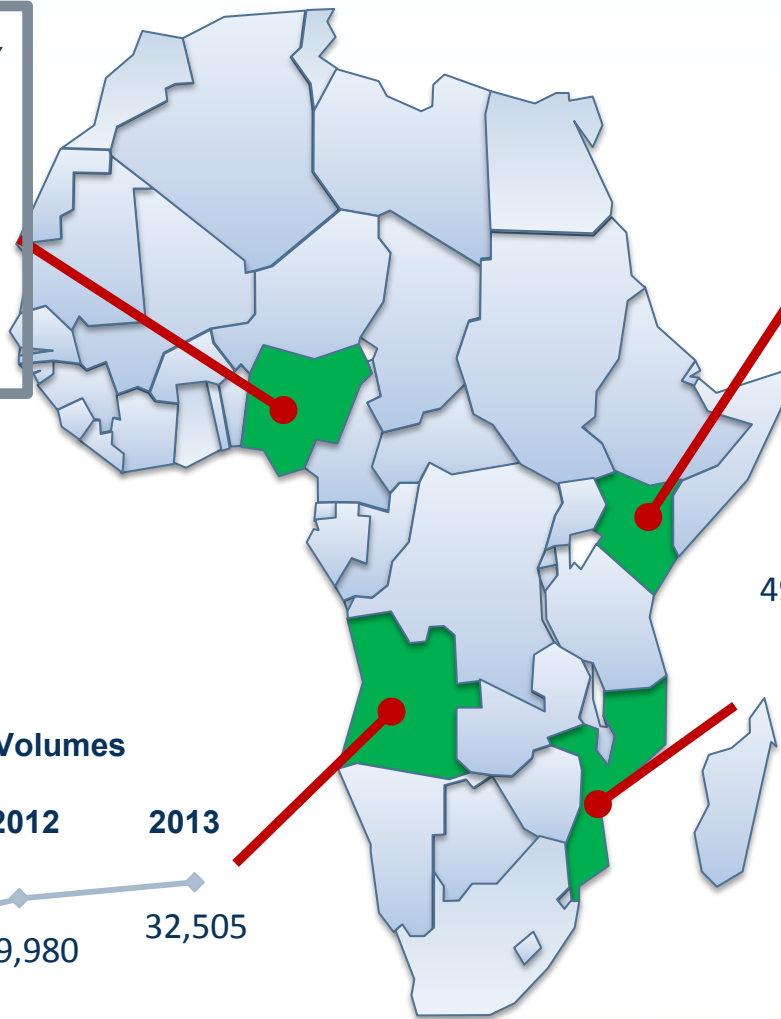
Countries outside of Top 5 delivering higher growth rates; competition between manufacturers and importers across the continent intensifying

MANUFACTURER ACTIVITY

Manufacturers are taking direct action to grow their presence across the regions in anticipation of market growth with Honda setting up West African office in Nigeria in 09/13

IMPORTER ACTIVITY

New businesses are entering the African market e.g. in Kenya the sale of CMC Group to UAE-based **Al-Futtaim Group** was concluded in March 2014



Kenya New Car Volumes



Angola New Car Volumes



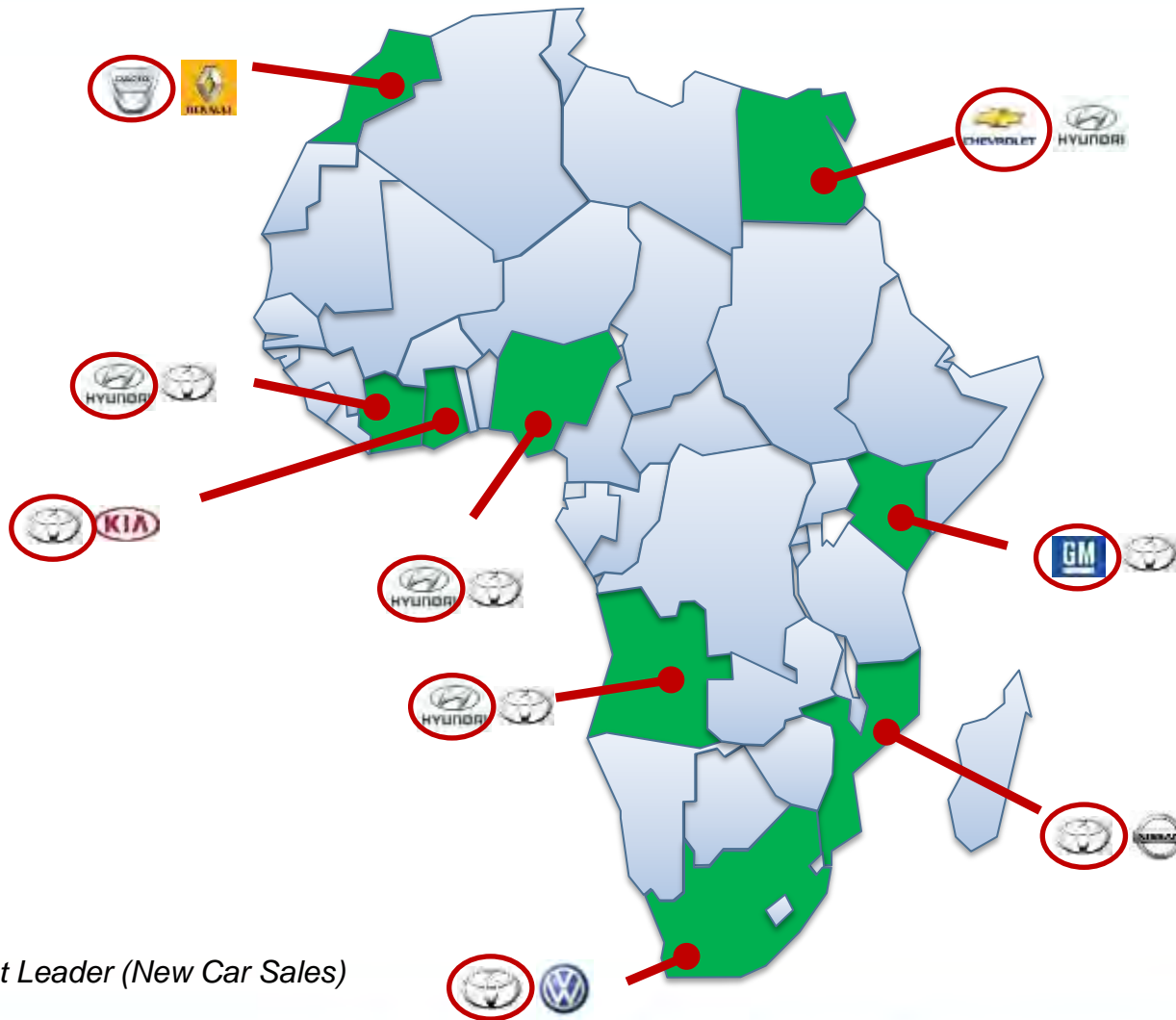
Mozambique New Car Volumes



Note: All figures are rounded. The base year is 2012.. Source Frost & Sullivan Analysis

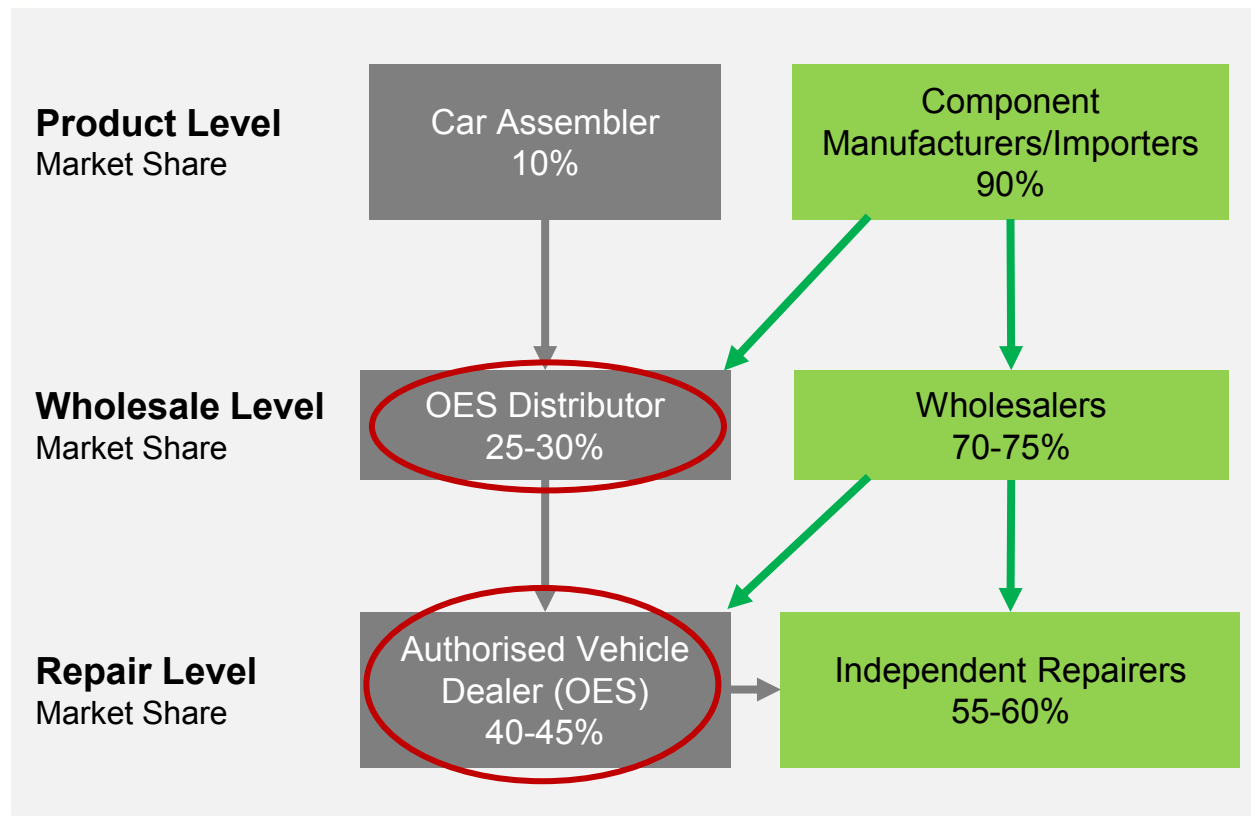
Leading Vehicle Brands across Africa

Korean & Japanese brands dominant in the West and South; European & US brands better placed in the North and East



Parts Distribution Overview

After Market Distribution Structure



- Local parts **production** is **limited** to a few North African countries
- Algeria, Egypt and Morocco are self sustained markets, where Algeria is driven by strict regulations
- Limited impact of **government legislation/regulation** in most of the Sub-Saharan countries; **Nigeria** is the **largest** market for **Grey Imports**
- Grey Imports include domestic parts, spurious/fake parts

Note: Revenue share by distribution level

Source: Frost & Sullivan Analysis

More than 8 channels for parts distribution

Sub-Saharan Africa is the largest market for Grey Imports;

We expect nearly 55-60% market to be driven by Grey Imports

Channel	Particulars	Type of Channel	Estimated Market Share
Channel 1	Authorised Parts - Going to Vehicle Authorised Dealer (for own vehicle servicing)	Authorised Channel	Authorised Channel is nearly 40-45% and Unauthorised Channel accounts for the rest (Spurious and fake products = nearly 40%)
Channel 2	Authorised Parts - Going to Vehicle Authorised Dealer (for wholesale purpose)	Authorised Channel	
Channel 3	OES/VMs Second Brand (low end) Genuine parts going to aftermarket	Authorised Channel	
Channel 4	OEM (Part Manufacturer) who is supplying in after market as Authorised dealers Tier 1 suppliers e.g. Bosch. TRW	Authorised Channel	
Channel 5	Part providers like part Mart who does a job of integrator and logistic company which means they get parts from local Korean/Japanese/Chinese suppliers, import them in Africa and sale it to aftermarket	Authorised & Unauthorised Channel	
Channel 6	Fake Parts - completely fake, spurious parts	Unauthorised Channel	
Channel 7	Domestic parts - back channel e.g. direct import of OES parts from manufacturing country without involving OES local office, these parts will come in boxes which will have local language e.g. for Toyota, Nissan it will be written in Japanese	Unauthorised Channel	
Channel 8	Domestically Assembled/Manufactured parts supplied in aftermarket through 2 tier/3 tier or 4 tier channels	Authorised & Unauthorised Channel	

Source: Frost & Sullivan Analysis

Key Trends in Distribution



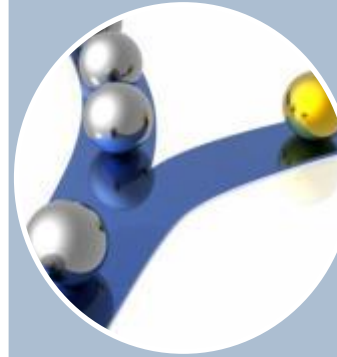
National network coverage, either fully owned or operated in partnership



Multi-brand showrooms are the norm across



Revenues from new car sales form big chunk of the business..and increasingly parts sales (non branded)



Warranty is a main issue due to huge claims - Service / parts facilities & trained professional is key factor

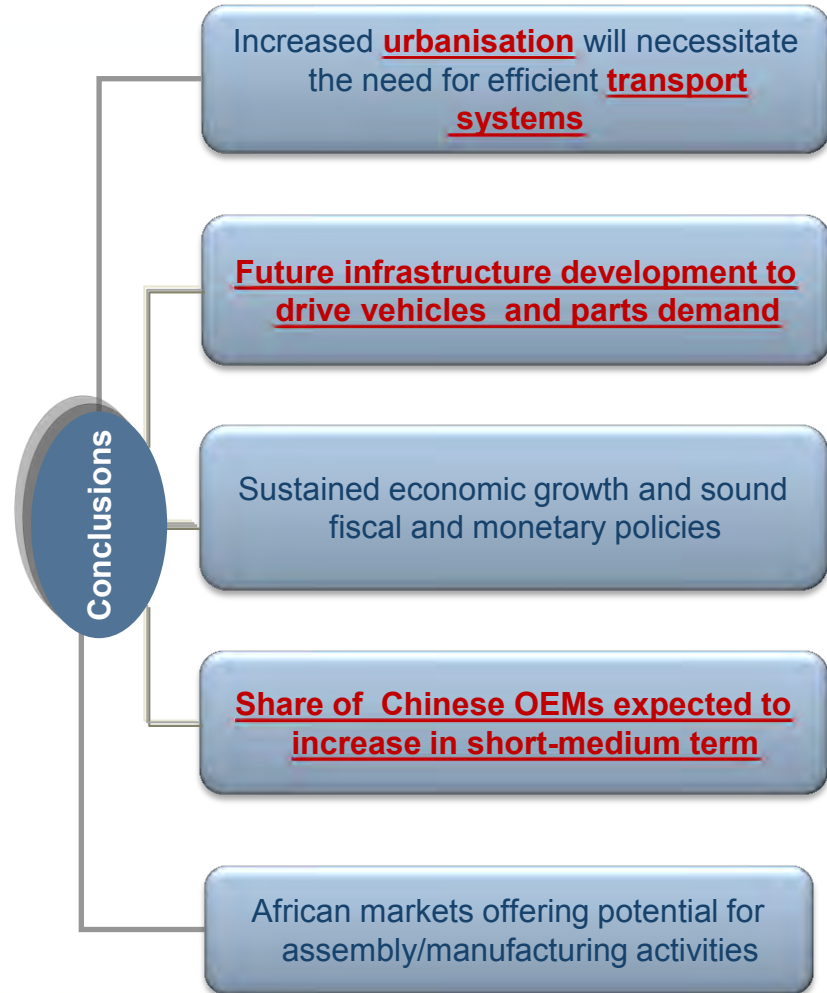
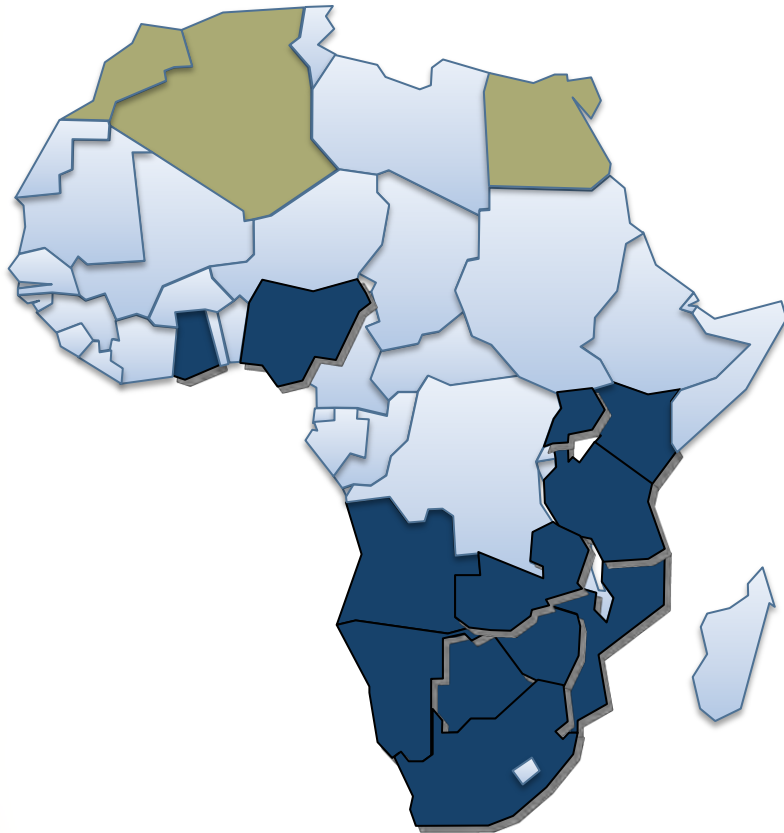


Used car sales and leasing has become important sales channels



Key Conclusion

Asian OEMs are expected to play critical role in the future. This is a result of the huge potential demonstrated by the market



ABOUT FROST & SULLIVAN



Who is Frost & Sullivan?

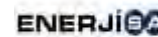
50 years of partnering Global Companies helping Accelerate Growth

- Founded in 1961
- Offer the exclusive Growth System including:
 - **Growth Consulting and Growth Implementation Services**
 - **TEAM Research & Reports, Custom Research**
- Over **2,000 Consultants & Analysts** across 43 **global locations**
- 10,000+ clients worldwide including emerging companies, the global 1000, and the investment community



How We Support You

- ✓ Megatrend and impact analysis on your business
- ✓ Growth and New Business Opportunity Assessments
- ✓ Business Plan & Change Management
- ✓ Implementation and Mid -Top Management Training
- ✓ Expansion and Partnership Selection Strategy
- ✓ Competitive Environment Analysis



Automotive Practice Team

A regional team (MENASA) of **25 automotive analysts, consultants and research experts** manage two functional areas complimented by global teams functioning seamlessly to provide global automotive expertize

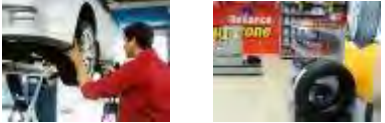
Middle East & North Africa Practice Team



Automotive Systems & Components - OE



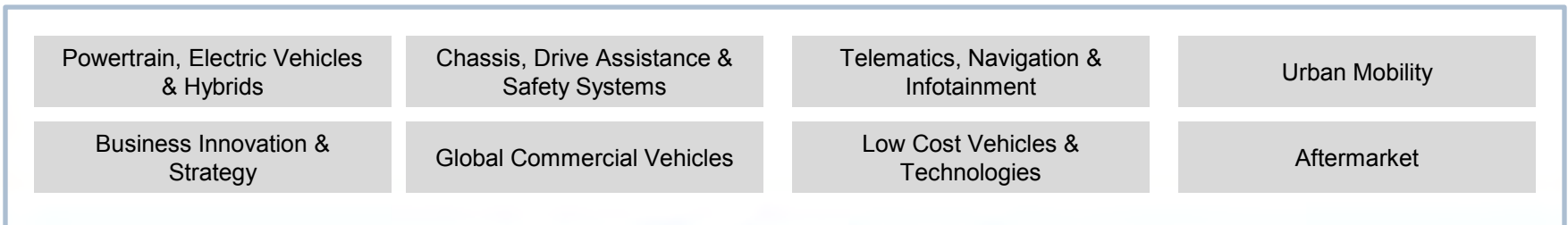
Vehicles, Construction , Mining & Farm Equipment



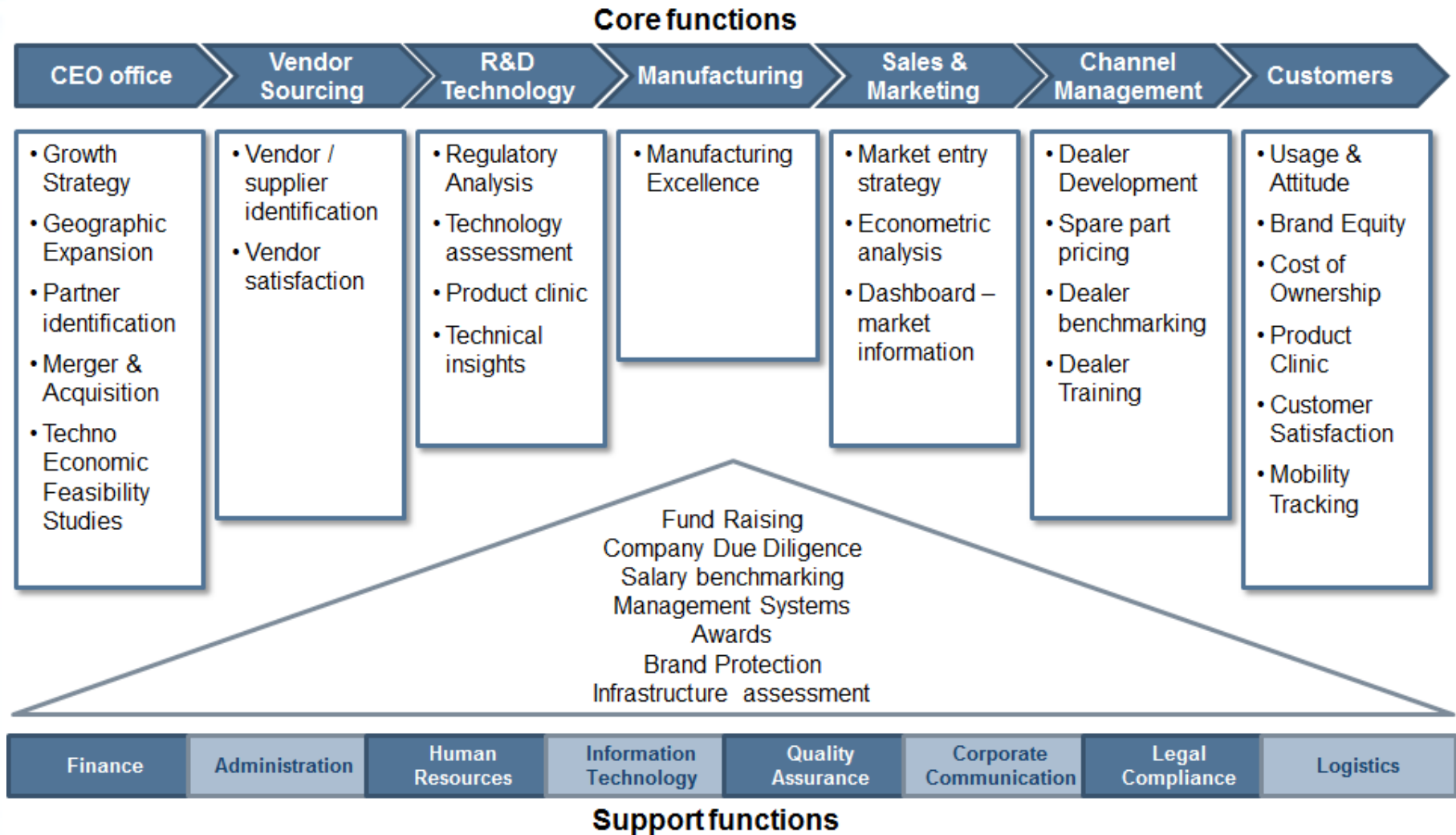
Vehicle Dealership, OES & Independent Aftermarket

A team of **300 + automotive analysts, consultants and research experts** across the globe specialize in 8 program areas

Global Automotive Practice – Program Areas



Product Offerings for Automotive across Value Chain



Frost & Sullivan Leverage on Expertise of Regional and Global Trend Experts in 45 F&S offices in 30 Countries

Sarwant Singh

Senior Partner, Thought Leader



Arnaud Bossy

Growth Implementation
Solutions Expert,
Europe



Masaki Honda
Regional Expert,
Japan

Archana Amarnath,
Global Program Manager,
Global Mega Trends Expert



Richard Sear

Vice President, Global
Thought Leader, United States

Jason Huang
Regional Expert,
China



Subhash Joshi
Head - MENA



Mohamed Mubarak
Regional Expert, CEE



Manoj Menon
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Singapore



Vijay Kakade
Director Automotive -
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Mani James
Regional Expert, Africa



Lorena Isla
Country Manager, LATAM
Trends Expert, Mexico



Cristiano Zaroni
Country Manager, LATAM
Trends Expert, Brazil

