

Wiring Harness Division Investor Meet 2020



#### The Division's Operations Today





**26%** of Group revenue



**81K+** employees



77 Facilities



#### **JV Partners**

- Sumitomo Wiring Systems, Japan
- · Kyungshin Industrial Corporation, South Korea

#### **JV Partners**

- · Jiangsu Huakai Wire HarnessCo. Ltd., China
- · Hefei Jianghuai Automobile Co. Ltd., China
- Hubei Zhengao Auto Accessories Group Co. Ltd., China

#### **Experienced Leadership**





**Pankaj Mital** 



G.N. Gauba



Rakesh Satwah KIML



Duncan Reid

MWSI- North America



PKC - North America



Jani Kiljala PKC - EUSA



André Gerstner

PKC - Rolling Stock



Jyrki Keronen
PKC - APAC



Sanjeev Bhatia
Wire Group



Matti Yli-Olli PKC- Finance



Younes Saadi
PKC- Sales
& Engineering



PKC- Advance Engineering



Chief Technical Officer



Shashi Gupta
MSSL- Purchase



Anurag Gahlot

MSSL- Human
Resource



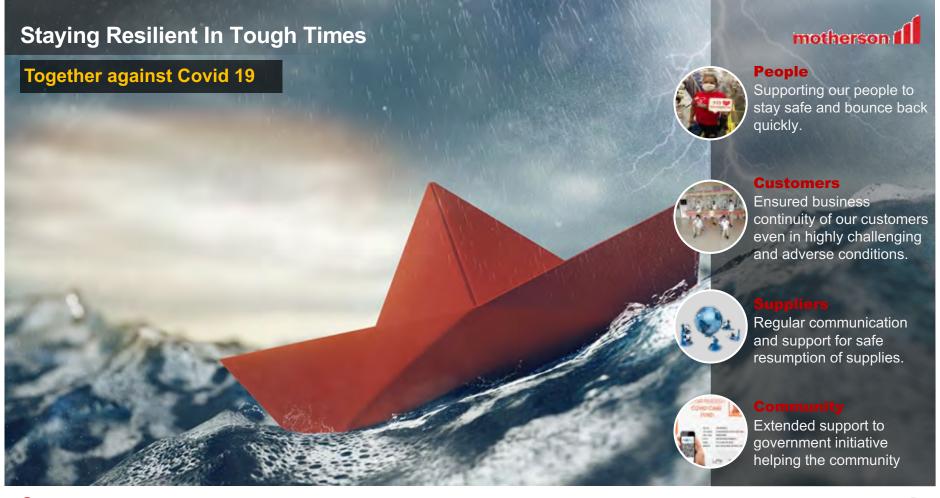
Sanjeev Mathur

MSSL- Manufacturing



R.S.Saini

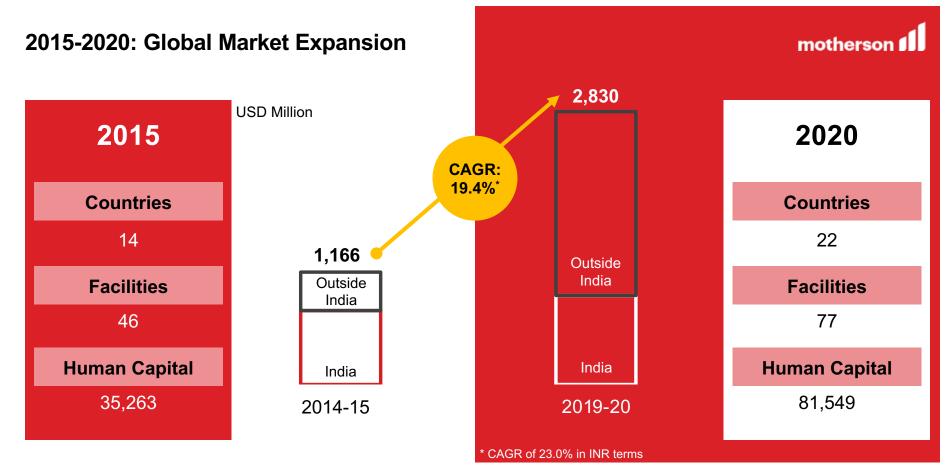
MSSL- Quality
Assurance & PE





**2015 – 2020 : A Sneak Preview** 





Consistently growing faster than the industry.





#### **Expanding Business Portfolio**



**HVAC EARTHMOVERS** ENGINE FORKLIFT PASSENGER VEHICLES MEDIUM DUTY TRUC UTILITY VEHICLES 1000+ LIGHTING SYSTEMS customers BUSES FORKLIFT ENGINE **ELECTRIC MOTORCYCLE Continents ELECTRIC TRUCKS** FLECTRIC MOTORCYCLE **VANS** THREE WHEELERS **PASSENGER VEHICLES HEAVY DUTY TRUCKS** RACTORS **MOTORCYCLES Countries** BUSES ENGINE FORKLIFT VANS HVAC **IER 1 COMMERCIAL VEHICLES** LIGHT DUTY TRUCKS MEDIUM DUTY TRUCKS EXCAVATORS OF ROAD VEHICLES MIRRORS PILE JM BIKES UTILITY VEHICLES PICK-UP TRUCK MOTORCYCLES ROLLING STOCK MEDICAL EQUIPMENT **ROLLING STOCK** DUMP TRUCK ELECTRIC MOTORCYCLE PASSENGER VEHICLES TRACTORS COMPACT TRACK LOADERS LIGHT DUTY TRUCKS TWO WHEELERS BACKHOE PASSENGER CARS



#### **Broadened Footprint**





14

Countries

46
Facilities



FY 2019-20

**22** 

Countries

**77** 

**Facilities** 

**O** N

Newly added Locations

Strategically Positioned Facilities in Key Geographies







We had a dream. We realized it.





# Time to dream bigger.

**WHD** 

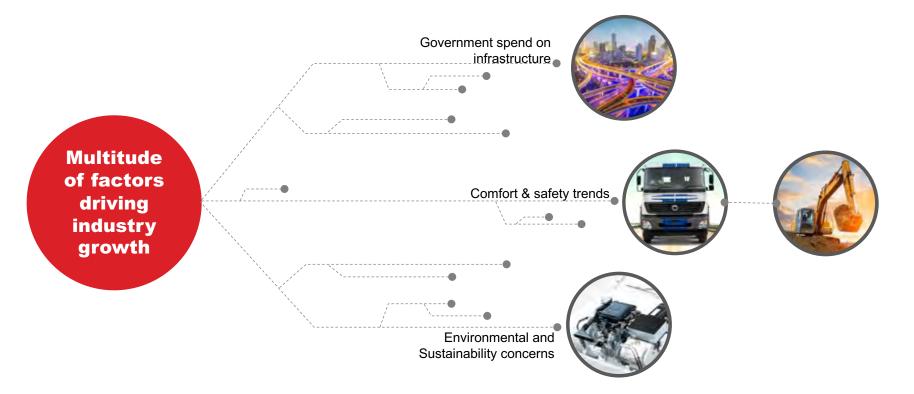
2020 – 2025 : Envisioning the Future

**Business in India** 



#### **Indian Mobility Industry On Move**





#### Rapidly evolving mobility landscape



























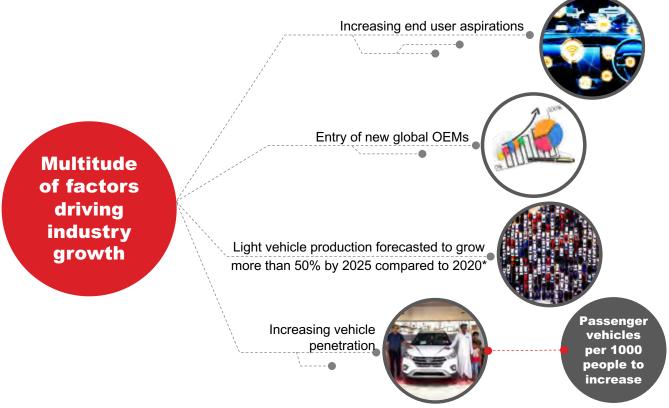






#### **Indian Mobility Industry On Move**















































- Maintain preferred solutions provider status in the market.
- Increase share of business with existing customers.
- Secure business from new customers.
- Enter new market segments.
- Increase content per vehicle.





Alignment with future needs





#### motherson 1

- Pioneers in FSS\*
   Capability with largest pool of experienced guest engineers.
- First to bring in design and manufacturing of advanced wiring harness parts.

#### We have

- executed global EV programs from India.
- connected solutions for PV, CV, 2-W & off highways application.





Sumitomo Wiring Systems, Ltd.



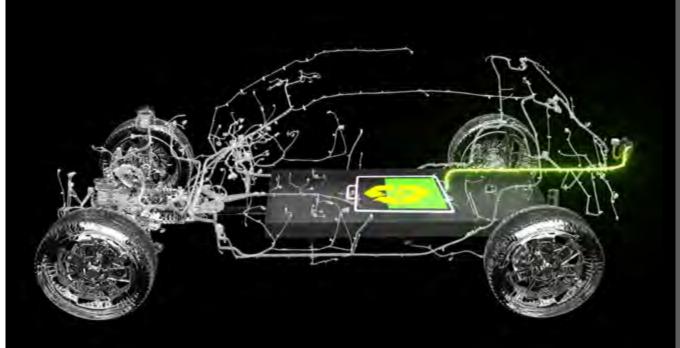
Global wiring harness supplier for Passenger Vehicles.

Global wiring harness supplier to Hyundai & Kia.



### **Product Portfolio To Support Emerging Trends**





- Hybrid and Electric Vehicle Harness Solutions.
- Infusing wire-less technologies.
- Enriching user experience through semiconductor based SMART technologies.

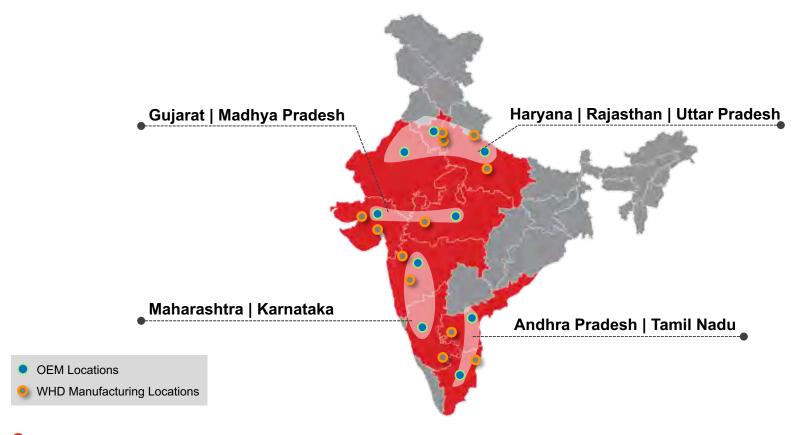






#### **Strategically Positioned Near Customer Locations**





# Capability To Expand Capacities Rapidly

motherson 1

Vast experience in setting & ramping up green field facilities.

8 Greenfield projects from 2016 to 2019

Organization and managerial bandwidth to successfully manage multi location, multi geography operations.

Noida Noida Indore III Sector 85 Sanand Sector 85 Indore I Indore II Anantapur Chennai III 2016 2016 2017 2017 2017 2019 2019 2019

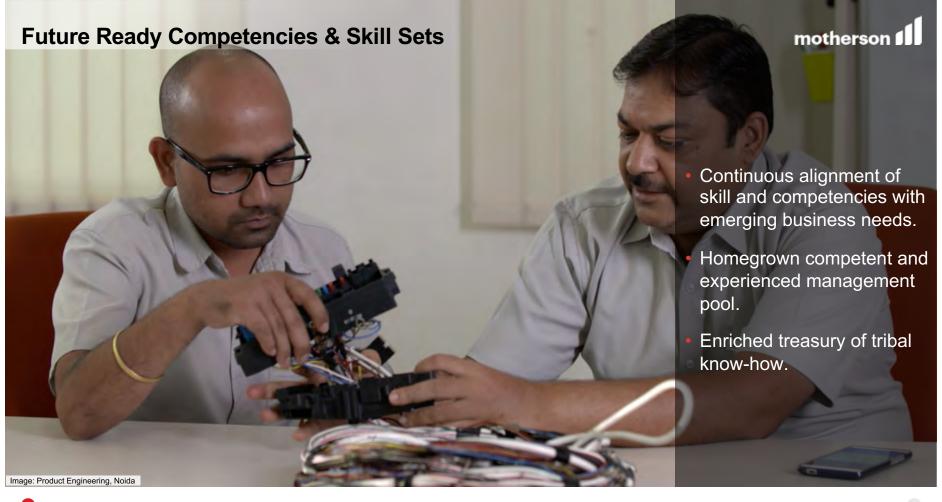
No 80 10 10 10 10 10



#### **Managing Complex Operations- Power of IT**









**Operational Excellence Through Best Of East & West** 















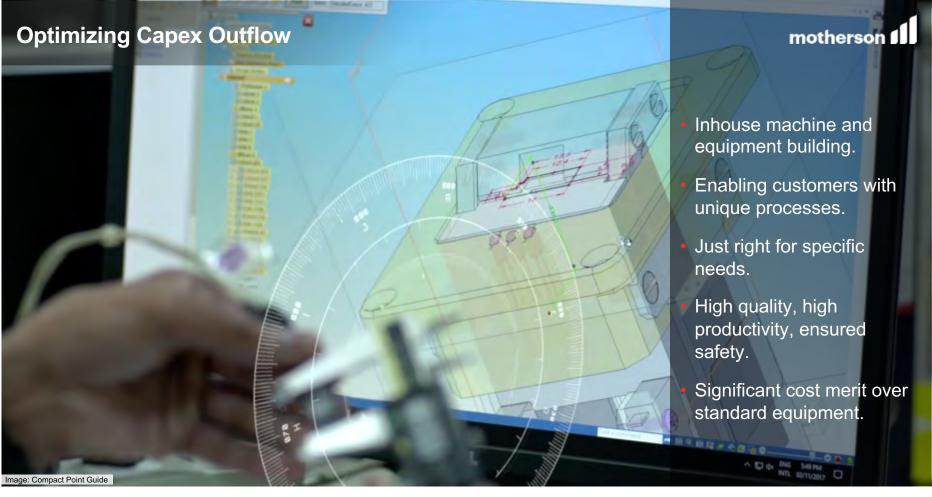






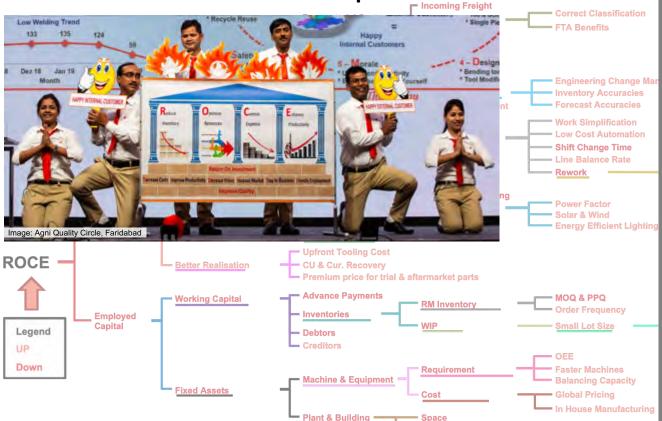






#### **Focus on ROCE- To Cultivate Crops of Success**





- Capacity Balancing

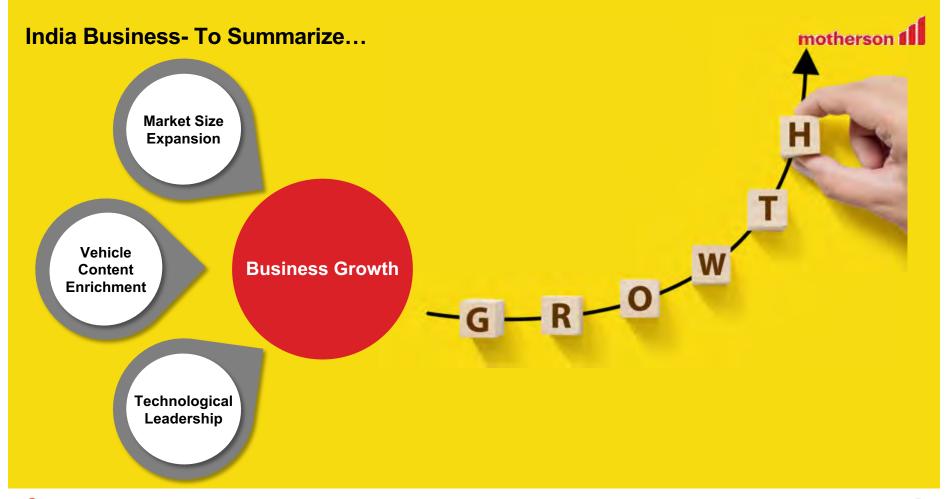
- Cost optimization through practice of C<sup>2</sup>A<sup>2</sup>C (cut cost at all cost).
- Waste elimination- part and parcel of daily life.
- An opportunity to improvealways, everywhere.





motherson 1

- Strong financials.
- Good internal accruals.
- Optimized working capital and capex outflow.
- High ROCE operationsfaster payback.







# **WHD**

2020 – 2025 : Envisioning the Future

**Business Outside India** 





### **Global Growth Drivers**



**Electrification/** Alternate drivetrains

**Digitalisation** 

































## **Rapidly Growing Addressable Market**







Source: Company own assessment based on industry sources

# **Rapidly Growing Addressable Market**

19

**USD Billion** 



**CAGR** : 6.2%

13

2019-20 2024-25

- Grow with market.
- Enhance content per vehicle.
- New customers, segments & products.
- Competent JV partners in China.

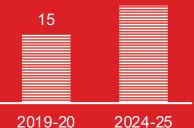
Significant growth opportunities in all geographies





**CAGR: 6.4%** 

22



Wiring Harness Market- APAC

CAGR: 7.3%

32



2019-20 2024-25

Source: Company own assessment based on industry sources





#### WHD- Poised To Grow Outside India

- Global manufacturing footprint in all major geographies.
- Strong relationship with existing customers.
- Technological readiness for alternative powertrain.
- In-depth knowhow and expertise to manage complexities.
- Leveraging global capabilities to create optimized and cost competitive solutions.
- Customer confidence in capabilities to manage and turnaround acquisitions.









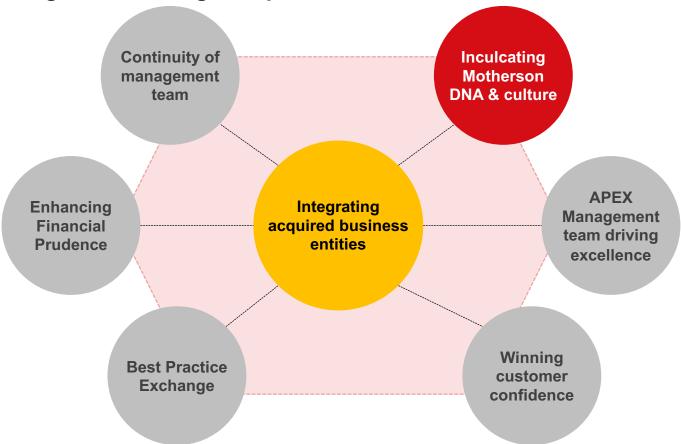
**Business Consolidation** 







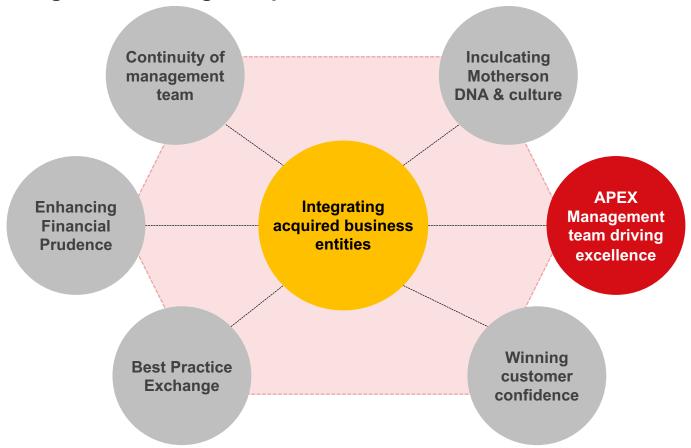














**APEX Meeting - Brazil** 

APEX
Management
team driving
excellence

**APEX Meeting - Acuna** 

motherson 1











**PKC Daimler Quality Award 2020** 

Winning customer confidence

Volvo Supplier Award

motherson

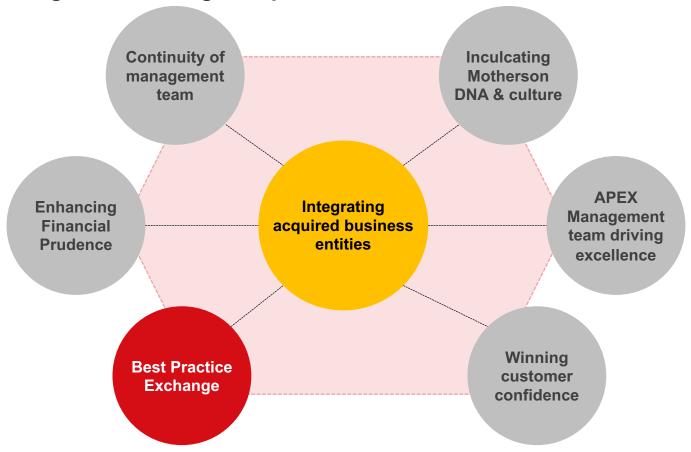






VE COMMERCIAL VEHICLES

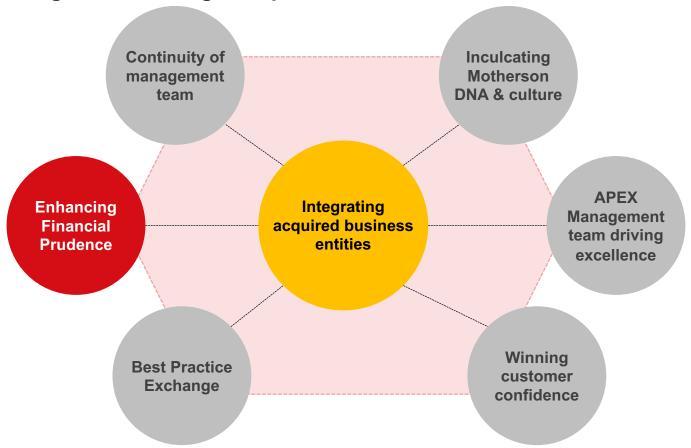






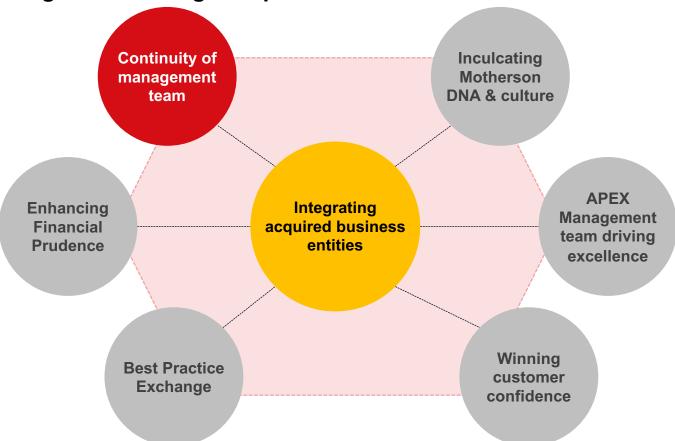










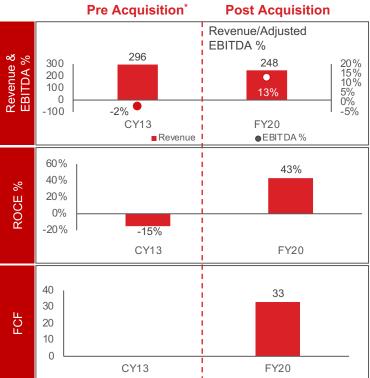






### **Integration of Acquired Entities**

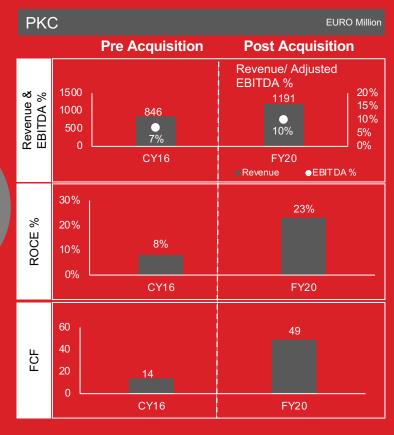




Notes: \*2013 figures are for calendar 12 months period under Stoneridge



### motherson 1







**Aligning With Emerging Business Dynamics** 

### **Strategically Located Design & Development Centres Outside India**



#### **North America**

USA Mexico

D&D Centres in close proximity to the customer-collaborating for speed & value enhancement.



Germany
Poland
Estonia
Finland
Italy

**Japan** 

China



### Smart Assembly Tooling

- Flexible assembly tooling.
- Release of investment trapped in tooling.
- Faster order to delivery time.
- Improved workability.



### **Smart Glasses**

- Step-by-step virtual work instructions.
- Reduced reliance on memory- capability to manage complex products.
- Improved Quality.
- Enhanced Productivity.



### **Managing Complexity**

- Tailored Data Management System for easy, error-free and efficient operations.
- Dynamic visual aids for associates.
- Process Automation- faster change management.
- Cost optimized manufacturing routines.

### **Innovating Manufacturing Technologies**



Engineering



### **Smart Factory**

- Minimal human intervention.
- Managing key indices online.
- Remote monitoring & management.
- Proactive decision making.

### **Vertical Integration - Global Footprint**





Components
Power Distribution Module
Protection & accessories

#### **North America**

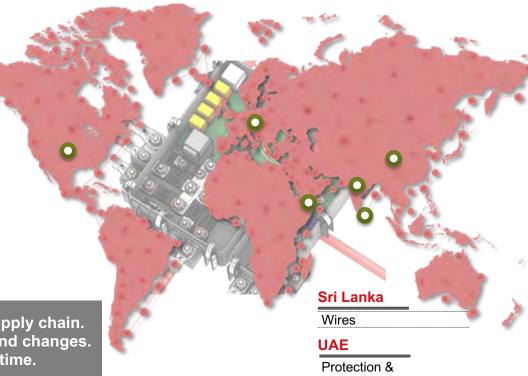
Components

Wires

Power Distribution Module

Protection & accessories

- Fast, slim & de-risked supply chain.
- Quick response to demand changes.
- Shortened development time.



accessories

#### China

Components

Wires

Protection & accessories

#### India

Components

Wires

Power Distribution

Module

Protection & accessories



### **Outside India Business- To Summarize...** motherson 1 Increase New share of customers & businessnew existing segments customer **Business** Growth Relationships Market with global consolidation **OEMs Emerging** technological



solutions



**Customer Delight- Purpose of existence** 



### Customers acknowledge & appreciate our efforts...

#### **Daimler Group**



Masters of Quality



Best Quality Supplier Zero PPM

Quality

Achievement



Business Partner of the Year

#### **JMC**



Excellence
Development Partner

#### MCI



Supplier
Performance AwardSilver

#### Dongfeng



Brilliant Contribution Award

#### **Paccar**



SPM Leader Award

### Sany



Best Supplier Award



Excellent Supplier Award

#### **SAIC Maxus**



Part Development

#### **JAC**



Best Quality Contribution

### motherson 1

#### Paccar SPM Masters Award

"PACCAR works closely with suppliers to produce the highest quality products in the industry. We appreciate the SPM Achiever suppliers for attaining that performance level in 2019, and in particular, the 16 suppliers that achieved SPM Master and Leader status."

-Darrin Siver, PACCAR Senior Vice President.

# Daimler Global Award for Innovation

"From idea to innovation—that's PKC!
You supply the state-of-the-art cable
harnesses for our North American
business. Through new design
methods, you convert flexibility into
speed. Thank you for establishing our
connection to the future and
advancing our truck business!"

-**Dr. Marcus Schoenenberg**, Vice President Global Procurement Trucks & Buses



### Customers acknowledge & appreciate our efforts...

#### Foton



Excellence Quality
Partner Award Gold Award



Best Quality Contribution



Award

#### Volvo Eicher



Outstanding Performance New Product Development

#### **Ashok Leyland**



Best Supplier Award



Best Poka Yoke



Best in Class Performance in Delivery

#### **Tata Motors**



Quality Award

**Honda Motorcycles** 

Strong CR efforts in

localization



Quality Improvement for Proto Supplies



Energy Champion Award

### Alstom Asahi India



Supply Chain Performance Award



Award for Zero Defect

#### **Honda India Power Products**



Supplier Performance Award

#### Suzuki Motorcycle



Quality Award

#### India Yamaha



Excellence Award for Quality Performance

# motherson **B**Bombardier Transportation Diamond Supplier

"I am very pleased about the constructive exchange with our most important players in the supply chain. We see this as confirmation of our partnership and look forward to future collaboration with them, contributing to business excellence and on-time delivery to our customers."

-Jim Vounassis Chief Operating Officer



Millimpos fluting Stock (ICT) & con-

Navistar Diamond Supplier



### Customers acknowledge & appreciate our efforts...

#### Maruti Suzuki



Part Development





Year -Silver

#### **Honda Cars**



Gold

Award

**JCB** 



Customer Satisfaction And Quality

#### Renault Nissan



Quality & Customer Satisfaction (Mind-set Award)

**TAFE** 

#### Mahindra



Arren Suzuki India Limand

Supplier **Excellence Award** 

#### **CNH Industrial**



Super Award for VAVE

#### Ford John Deere



Status



Recognition

Excellence in Quality, Delivery, Wavelength, Technical Support & Cost Management

Tata Hitachi

Award



NQCRPM Award



Chairman's Award Special Citation of Distinction



Best Benchmark Award





Pancharatna Award for "Best in VA-VE"

#### Caterpillar



Best "APQP" Performance



SQEP (Bronze)



Sustained Performance on Quality



Kobelco

Preferred **Business Partner** 



Komatsu

Best Performance in Delivery





motherson 1

Maruti Suzuki **Overall** 

**Performance** 

Hyundai

**Award** 

**Overall Best** 

**Performance** 

### **Sustainable Value Chain**

Together creating a positive impact.





Committed to be better with each passing day.

- Focus on **QCDDMSES** paving strong **GROWTH** foundations.
- Strong corporate governance- ethical & moral conduct, every time & everywhere.
- Engagement in upstream and down stream supply chain to promote sustainable business practices.
- Supporting the communities we operate in.

### Quality

Stramlessly fit global quality standards of the customer

#### Cost

Work at leading cost levels

#### Delivery

Onliver globally and be able follow the oustomer where they need us

#### Design

Provide design support for current products and new concepts

#### lanagement

and the organisation ith the highest overhance standards

### Safety

Work to the highest standards of safety

#### Environment

Meet the highest environmental standards

### Sustainability

Be committed to long-term greatness rather than transactional relationships

### **Envision, Execute, Accomplish**



What we said in 2015	Where have we reached today 2017
<b>01</b> Global market expansion	<ul> <li>Non Passenger car business expanded across\         geographies</li> <li>Leading Supplier to Commercial vehicle segment</li> <li>22 countries, 70 manufacturing facilities</li> </ul>
02 Consolidation	Successful integration of MWSI     Acquisition of PKC Group     Entry into China Market
03 Increased component content	O3 Added new technologies- over foaming harnesses for engine applications, Vehicle electronics- smart Power Distribution Centres, aluminum cables etc.
04 New customer penetration	New customers added across geographies and segments     Two new segments added- Rolling Stock & Recreational Vehicles

New Segments & New Customers

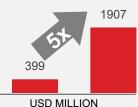
### 2015~2020

# Successful turn around and integration of acquired entities.

- WH business of Stoneridge, USA (now MWSI). USD 248 Million
- PKC Group. USD 1323 Million
- Interior and Cabling Business of Bombardier Transportation Rolling Stock (BTROS) at Derby, UK. USD 60 Million



Consolidation



USD MILLION
Revenue outside India

**Increased Component Content** 









Market Relevant Product Offerings

New Customer Penetration

Source: Update on Vision 2020 Meet- Nov'17

### **Summary**

2020~2025: Growth through Robust Business Model and Execution Mind Set



Consistent execution of strategy.



Uniquely positioned to unlock value.



Consistently increasing product value content.



Continuing to deliver sustainable value creation.



Motherson Wiring Harness Division

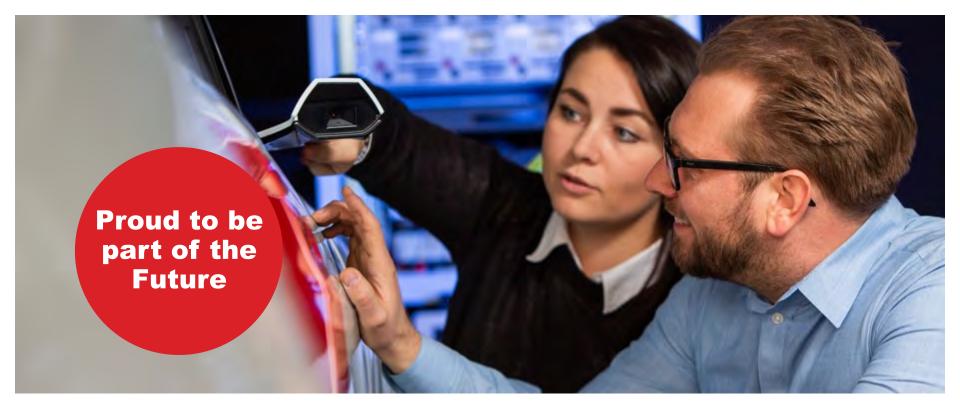
- We dream
- We execute
- We deliver

a trustworthy Partner in growth....



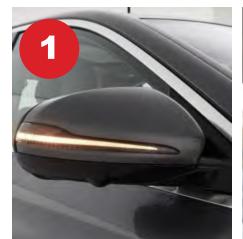


© Motherson Group All rights reserved by Motherson and/or its affiliated companies. Any commercial use hereof, especially any transfer and/or copying hereof, is prohibited without the prior written consent of Motherson and/or its affiliated companies. In case of transfer of information containing know-how for which copyright or any other intellectual property right protection may be afforded, Motherson and/or its affiliated companies reserve all rights to any such grant of copyright protection and/or grant of intellectual property right protection. www.motherson.com

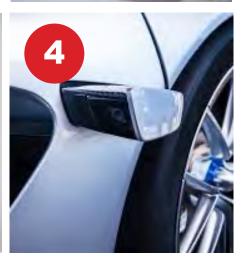


## Vision Systems Division Investor Meet 2020











### Main focus areas

01 Exterior mirrors for cars

One of the largest 3 experts in the world

**02 Interior mirrors** 

High-volume expert in Europe, India and Korea

03 Exterior mirrors for light commercial vehicles

From simple to multi-functional

**04 Camera monitoring Systems** 

Pioneer with one of the first systems in the market

### The division's operations today.





**19%** of Group revenue



**7800** employees



22 facilities



### **Our specialised companies**

Samvardhana Motherson Reflectec (SMR)

### **JV Partners**

NBHX (China)

### Experienced leadership.





**Char Zawadzinski** CEO SMR



Ravish Parvez
EVP Global Sales



Rajan Batra EVP Global Finance



Enrique Flores EVP Global Eng. & Quality



Alejandro Lomas EVP Global Purchasing



**Gaurav Gulati** EVP Business Process Optimization



Michael Lady EVP Global Human Resources



Rajat Jain COO SMR



Sai S. Tatineni EVP North / South America



Stephan Gonzalez EVP West Europe



Tibori Pal Levente EVP East Europe & Germany



Puneet Saim EVP South Asia



C K Han EVP North Asia

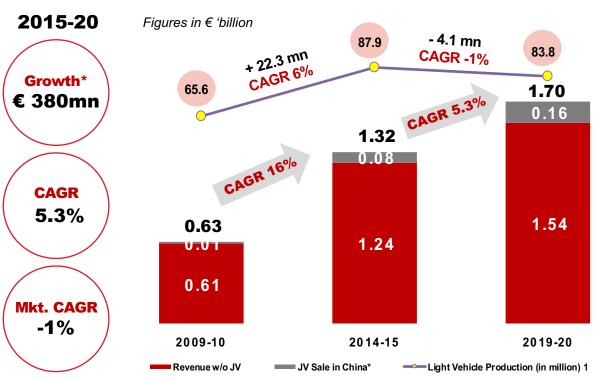


Xu Wenzhong EVP East Asia

### Revenue Growth.



Growing revenues across all geographies exceeding market performance

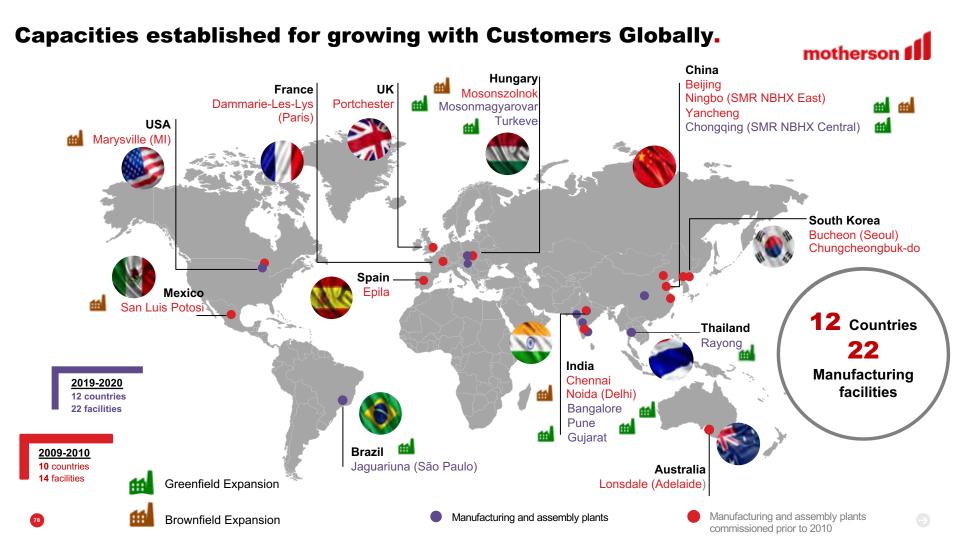


<sup>\*</sup>JVs total sale in China consolidated proportionately till 2014-15 under Indian GAAP # since acquisition



<sup>&</sup>lt;sup>1</sup> Source: Light Vehicle Production: IHS Markit, Forecast October 2020

#### Capacities established for growing with Customers Globally. motherson ( China Hungary Beijing France UK Mosonszolnok Ningbo (SMR NBHX East) Dammarie-Les-Lys Portchester Yancheng (Paris) USA Marysville (MI) South Korea Bucheon (Seoul) Chungcheongbuk-do Spain Epila Mexico San Luis Potos 10 Countries India Manufacturing Chennal facilities Noida (Delhi) 2009-2010 10 countries Australia 14 facilities Lonsdale (Adelaide) Manufacturing and assembly plants commissioned prior to 2010

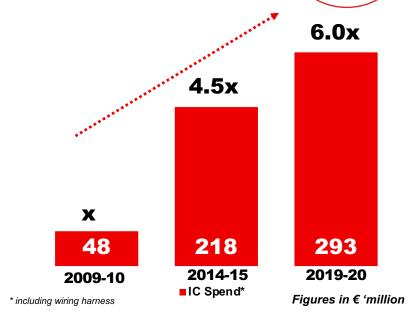






Vertical integration grown "6x" since acquisition

27%
Of Material
Spend



### **Recognitions & Awards.**

### motherson 1

**Ford Motor Company** 













Hyundai Motor Company

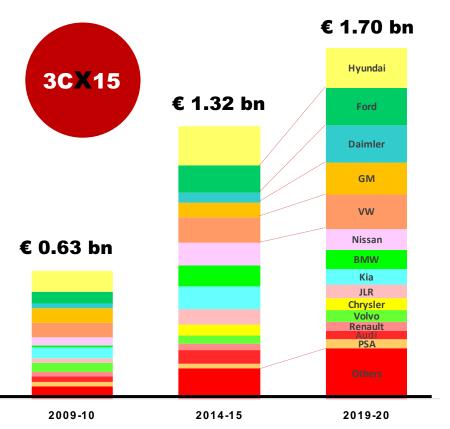


**General Motors** 

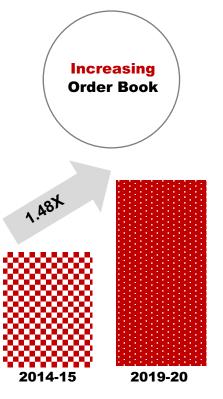


### Diversified customer base.





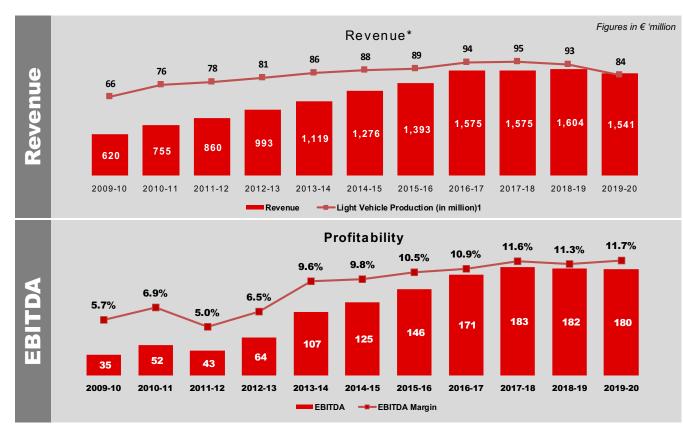




Order Book\*

### Profitable Growth with financial discipline.





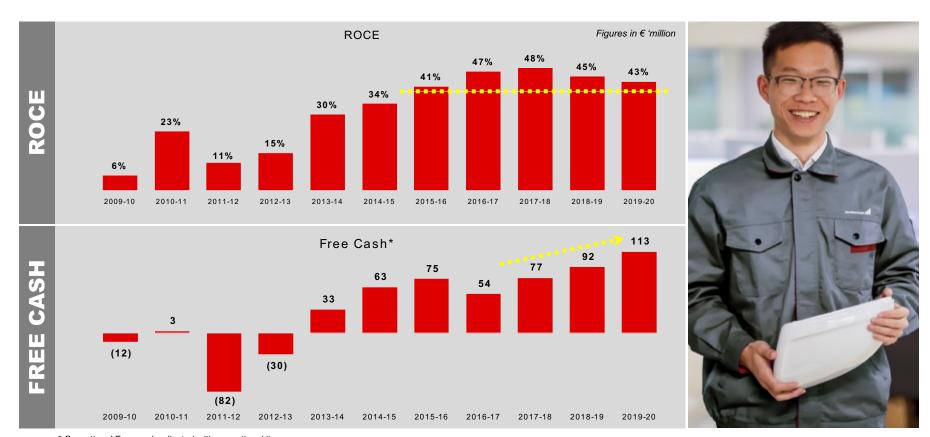


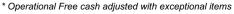
<sup>\*</sup> reported numbers

<sup>&</sup>lt;sup>1</sup> Source: Light Vehicle Production: IHS Markit, Forecast October 2020

### Profitable Growth with financial discipline.



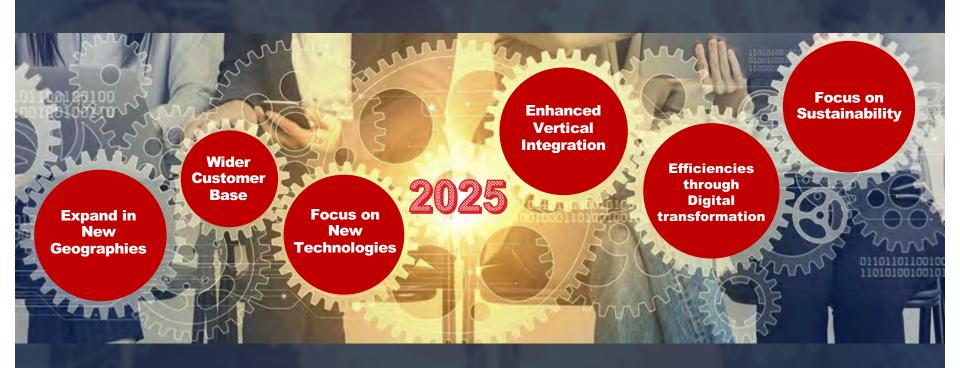


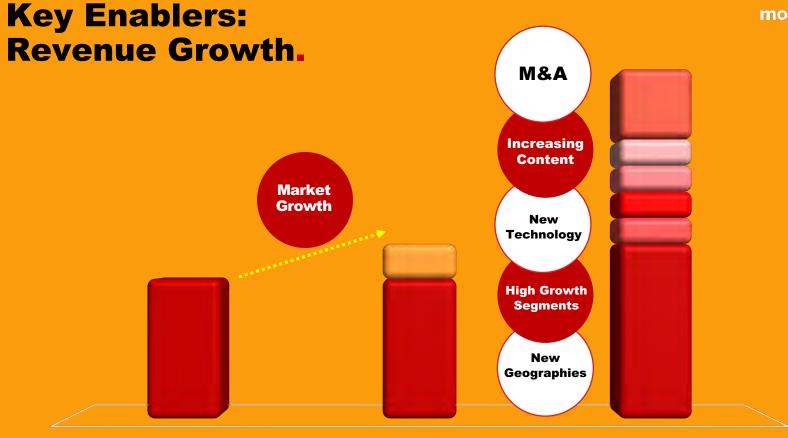






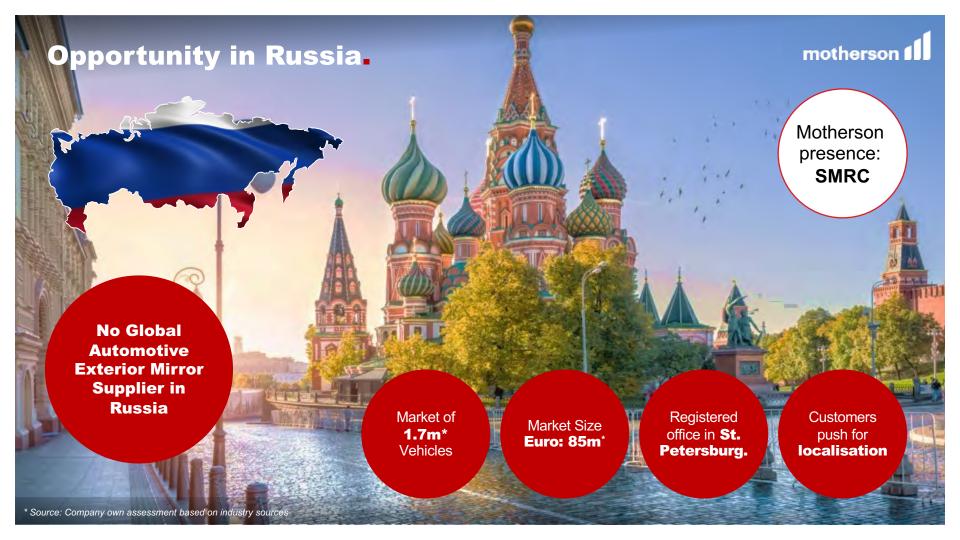
# Way ahead to VISION 2025





2019-20 2024-25 2024-25























**58**CMS / ADAS patents

Expected Market size of

> \$ 1 billion

by 2030







## **Key Enablers: Profitable Growth.**

motherson 1



ROCE > 40%

2019-20 2024-25



### **Employee Engagement.**

"People are our **biggest strength**"













**Employee Engagement** Improvements **2015** ⇒ **2020** 











### **Corporate Social Responsibility.**





"Giving Back"





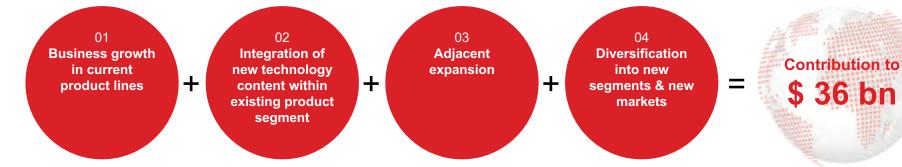




### **Conclusion / Roadmap 2025**

### **Vision Systems**





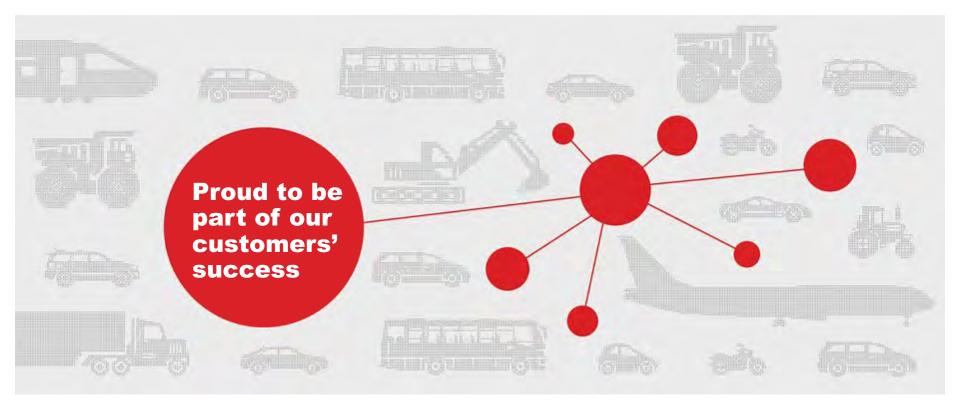
- Market growth
- Increase in Content
- New Energy Vehicles
- Sports Utility vehicle
- Camera Monitoring System
- EcoMirror
- Lighting technology

- New geographies
- Japanese OEMs
- Local Chinese OEMs
- Advance surface technology
- Automotive camera market





© Motherson Group All rights reserved by Motherson and/or its affiliated companies. Any commercial use hereof, especially any transfer and/or copying hereof, is prohibited without the prior written consent of Motherson and/or its affiliated companies. In case of transfer of information containing know-how for which copyright or any other intellectual property right protection may be afforded, Motherson and/or its affiliated companies reserve all rights to any such grant of copyright protection and/or grant of intellectual property right protection. www.motherson.com



## **Modules & Polymer Division**Investor Meet 2020







### Modules & Polymer Division

Provides Interior and Exterior Modules and Systems focused on the Automotive industry

### The division's operations today





**51%** of Group revenue



**32,000** employees



**96** facilities



### **Our specialised companies**

SMP SMIA CTMIL SMRC MAE MMDL

MATE MEPL

### **JV Partners**

CEFA

**CPAT** 

**YSAT** 

### **Experienced leadership**





Char Zawadzinski CEO SMP



Eric Auzepy COO SMRC



Amit Bhakri COO MATE



Horst Morgenroth COO SMIA



Sunil Vijay COO MAE & MEPL



**Devender Singh** COO CTMIL & MMDL



Chapter 1
Foundations
and achievements



### Modules and Polymer specialized companies

Combine expertise on a wide variety of product lines







One of the largest suppliers of bumpers, instrument panels and door panels to the premium segment

### **SMRC**



Global interiors expert for mid/high segments and decorative surfaces

#### MATE



Leading supplier of interior and exterior plastic components, Supplying basic/mid segments globally

### **SMIA**



Leading specialist suppliers of extruded and injection-moulded exterior and interior components

### MAE MEPL



Molded rubber parts for automotive, medical, white goods & other industrial applications

### CTMIL MMDL



High precision injection moulding tools from 10 tons to 3200 tons, soft tools, jigs and fixtures

### Multiple further offerings... up to 150 parts per car!



Door Panels p.a. >4 mn vehicle sets



Instrument Panels p.a.



Bumpers p.a. >8 mn



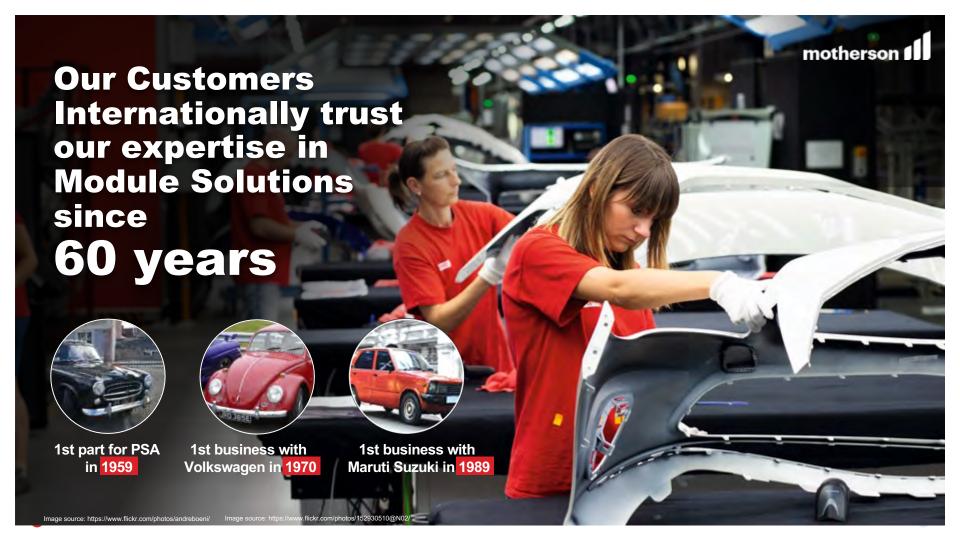
Center and Floor Consoles p.a.

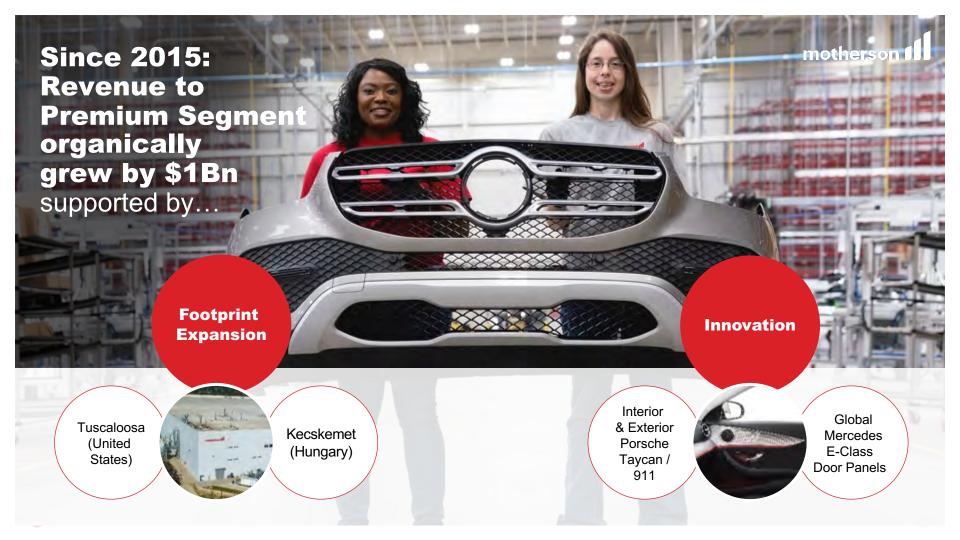




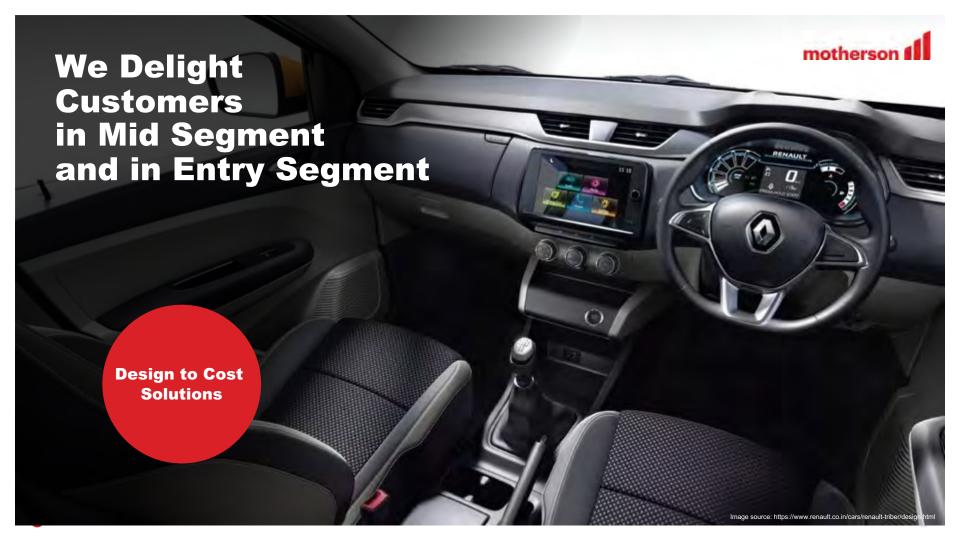
Roof Rails p.a. ~0.5 mn













# Three acquisitions brought \$1.3Bn additional Revenue by 2020

### **Inorganic Growth**

**January 2015** 

Scherer & Trier

Now: SMIA
Interior & Exterior
Decorative Expert

**January 2017** 

Kobek Lighting Technology

Now: **Motherson Innovations Lights** 

August 2018

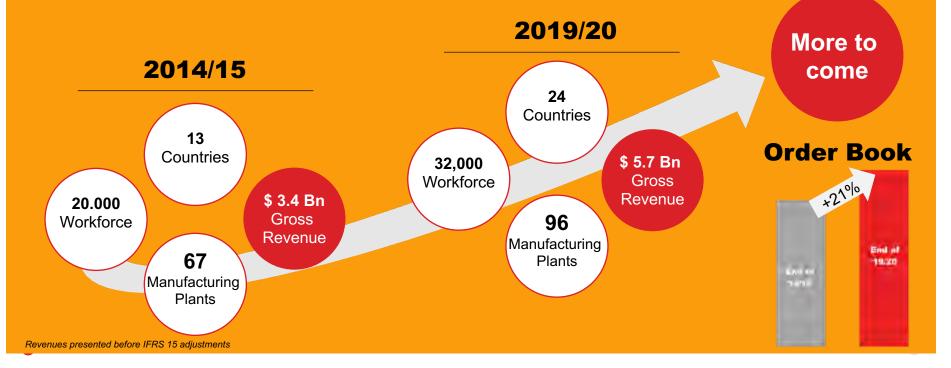
Reydel

Now: **SMRC** 



motherson 1







**Chapter 2 Our Vision 2025** 



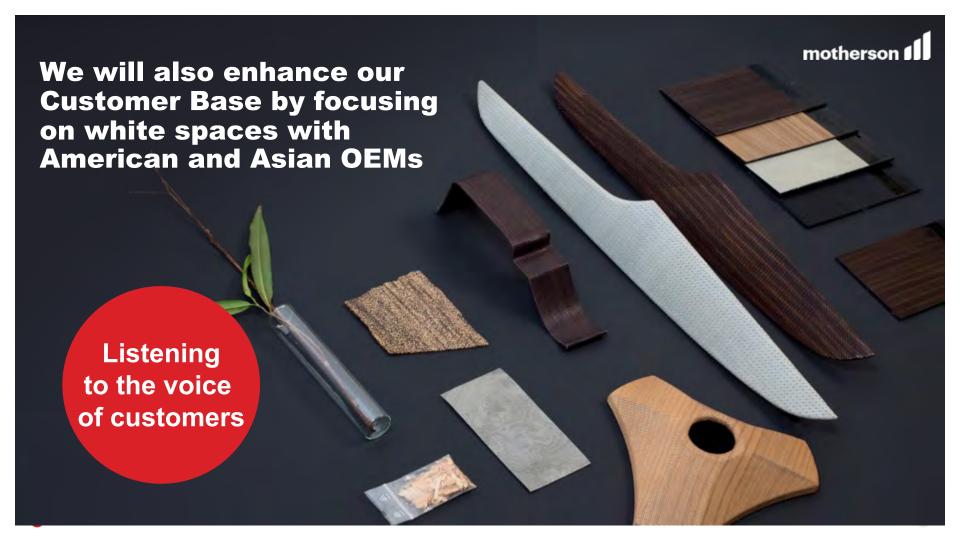
### We Aim to enhance our Global Presence in the USA, China, Eastern Europe, Africa and India

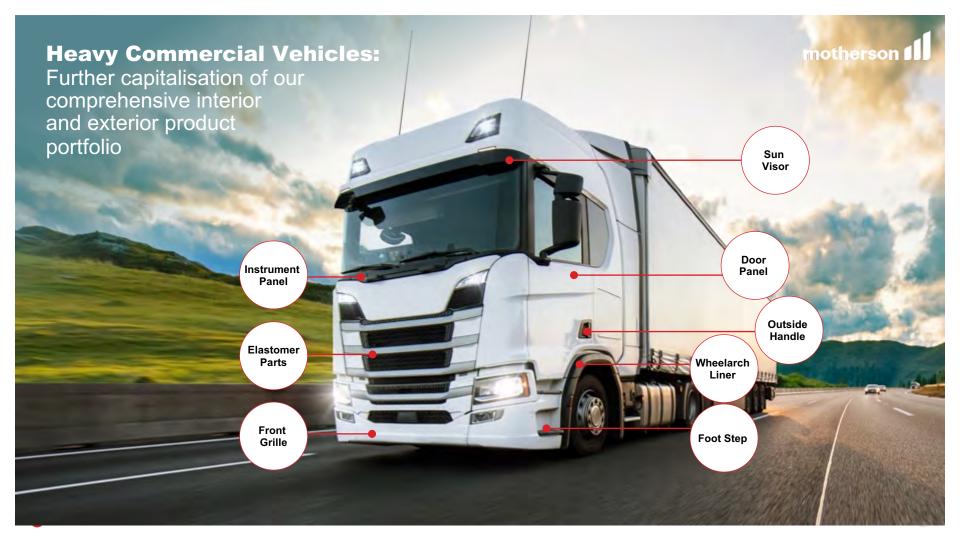












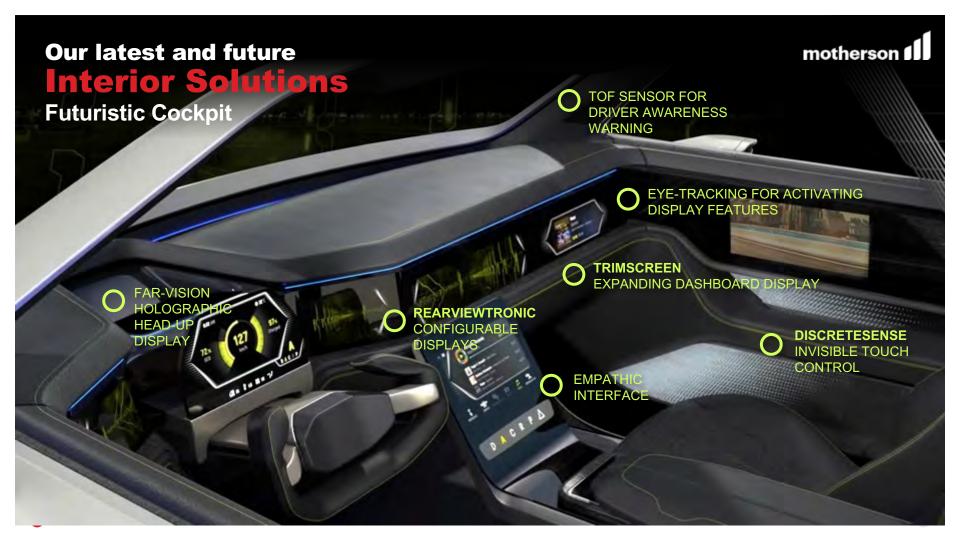


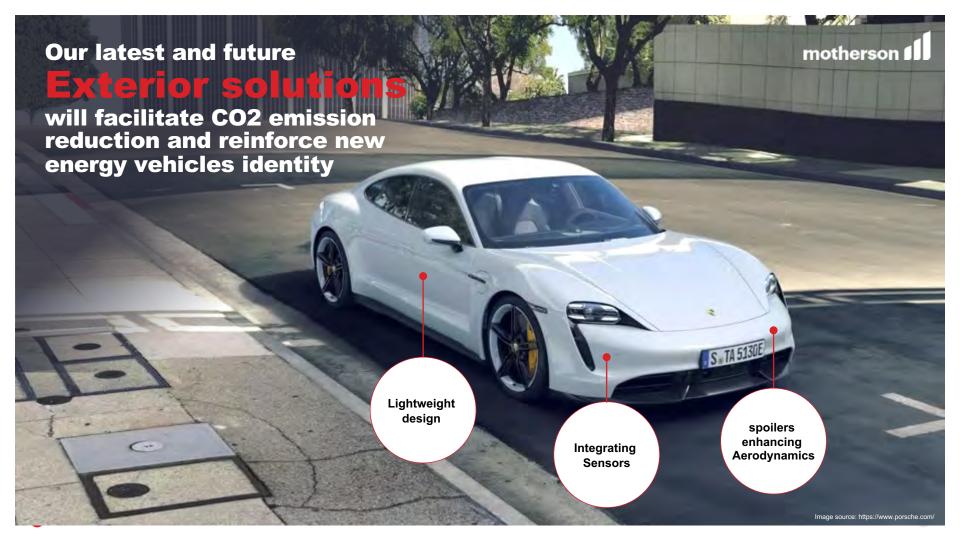












### **Our latest and future**

### motherson

### **Exterior solutions**

will Support Autonomous Vehicles Development **Bumper** 2025 Illuminated **Aerodynamic** bumper **Bumper Design** Camera & Radar hidden Behind painted bumper



# We increase value per car by transferring know-how from Premium segment to mid and entry segments



#### **Premium Segment**



Know How Transfer

#### **Mid Segment**



Image source: https://de-media.opel.com/

#### **Entry Segment**



Image source: https://www.nexaexperience.com/

**Know** 

How

**Transfer** 



Image source: https://www.porsche.com/







# Our Operational Efficiency initiatives are key to ensure profitable growth and improved ROCE





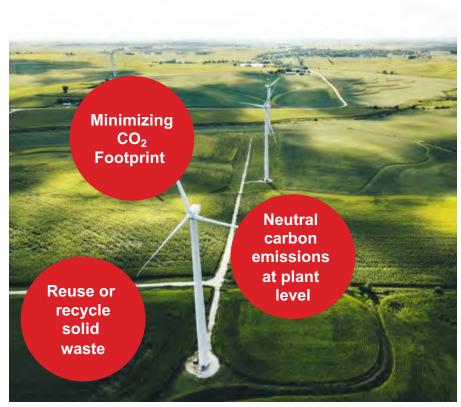






## Sustainability: we systematically promote Environmental and Social Responsibility







### **Conclusion / Roadmap 2025**

+

### **Modules & Polymer Products Division**



01
Business growth
in current
product lines

02
Integration of new technology content within existing product segment

+

03 Adjacent expansion

04
Diversification into new segments & new markets

\$ 36 bn

- Expansions in New Geographies: USA
- Enhance Footprint in China,
   Europe, India & Africa
- Vertical Integration: Cut/Sew/Wrapping
- Increase Market Share with Customer- BMW, Porsche & Commercial Vehicle
- Increase Content per car-Complete Interiors & Complete Exterior Package

- Ambient Lighting Interior & Exterior
- Sensor Integration-Interior & Exterior
- Elegant Decoration-Interior
- Plastic Tailgate
- Surface finishing

- Plastic Pallets
- Two-Wheelers
- White-Goods

- Healthcare Segment
- Telecom Segment





© Motherson Group All rights reserved by Motherson and/or its affiliated companies. Any commercial use hereof, especially any transfer and/or copying hereof, is prohibited without the prior written consent of Motherson and/or its affiliated companies. In case of transfer of information containing know-how for which copyright or any other intellectual property right protection may be afforded, Motherson and/or its affiliated companies reserve all rights to any such grant of copyright protection and/or grant of intellectual property right protection. www.motherson.com



**Lighting & Electronics Division Investor Meet 2020** 













Exterior Lighting & Electronics

Compressor & Shock Absorbers









Division Product Overview









B2C Direct to Market

Backward integration









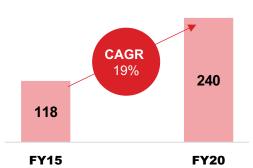
### **Lighting & Electronics Division**

- Largest Premium Lighting Supplier In India.
- Among top three Exterior Lighting Supplier.
- 4x Topline growth over the last 5 years in Lighting in a muted market.
- Leader in "market firsts" and technology advancements
- One of The Largest Shock Absorber Exporter from India.
- Market Leader in Oil Free Scroll compressors.

### **Creating the Platform**



#### Revenue



Numbers converted In Usd Million using average exchange rates CAGR calculated on INR revenues



### **Our specialised companies**

Marelli Motherson Automotive Lighting India Private Limited (Exterior Lighting/Electronics)
Calsonic Kansei Motherson Auto Products Limited (Compressor / BCM)

Marelli Motherson Auto Suspension Parts Private Limited (Shock Absorbers / Gas Balancers)

Anest Iwata Motherson Private Limited (Air Compressors)

Samvardhana Motherson Auto System Private Limited (Trading – Independent After Market)

Samvardhana Motherson Auto Component Private Limited (HPDC Components)

Youngshin Motherson Auto Tech Limited (Compressor Clutch Assembly)

### **Our Partners**













### **Experienced Leadership**





Vishal Kabadi
President,
Lighting and Electronics Division
Motherson Group

Long Serving
Motherson Group
Professionals
with more than
160 years of
cumulative
Automotive
experience



Alok Khanna COO, CKM



Aman Bhatnagar COO, MMAS



Pankaj Dighe COO, AIM



**Geetika Mishra** COO, SMAC



**Dhanraj N.** COO, SMAS



Gautam Manga COO, YMAT



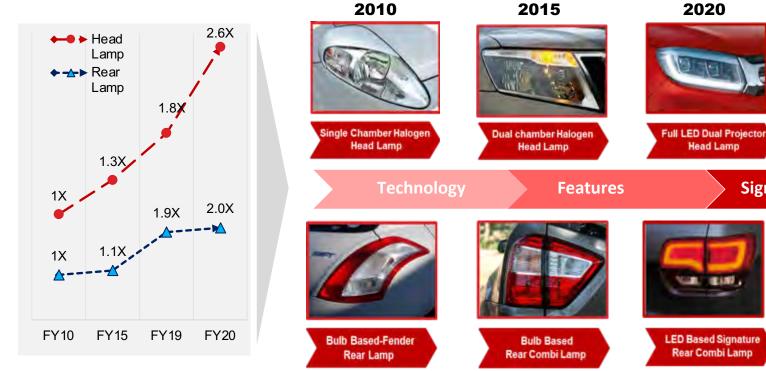
### **Exterior Lighting Evolution – Creating more value**



2025

#### Price Evolution<sup>1</sup>

### **Movement from Commodity to Technology**





Full LED Matrix Head Lamp

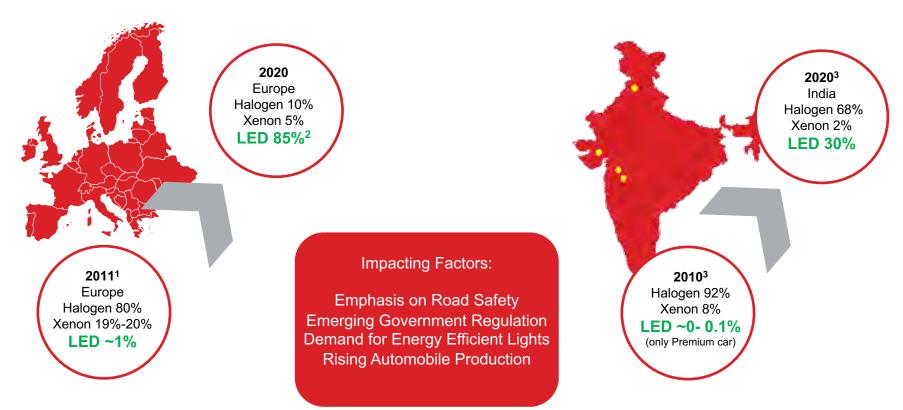
Signature Styling



Full LED Signature Full Body Rear Combi Lamp

### Competitively placed to increase value with enhanced LED penetration





#### Source:

- 1. Automotive news Europe, Article titled "Automotive Lighting sees jump in LED uptake for Europe in 2020"
- 2. Collaborator Information
- 3. Internal Estimates



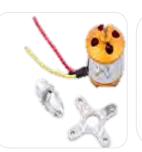
### **Expanding Product Portfolio**













2 Wheeler LED Lighting\*

Electronic Instrument Cluster\*

India

Gas Balancers, Brushless Motors ECU & PCBA\*

Internal Requirements and Buy-back

Market Size

Market

Global 400Mn \$

200 MN \$

150 MN \$

2W Segment

**PV Segment** 

PV Segment

# **Diversifying Beyond Auto OEMs**



Indian Railways & Medical Segment\*





Market Size India 30 Mn \$

Focus
Products:
Locomotive &
Medical air
Compressor

After Market & Accessories\*

# motherson

**AUTO PARTS** 

Market Size India 9 Bn \$
Market Size Global 114 Bn\$

Focus
Products:
Group Products
Telematics
Accessories
Co-Branded
products

# **Serving New Geographies – Focus on Exports**



**Opportunity** size 200 Mn \$

Current **Markets** 2020

**Additional** Markets in 2025

Air Compressor Clutch Assy **Die Casting** BCM Lighting **Shock Absorbers** 





















- Brazil
- UK
- Mexico
- Bahrain
- Kuwait
- Oman
- Qatar
- Saudi Arabia
- UAE
- Sri Lanka
- Bangladesh
- Bhutan
- Morocco

















# Future Ready.

Exterior Lighting Solution



Ready for the

"E" volution

Passenger Cars Commercial Vehicles



E Bus Compressor



Shock Absorbers





# **Conclusion / Roadmap 2025**

# **Lighting Electronics & aggregates**

+



01
Business growth
in current
product lines

02
Integration of new technology content within existing product segment

+

03
Adjacent
expansion

Diversification into new segments & new markets

Contribution to \$ 36 bn

- Continued focus on value added products.
- Increase in share of business.
- Add new customers.
- Outpace the growth of the Industry.

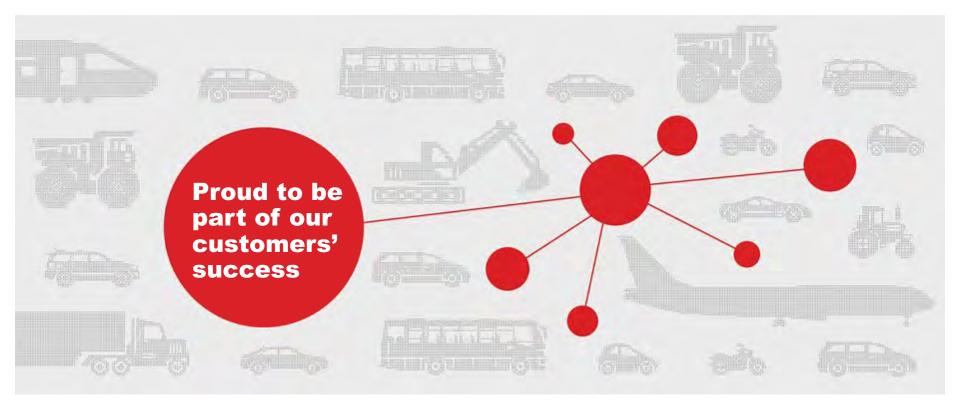
- Access to latest global technologies.
- Localised Engineering & process solutions.
- First to Market.

- Introduction of complementary product lines
- 2 W LED lighting
- ECU's and PCBA
- Gas Balancers

- New segment additions Railways/Medical and after market
- New geographies with focus on exports though best cost manufacturing solution.
- Leveraging global Motherson facilities.



© Motherson Group All rights reserved by Motherson and/or its affiliated companies. Any commercial use hereof, especially any transfer and/or copying hereof, is prohibited without the prior written consent of Motherson and/or its affiliated companies. In case of transfer of information containing know-how for which copyright or any other intellectual property right protection may be afforded, Motherson and/or its affiliated companies reserve all rights to any such grant of copyright protection and/or grant of intellectual property right protection. www.motherson.com



# **Precision Metals and Modules**

Investor Meet 2020



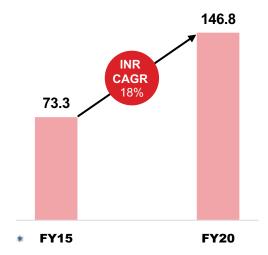


# Main focus areas

- Technologies & competences developed over last more than 10 years
- Opportunities & Road map for growth
- New products /new Technologies
- Safety and emission regulations

# The division's operations today







~ 1 % of Group revenue



2456 employees



19 Offices



## **Our specialised companies**

- MS Global Motherson Techno Tools• Fritzmeier Motherson Cabin Engineering
- Samvardhana Motherson Innovative Solutions Broaches, Gear Cutting Tools and powdered metal sintered parts
- Nissin Advanced Coating Thin metal coating servid ##FPG MTP MEX MINES
- Valeo Motherson Thermal Commercial Vehicles Motherson Bergstrom HVAC Solutions
- Matsui Technologies India
   Frigel Intelligent Cooling Systems

### **JV Partners**

















# **Experienced leadership**





**Ajay Bahl -** President Modules & Metal Solutions



Cyril Xavier COO – VMTI



Rajeev Goyal COO-MTIL



Harsh Neb



M.Paramasivan – COO - FMCEL



Kunal Sabharwal – President



Mr. S. Anbarasan Robin COO - MSGI



**Mr. Bala** COO - MSTL



Mr. Sumanth



Mr. Jens COO - MTPG & MTP Mex



Shailesh Prabhune – President



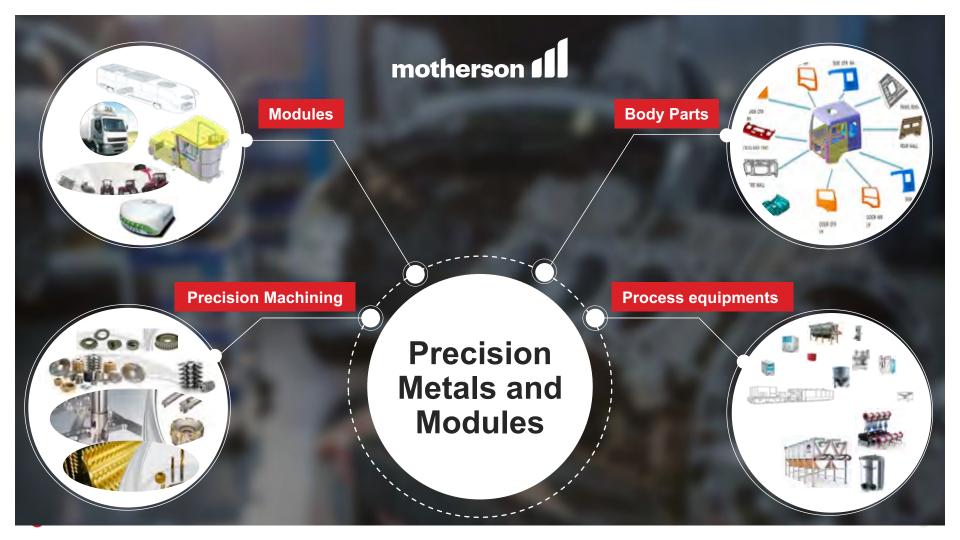
Ajay Dulloo COO - NACIL



Rajiv Malhotra COO- MTTL



Vineeth Chandran COO - MATS



# **Supplier of Choice**



MAHINDRA PRESIDENT AWARD



ACCEPTING NO LIMITS AWARD MAHINDRA OUTSTANDING SUPPORT



KOMATSU BEST PERFORMANCE IN QUALITY AWARD



ASHOK LEYLAND-OUTSTANDING AWARD FOR **BUSINESS ALIGNMENT** 





CATERPILLAR WELD EXCELLENCE



CATERPILLAR (SQEP) CERTIFICATION



CATERPILLAR PAINTING COMPETITION



AUTO COMPONENTS AWARD



QUALITY CIRCLE FORUM OF INDIA NATIONAL LEVEL COMPETITION



Ashok Leyland-Gold Award



Volvo Eicher -Outstanding Contribution Award

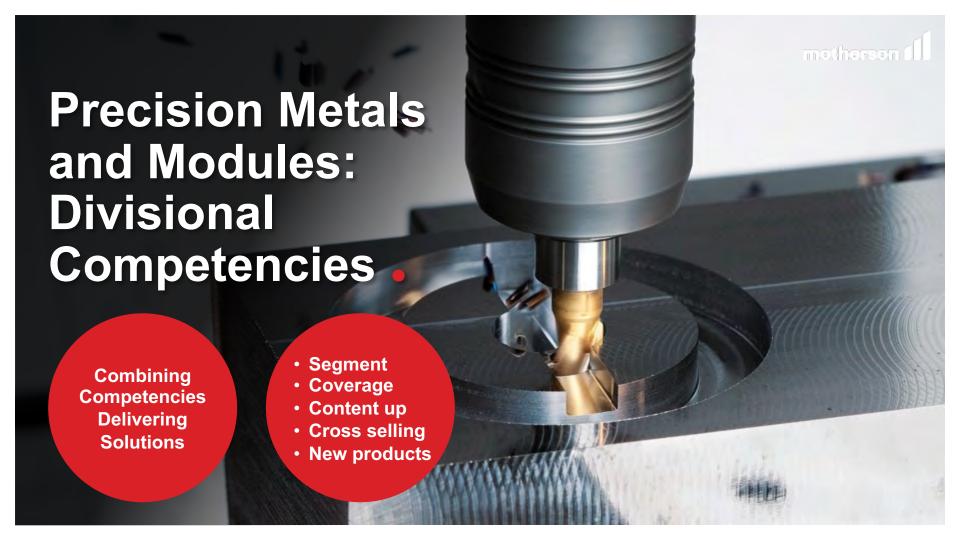


DANFOSS RECOGNITIONS









# **Gearing for Growth**

# **Body Parts**



MSGI – Sheet metal structural parts

# **Precision Machining**



MTTL-Turning, Milling, Drilling Tools



**NACIL-** PVD coating



SMISL- Sintered / Gear cutting / Broaches



MTPMEX/MINES/ MTPG/ – Precision Machined Parts

# Modules



**FMCEL**— Cabins / Fabrication Parts



VMTI,- HVAC systems for Buses MBSL - HVAC systems for Trucks and Off-road

# **Process Equipments**



MTIL – Auxillaries for Polymer Processing

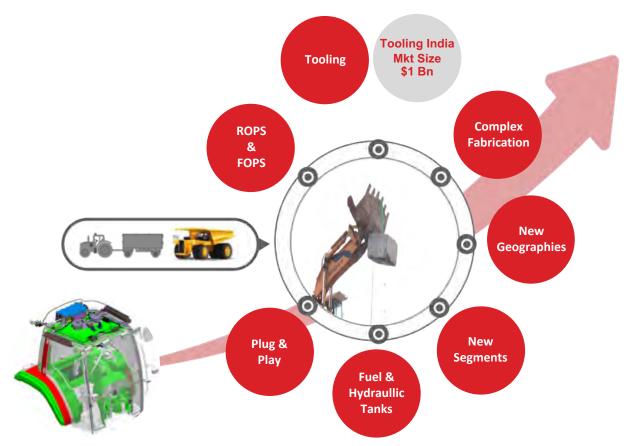


**FICS**- Process Cooling solutions

# **Modules: Road Map -Safety Operator Cabins**



- Design
- 8 Axis bending
- 3D Laser cutting
- CED Painting
- Safety Welding
- Complex assembly
- Supply chain management
- Market Penetration





# **Modules: HVAC Systems**

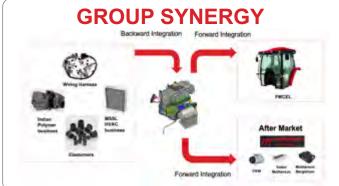




60,000 Refrigerated truck Market\*

2024/25





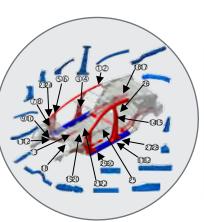
Now

# **Body Parts: In Pursuit of Global Play**

motherson 1

- Cold Stamping
- Hot Stamping
- Laser Cutting
- Welding
- Powder Coating
- Frame Assembly

Phase I









1st Production line with 3 customers for structural parts

2019

Development of Tooling Technology and Large Volume Production

Development of Tooling Te

Phase II

2023

Development of Tooling Technology And Global manufacturing footprint

Development of Hot trimming technology to do inner parts

Global Vehicle - body Specialist

2025

Global Mkt Size \$150 Bn

**Stamping** 

Phase III



# **Process Equipments: Doubling the Play Field**





635 Customers

Leadership

3000 Installations Compound Conveying Solutions

Specific Technology

**Metal Processing** 

Competencies

Position in Auxillaries

**Cooling Solutions** 



32 Countries

Plastic Recycling Solutions

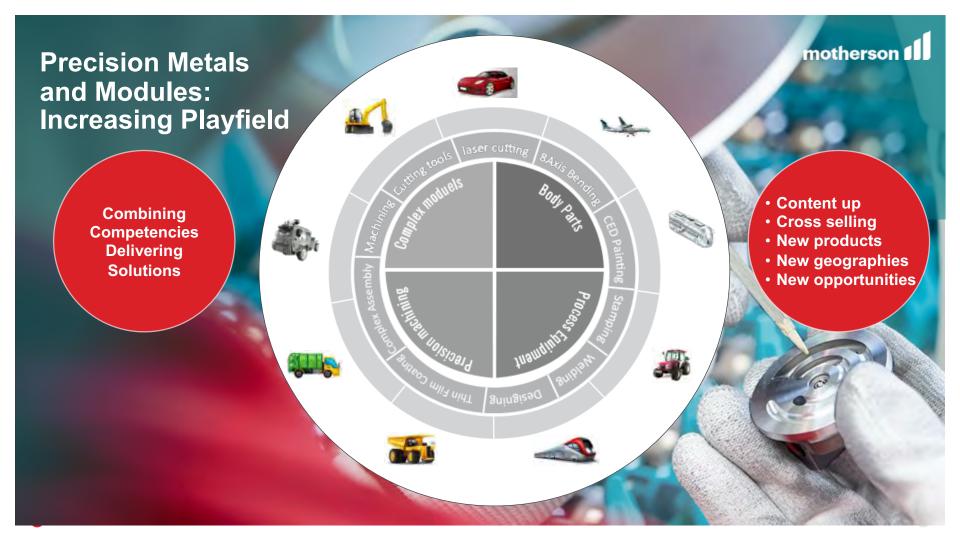
**Customer Relationship** 



108

**Products** 





# Roadmap summary – Precision Metals and Modules



01
Business growth
in current
product lines

02
Integration of new technology content within existing product segment

+

03
Adjacent
expansion

+

04
Diversification into new segments & new markets

Contribution to \$ 36 bn

- Market Growth forecast
- Booked Orders
- New projects won
- Anticipated new projects

- Complex fabrications
- New Refrigerant
- Forward integration in Body Modules /systems and machining
- Most CAPEX on new Technologies already done in last 5 year cycle.

- · Set up of press tooling
- Targeted acquisition to complement existing portfolios
- Value addition /
  Forward and / or
  backward integration
  at behest of customer
- Global play in skin, chassis and structural parts
- Expansion of cabs business outside India
- New products through interplay of divisional competencies
- Use Current Core Competencies and customer access to expand in Non-Auto Segment.



© Motherson Group All rights reserved by Motherson and/or its affiliated companies. Any commercial use hereof, especially any transfer and/or copying hereof, is prohibited without the prior written consent of Motherson and/or its affiliated companies. In case of transfer of information containing know-how for which copyright or any other intellectual property right protection may be afforded, Motherson and/or its affiliated companies reserve all rights to any such grant of copyright protection and/or grant of intellectual property right protection. www.motherson.com



# **Group Services**



Make with Motherson

motherson 1

### **Industrial Park**

### **Motherson Auto Solutions Limited**

- Partnership with Sojitz Corporation, Japan
- Total size: 300 acres
- Ready to Move-In: 40,000 sq ft.
- Permits and Approvals All done!
- Engineered by International Experts









© Motherson Group All rights reserved by Motherson and/or its affiliated companies. Any commercial use hereof, especially any transfer and/or copying hereof, is prohibited without the prior written consent of Motherson and/or its affiliated companies. In case of transfer of information containing know-how for which copyright or any other intellectual property right protection may be afforded, Motherson and/or its affiliated companies reserve all rights to any such grant of copyright protection and/or grant of intellectual property right protection. www.motherson.com



# **Technology & Industrial Solutions**

Investor Meet 2020



# motherson



### **Main Focus Areas**

- Evolution from Project to Product based Orientation for Speed & Agility to Market
- New Entities & Global Alliances for Geographic Expansion
- Integrated Competencies & Verticalized Focus for Strengthening Identity & Growth Potential
- Contributors of Future Growth

# Technology & Industrial Solutions—Introduction.



### **Technology & Industrial Solutions**

Developing Solutions for Unlocking Cutting-edge Innovation, Solving Complex Challenges, Driving Sustainable Business Growth

MothersonSumi INfotech & Designs (MIND)

Samvardhana Motherson Health Solution (SMHS)

Embedded & Electronics Division (MI-XLab)

Hardware Automation (ROBIS)

Less than 1 % of Group Revenues



2000 +**Employees** 



17 Offices

Phase 1

### **Footprint**

- India (6 Cities)
- USA
- Germany
- Japan
- Singapore
- UK
- Middle Fast

### Phase 2

- 1. Spain
- 2. APAC (Via Singapore Entity) Thailand, Malaysia & Indonesia
- 1. France and Italy
- 2. Africa
- 3. Australia & New Zealand

### Verticals ▶ Automotive | Manufacturing | Pharmaceuticals / Healthcare | Logistics

### **Portfolio**

### ADM Services (MIND)

Expertise in developing agile business applications for global scale operations

### DEX (MIND)

Integrated design and manufacturing group providing Full System Solutions to customers

### Industry 4.0 (MIND)

End-to-end Smart Manufacturing enablement expertise powered by inhouse MES 'iDACS'

### Infrastructure Services (MIND)

Focuses on digitalization, fine tuning infrastructures and IT operations

### Global Business Services (MIND)

Global Center of Competencies for client operations with Process Excellence & RPA

### Cloud (MIND)

Cloud Journey Enablement from Strategy to Migration to Developing Cloud First Solutions

### Plant Automation (ROBIS)

Robotic Automation and Innovative Solution for end-to-end Plant Automation

### Embedded & Electronics (MI–Xlab)

Hardware solutions for various verticals. Telematics solutions for Automotive

### SMHS

Customer centric product & services focusing on compliances, patient & drug safety

### Global Alliances











卿

















**Expansion** 

**Planned** 

# Pillars of our Future Growth – Key Leadership.





With right blend of Seasoned Technology Leaders complemented by Market Facing Leadership who have extensive experience of nurturing business in Global Markets, we are committed towards our Vision of becoming a Globally Preferred Solutions Provider.

### **Market Development Leads**



Mr. Rajesh Thakur CEO



Mohanchandra Head, Americas



Ralf Rees Head, Europe & UK



Yash Bhatnagar Head, Japan & Far Fast



Krishanu Singh Head, Strategy Office



Sunil Sharma Head, Global Alliances



Vimal Manchanda Head, Healthcare Vertical (SMHS)



Amit Upadhyay Head, Embedded & Electronics (MI-XLAB)

### **Technology Practice Leads**



Mr. Rajesh Srivastava CFO



Cheruvu Krishna Head, Industry 4.0



Tarun Gupta Head, Cloud



Prakash Thiyagarajan Head, DEX



Vinod Pahlawat Head, GBS, India & Middle East



Mohit Gupta Head, Cybersecurity



Gaurav Mathur Head, Infrastructure Services



Anurag Agarwal Head, ADM Services

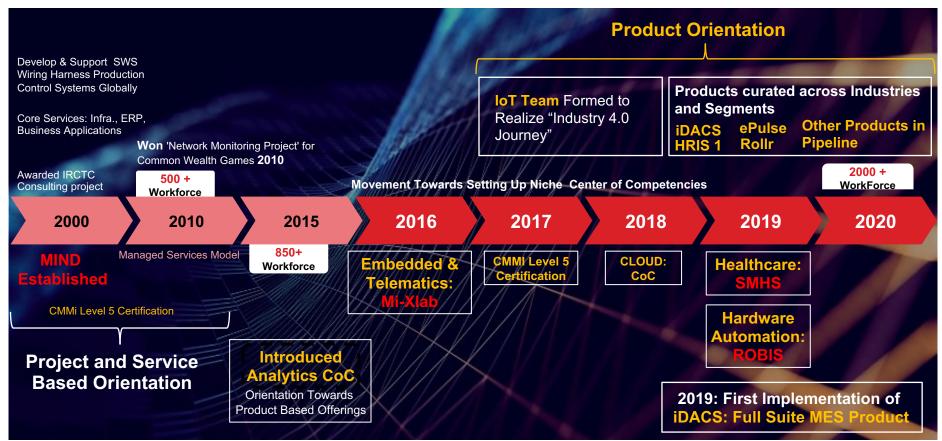


Pradeep Kumar Head, Hardware Automation (ROBIS)



### Vertical Evolution.







# MothersonSumi INfotech & Designs.





# ROBIS.



### Hardware Automation & Robotics

### **Vertical Overview**



Superior Products & Competencies Developed for Driving Manufacturing Excellence through Hardware Automation & Robotics

### **Go-to-Market Capabilities**





### **Offerings**

- · Automated Assembly & Testing
- Plastic Joining
- · Material Handling & Conveying
- · Quality & Traceability Aids
- Robotics & Automation
- · Machine Overhaul & Upgrades



### Scope

- Concept
- Feasibility Study
- · System Design
- · System Build
- System Integration
- Installation & Support

### **Future Growth Drivers**



- Integrated Industry 4.0 Positioning along with iDACS & Factory Analytics
- Inclusion of External Market Business Development Planning in Scope
- Focus on more Cutting-Edge Areas Including AR / VR
- Formulation of Competitive Product Roadmaps for Key Offerings related to Digital & Automation



# ROBIS.



# Product Highlight

Key Product Portfolio spans across User Guidance, Error Proofing, Material Movement, Automation, Inspection Systems & Machines / Overhaul / Upgrades



Material Handling Systems - AGV, ASRS



Augmented Reality for Error Proofing



End of Line(EOL)
Inspection Systems



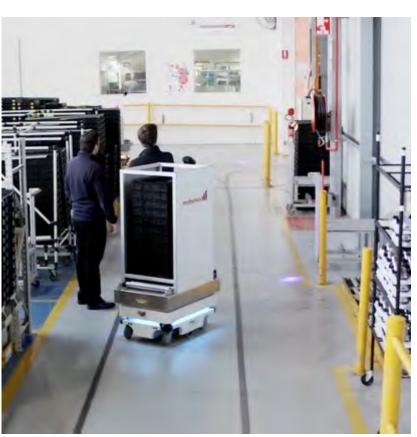
Robotics & Automation



Special Purpose Machines(SPMs)

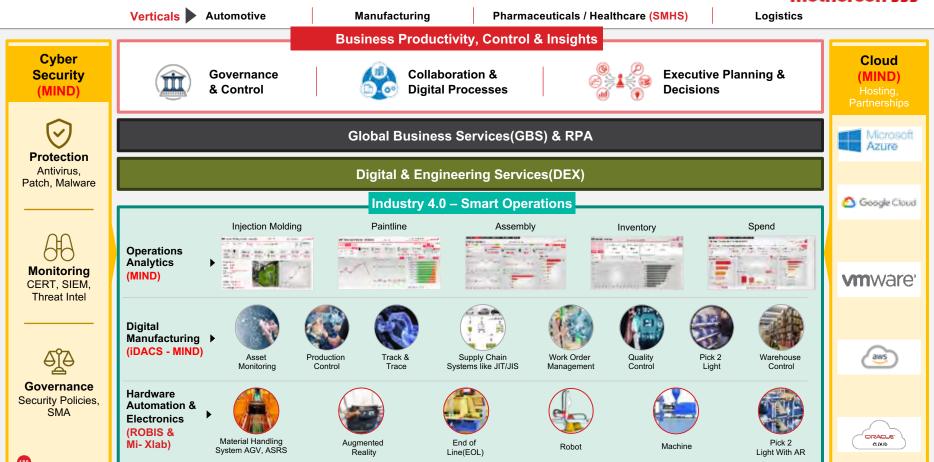


Pick 2 Light With AR



# Maximizing Value through Comprehensive Digital Coverage.





# **Future Growth Drivers – Industry 4.0.**





Global Spending on Industry 4.0 set to Rise from \$119 BN in 2020 to \$310 BN in 2023 @27.04% CAGR: Forbes Dec18

# Market Needs Connected Machines & Factory Plant Automation Analytics across Sales, Spend, Factory, HR and Audit Cloud Managed Services

#### **Service Offerings**

**ROBIS** 



FAS (Factory Analytics System)

Multi Cloud Capability backed by Next Generation Security Protocol Expertise

iDACS

### Experience & Scope at motherson



**iDACS Implementation** - Several Plants Covered



Future focused Industry 4.0 Light house **Projects** 



Collaborative approach for Digital, Automation & Analytics



#### **External Market - Growth Drivers**

- Industry presence across Manufacturing, Automotive, Pharma & Healthcare
- Automating the Material Handling System using ROBIS Products
- Smart Manufacturing using iDACS
- Supporting Industry Solutions on Hybrid Cloud
- Integrated Ecosystem Management



#### **Kev Customers**

Motherson

- Yanfeng
- Maruti Suzuki
- JBM

Rane

- Supreme
- TATA AUTOCOMP
- Visteon
- Brakes India Ltd.
- Magna
- Sun Pharma
- Valeo
- Century Ply

Cosma

HUI

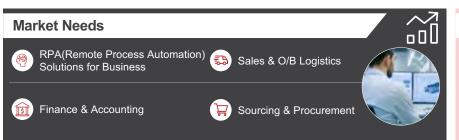


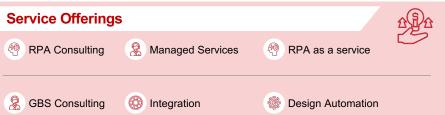
# Future Growth Drivers – Global Business Services (GBS).



# Market Opportunity

Total opportunity size estimated to grow at high single digits\*





## Experience & Scope at motherson



**Business** Process Standardization - Finance. Purchase. Sales Back

Office etc.



Std. Operating Procedures as plug & play for Greenfield Setups



Digital Transformation and Process Re-engineering for Indirect Cost Optimization



#### **External Market - Growth Drivers**

- Economy of Scale
- **Business Risk Mitigation**
- Cost Advantage
- Utilization Improvement
- Superior Competency
- Work from Home & Shifts Flexibility



#### **Kev Customers**

- Motherson
- Max HealthCare

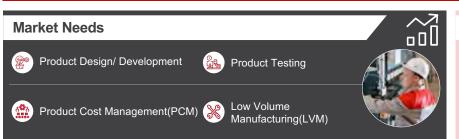
# Future Growth Drivers – Digital & Engineering Services (DEX).





Digital Engin

Digital Engineering Spend to Grow from \$1358 BN (2019) to \$2155 BN (2025) @19% CAGR: Zinnov Dec 2019 Report<sup>2</sup>



#### **Service Offerings**



\_\_\_\_\_

Design Validation and LVM services

Digital Engineering

# Experience & Scope at motherson



Modelling, CAD & CAE, Tolerance Analysis & Prototyping



Manufacturing Engineering Services



Supplier Quality Audit Support



#### **External Market - Growth Drivers**

- Reorganizing the Business to Go- to- Market as an Integrated Design and Manufacturing Group providing FULL SYSTEM SOLUTIONS to Customers
- Strong Digital and Design partners
- GEO Expansion to North America, Europe & ROW
- Vertical Expansion to Automotive, Industrial Manufacturing, Medical Devices & Aerospace



#### **Key Customers**

- Motherson
- Honda Cars
- Daimler(Mercedes Benz)
- Bharat Benz
- Suzuki
- Ford
- John Deere's
- HUI
- lveco

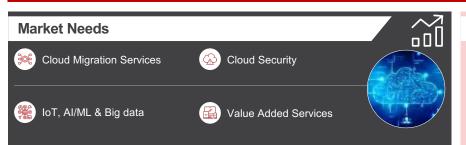
Sources:

## **Future Growth Drivers – Cloud.**



# Market Opportunity

Global Cloud Spending on IT Growing @16.5% (CAGR), Expected To Touch \$345 BN by 2022: Nasscom, April 2019



#### **Service Offerings**



Next Generation Multi Cloud Managed Services (Public as well as Hybrid)

A Rare IT Player with strong Horizontal and Vertical strength

# Experience & Scope at motherson



Enterprise Cloud Journey



Cloud first **Applications** 



Core Systems like SAP on Cloud



#### **External Market - Growth Drivers**

- Strong Partner Network and Support
  - AWS
  - · Google Cloud
  - Azure
  - Vmware

  - Oracle Cloud
- AWS Premiere Tier partner by end of 2020
- Well defined competency road map
- 90+ Cloud Certifications, 60 + certified Professionals



#### **Kev Customers**

- Motherson
- All India Radio
- **CREDAL**
- **CSIR**
- Delhi University
- STC
- THDC India Ltd.
- Woodland & 70+ Customers

# SMHS.



#### Healthcare

#### **Vertical Overview**



Solutions around Compliances, Patient & Drug Safety and Operational **Excellence** 

#### **Go-to-Market Capabilities**







· Indoor Navigation



#### **Services**

· Working in various Healthcare sub verticals (Health Tech, Med Tech. Pharma Tech. Wellness)

#### **Current Technologies**

- · Open source
- · Augmented Reality
- · Wearable & IoT

#### **Future Growth Drivers**



- · Connected Wellness
- · Aided Diagnostics using AR/VR
- IoT / Wearables
- Digitalization
- · Artificial Intelligence

#### Product Highlight

**ePulse** 

An Integrated Architecture, yet Modular. Modularization offers Flexi-Adoption Approach towards Digital Transformation.

#### **Assuring Digital Compliance**

**ERES** CFR Part 11 **GMP** 

**Data Integrity** 

#### Pre-ePulse

Shop floor logs, records, templates are filled manually.



# eLog

#### Digital Logbook

Shop floor logs, templates are converted to a digital platform/ tablets



#### **IoT Component**

Equipment agnostic IoT component to monitor machine utilization.

### **Intelligent Manufacturing Monitoring System**

Equipment integration to provide real-time data acquisition and reporting





Converting data to value, providing manufacturing pulse, on a click of a button



### Mi-Xlab.



#### **Embedded & Electronics**

#### **Vertical Overview**



Multitudes of Products Developed in Vehicle Telematics, Electronics & Services

#### **Go-to-Market Capabilities**









#### **Vehicle Telematics**

- Over 10+ grades of Hardware
- IoT Cloud developed
- Multiple App developed

#### **Electronics**

- · Laser Seeker
- Industrial IOT
- IRVM

#### Services

- Working with several Group Companies (MIND/MI,SAMRX)
- OEM Services for MSIL/M&M

#### **Future Growth Drivers**



#### **OEM Business**

- · 2-Wheeler Segment
- Tractor Segment
- Off-Road Segment
- Focus on International Markets Expansion

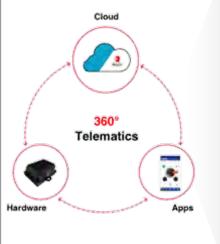
#### **Cloud Data Services**

- New Business ideas around Cloud driven Telematics Solutions
- Innovation driven Solutions for OEM & Insurance Partners Ecosystem in Automotive.

#### **Product Highlight**

Rollr

An IoT Platform providing diverse application use cases across Vehicle Telematics & Customer Operations





**150** Mn Km Vehicle Data Logged



250+ Vehicle Models Tested



**20+** Hardware Developed



**6x** Vehicle Managed: From 25k to 150k



# **Vertical - Key Customers.**



#### **Key Customers (External)**

Airtel

Asahi India Glass Ltd.

ANTOLIN

Ashok Leyland

**Brakes India Limited** 

BOSCH

Class Link

CREDAL

Century Ply

Cooper-Standard Auto

Cosma CSIR

CloudCodes

CAT

Digital Alchemy

Daimler(Mercedes Benz)

DuPont Escorts

**Espirit Toyota** 

Futuris

FIAT

Goodyear Tire and Rubber Company

**Gulf Stream** 

Honda

HUL

Hero

Hi-Lex

ILVS

iTutor

ISUZU

Intradiem

JCB

JBM

Jubilant LifeSciences

Larsen & Toubro

Max Healthcare

Maruti Suzuki

Moriroku

Mahindra Rise

Magna

Mitsubishi Motors Maruti Suzuki

McCalla Raymer Leibert

Neptune Sai LLP

NewTek

Nissan

NTPC Nidec

PavAsia

Rane Group

Rajiv Gandhi Cancer Institute of Research Centre

Revegy

Salido

SUN Pharma

Sumitomo

Suzuki

Soft Bank

Sigma

SML Isuzu

Shuttle

Sonalika

Supreme

Sir Ganga Ram Hospital

STC TATA

Tirupati

TATA AUTOCOMP

THDC India Ltd.

TVS Rubber

Turbo Energy PVT. LTD.

Visteon Valeo

Woodland

Yanfeng

YKK Manufacturing company



Estimating Return
Potential of 1%-1.5%\*
for Vertical



# We have Global Exposure & Experience to Drive Growth.



## **Digital Focus at Motherson**

#### **Current Scale of Operations**

- 270+ Group Locations
- 5000+ Servers
- · 600+ Applications
- 25+ ERPs Managed
- 135,000+ Employees
- · 200K+ Support Tickets/Year
- 99.996% Uptime

#### **Increasing Business Share** in Motherson through:

- · Increased Integration within Motherson Group
- Higher Value Proposition through Integrated Industry 4.0 Capabilities, GBS, DEX & Cloud

Significant IT Opportunities from **New Companies** as Group Targets \$36 BN over next 5 Years

Next 5 Yr. Target

**Experience** at Motherson has made us Price Competitive & ROI Focused

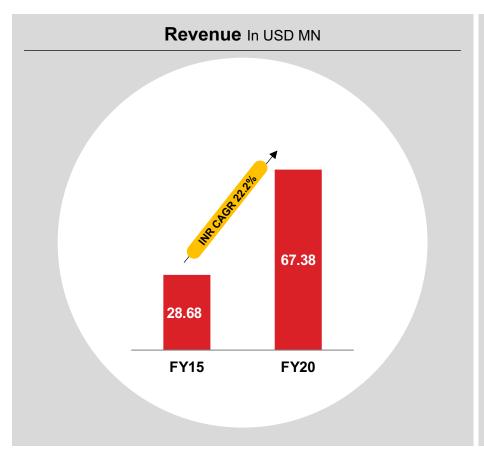
is to Increase IT **Wallet Share from** 35% to 60%

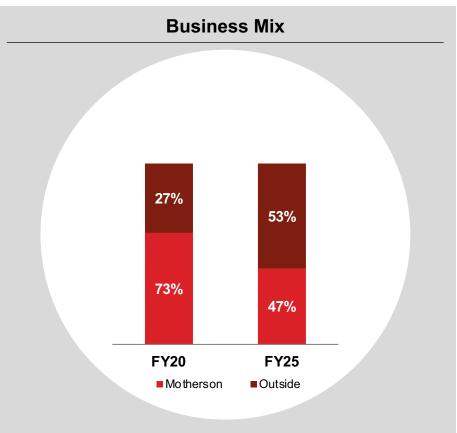
Motherson's DNA & Experience will Bolster our External Market Growth...



# **Vertical - Top Level Financial Performance.**



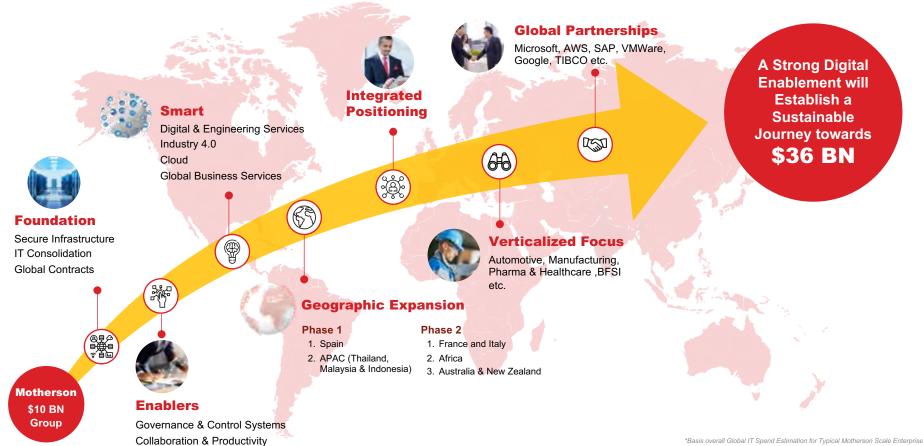




# **Digitally Empowering Motherson's Growth.**

Solutions







# Roadmap summary – Technology & Industrial Solutions.



01
Business growth
in current
product lines

02
Integration of new technology content within existing product segment

03 Adjacent expansion 04
Diversification into new segments & new markets

Contribution To \$36 BN

- Became a Strong Enterprise Technology Vertical over past 2 Decades
- Business IT Portfolio will focus on increasing Content Per Customer with new applications
- Digital Value & Coverage Expansion at Motherson
- MIND's continued Strategic Role in Integrating New Companies
- Foundation established with Customers Acquired for Healthcare 'SMHS' & Embedded & Electronics 'Mi-Xlab' offerings

- Centers of Competencies established in cutting edge Tech. Areas – Industry 4.0, Cloud, Digital & Engineering Services and Global Business Services(GBS)
- Working with Global Advisory for Strengthening Competencies and Acquire Larger World Market Share
- Working on Global Alliances to Integrate new Platforms / Capabilities, Market Outreach for Current Offerings

- Translating Projects/Solutions Experience in Developing Globally Competitive Products ROBIS, iDACS, HRIS1 etc.
- Integrating our Portfolio for Manufacturing vertical and position as an end-to-end Industry 4.0 Player
- iDACS suite will be pushed for other verticals like Process Manufacturing, Oil & Gas etc. in stages

- Setting up New Business Entities & Alliances in a Phased Manner
- Healthcare business 'SMHS' leveraging current IT capabilities complemented with Advanced Tech. like AR / VR will position us for Growth
- Embedded & Electronics business 'Mi-Xlab' will Extend our Solution Capabilities within the Overall Ecosystem



© Motherson Group All rights reserved by Motherson and/or its affiliated companies. Any commercial use hereof, especially any transfer and/or copying hereof, is prohibited without the prior written consent of Motherson and/or its affiliated companies. In case of transfer of information containing know-how for which copyright or any other intellectual property right protection may be afforded, Motherson and/or its affiliated companies reserve all rights to any such grant of copyright protection and/or grant of intellectual property right protection. www.motherson.com



**Logistics Solutions** Investor Meet 2020







# **Main focus areas**

- External logistics
- Internal logistics
- Skilling
- New opportunities



# The division's operations today

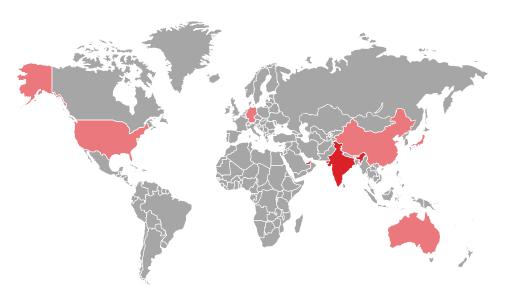




90 employees



11 facilities



## **Our specialised companies**

Samvardhana Motherson Hamakyorex Engineered Logistics Limited Samvardhana Motherson Global Carriers Limited Swarn Lata Motherson Center of Excellence

#### **JV Partners**

HMK

More in pipeline



# **Experienced Leadership**





Arjun Kochhar COO Logistic Vertical Division

3rd Generation SCM professional with 18 years experience, an MBA from Kellogg School of Management and Advanced Supply Chains Certification from IIM-A.



Nitin Sharma
Business Head
Logistic Vertical
Division – SAMRX



Niranjan Samal
Operations
Logistic Vertical
Division – SMGCL



Gaurav Pahwa CFO Logistic Vertical Division – SAMRX



Alok Srivastava
CFO
Logistic Vertical
Division – SMGCL



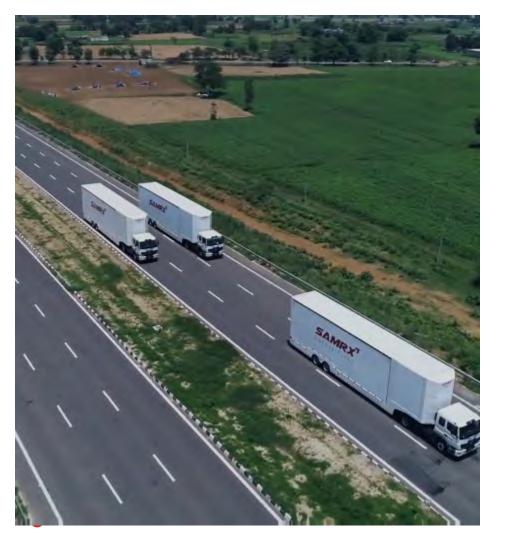
Ishizu Karsumsa CMO Logistic Vertical Division – SAMRX



# **External Logistics**SAMRX





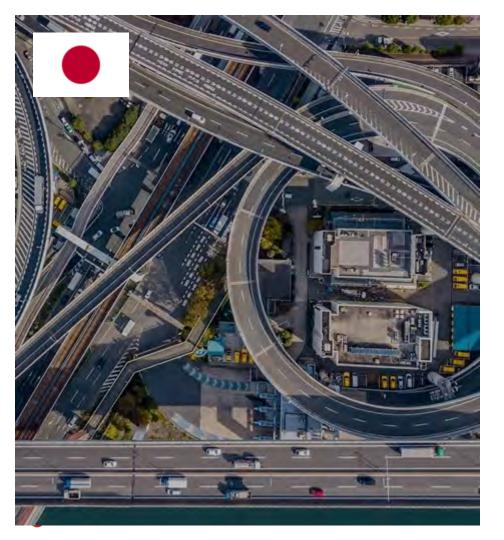


# **About SAMRX**

"A solution built around safety to deliver a better car carriage solution to OEM customers and provide the commercial vehicle drivers a fair deal."

SAMRX is a JV between Hamakyorex Co Ltd & Motherson Group







# **About Hamakyorex**

- Japanese logistics player established in 1971
- Listed on the Tokyo Stock Exchange
- Diversified services across FMCG, medical equipment, ecommerce and car carriage
- +100 Distribution Centers & +5,000 trucks

### **Car Carriage Business:**

- 30% Suzuki market share
- 47 Years of experience
- Capacity of 19,000 cars per month
- Best in class performance +600 Km per day
- Several Accident Free and Quality awards by Suzuki

# **Car Carriage Market Landscape in India**



# **Highly fragmented market**

- Lack of organized players (76% of the market is driven by unorganized players)
- Many fleet providers with small fleets (Avg: 100 carriers)

# Low penetration in other modes

- 95% of the car carriage business is via roadways
- Govt push for Rail & Waterways movement is a greenfield opportunity

Market size 18,000 carriers \$ 0.8 Bn\*

#### Low technology enablement

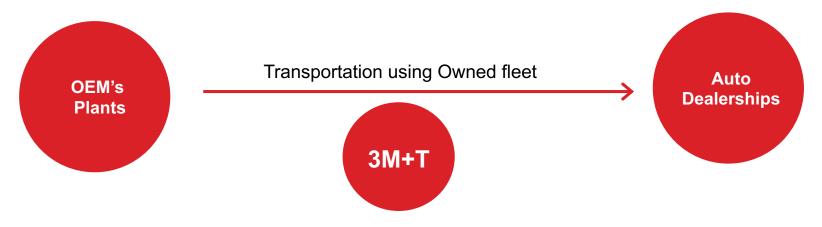
- Lack of fully organized systems for monitoring operating efficiencies of the fleet
- Poor traceability and lack of online systems

#### **Stability of drivers**

- Drivers are the key assets in the business
- Due to current employment practices, retention of drivers is a big challenge for industry players

# **Our Business Model**





- Betterment of Men
- Best in class Machines
- Standardization of Method
- Addition of cutting-edge Technology

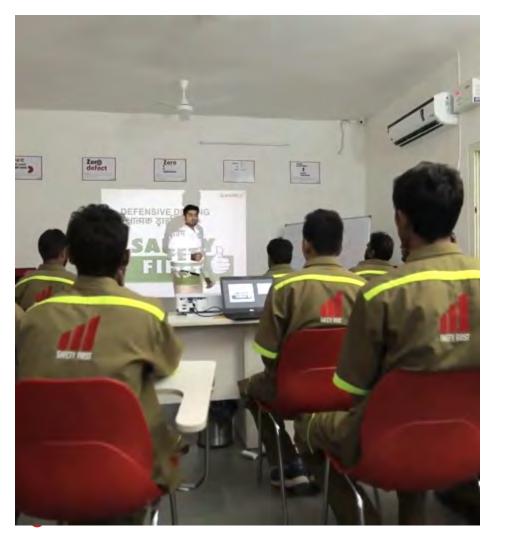




# SAMRX today Our fleet

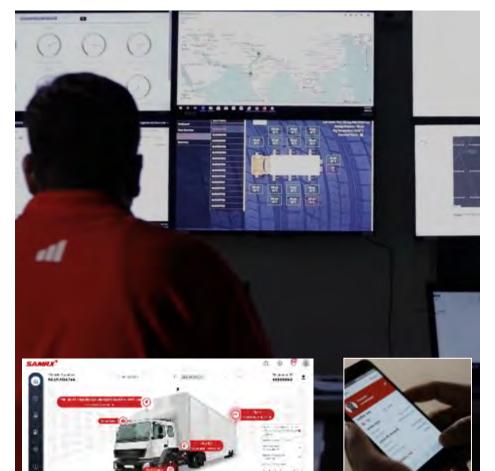
- Started with MSIL and are in process of onboarding other OEMs - 20 Carriers on road, 30 additional to be added by Dec 2020
- Green Company Higher Capacity Fleet thereby reduced Carbon Footprint
- 100% Advanced Telematics & IOT enabled Fleet





# SAMRX today **Driver Strategy**

- Unlike industry practice, we have all our drivers on fixed salaries along with all statutory compliances.
- Company offers Industry first and best in class for education/health/accident/life insurance schemes.

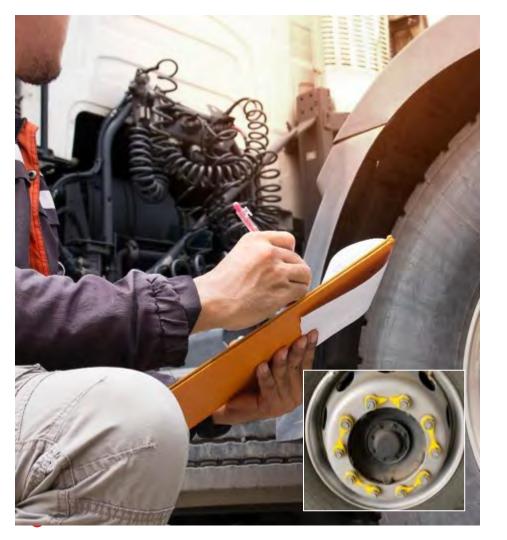




# SAMRX today **Technology Advantage**

- Control tower with real time visibility of fleet and cost capture
- Driver App and scoring based on performance, efficiency, training and testing.
- IOT Sensors for real time monitoring of:
  - Fuel and tyres
  - Dashcam
  - Fatigue Monitoring
  - Route deviations
  - Cargo hold access





# SAMRX today **Quality & safety focus**

- Full time Chief Safety Office
- Regular GEMBA visits to ensure quality and safety standards
- Japanese Kaizen Points
  - Hub Nut Indicator
  - Engine start button
  - Wheel Stopper
  - Laser Sensor
  - Counterbalance Valve & Flow divide
  - Double Acting Cylinder

# Strategy going forward



# **Organic**

- Continue building technology driven enablers to improve fleet efficiencies
- Consistently reduce carbon footprint by investing in superior fleet with increased load capacity.
- Focus on driver training and welfare
- Ramp-up business with current customers and gain entry into new customers

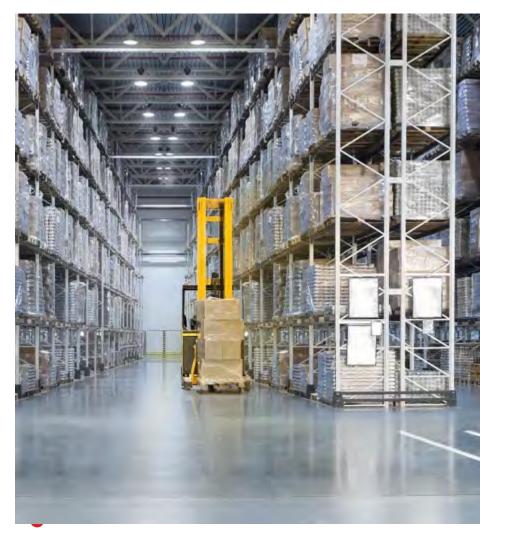
# Inorganic

- Expansion of fleet and business by acquisitions (PV, 2W, OHV)
- Entry into Auto Rakes business
- Entry into Yard Management



# Internal Logistics SMGCL







# **About SMGCL**

#### Our Vision:

To be an In-house single window 4PL Solutions Provider empowering Motherson's supply chain.





# SMGCL today Service Offering

- Transport services: JIT distribution, Milk Run, Loop Movements, Full Truck Load, Part Truck load, Over Dimension and Project Cargo.
- Air & Sea Clearing and Freight forwarding services.
- Virtually Managed Inventory & Warehousing consolidation projects
- Packaging solutions
- Logistics manpower consulting



#### **Business Model**



# **Freight Savings**

- Through centralized consolidated freight purchasing
- Vendor rightsizing

# **Technology empowerment**

- Deployment of Oracle Transport Management System for visibility and analytics
- Standardized telematics for vendor performance review, geofence based innovation and automated billing

# Logistics efficiency consulting

- 4PL efficiency & maximization strategies
- Process Mapping, Synergy Quantification & Re Engineering
- Material management equipment benchmarking & best practices

Opportunity 10% freight savings

# **Case Study**



Savings Per Trip
Avg. 10%



Savings thought EXIM Freight Consolidation

Avg. >30%



Annual Savings > INR 0.7 Mn

 Case Study 1: Freight reduction through consolidated purchasing. Data driven performance monitoring and rightsizing of vendors from a total of 17 service providers to 3.

- Case Study 2: SMGCL clubbed and negotiated 2 LCL (Less than container load) Export shipments of different Motherson entities to achieve significant savings.
- Case Study 3: Replacing physical bottle sealing process with electronic rear door sensor at a Manesar Unit will result in annual savings >7,00,000/-

# **Strategy going forward**



#### What?

- Consolidation of EXIM business of 270+ Motherson facilities
- Conversion of all CIF and similar purchasing where logistics costs are baked in at seller end.
- Inward Logistics To route all incoming raw material logistics purchasing.

# Why?

- An approx. 10% savings on Group spend and aligned with our philosophy of vertical integration to add value
- Improved supply chain visibility, credit access and insurance settlement terms.
- Better inventory visibility and cost control.



# **Skilling The Swarn Lata Motherson Center**







# **About the Motherson Center**

Motherson Group as part of Skill India plans to create a holistic Centre of Excellence complete with India's first driving track for large vehicles.

#### Our Goal is threefold

- Create sustainable job opportunities
- Skill upgradation in a rapidly evolving ecosystem
- Creating a trained manpower pipeline for Auto Ancillary industry

#### **Proposed Programs**

- Driving school and associated RTO operations
- Direct employability based Industrial Training
- Innovation & Entrepreneurship Lab





# **Projects under Consideration**

## **Under Exploration**



\$9b

Inland Container Depots \$14b

**Cold Chain** 

\$.8b

Trailer Manufacturing

\$26b

**Logistics Tech** monetization



# Conclusion

#### **Conclusion / Roadmap 2025**

+

#### **Logistics Solutions**



01

Business growth
in current
product lines

O2
Integration of
new technology
content within
existing product
segment

03
Adjacent
expansion

+

04
Diversification
into new
segments & new
markets

\$ 36 bn

- Scale SAMRX
- Consolidate Group spend in SMGCL
- Build skilled manpower pipeline for Ventures and industry.

 Industry first data driven real time business intelligent through best in class Logistics platforms and IOT sensors.

- SAMRX: Rail & Waterways
- Skilling Center: Global partnerships.
- Logistics associated asset manufacturing.
- Monetize IT
- Explore more B2B specialized Logistics opportunities.



© Motherson Group All rights reserved by Motherson and/or its affiliated companies. Any commercial use hereof, especially any transfer and/or copying hereof, is prohibited without the prior written consent of Motherson and/or its affiliated companies. In case of transfer of information containing know-how for which copyright or any other intellectual property right protection may be afforded, Motherson and/or its affiliated companies reserve all rights to any such grant of copyright protection and/or grant of intellectual property right protection. www.motherson.com



# **Aerospace Division** Investor Meet 2020







# **Main focus areas**

- Detailed parts
- Aerostructures
- Wiring harnesses
- Cabin parts

# The division's operations today



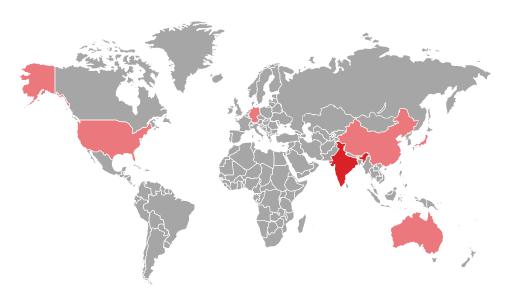


**12** employees



1 facility

**5** offices



#### **Our specialised companies**

Operational approach through other divisions

#### **Partners**

Not yet

## **Experienced leadership**





**Kunal Bajaj** CEO, Aerospace Division New Delhi, India

20+ years of industry and consulting experience in India, US, Canada and Australia



Xavier Dessemond VP, Supply Chain & Procurement Paris, France



**Vikram Bansal** AVP, Operations New Delhi, India



Deepak Manchanda AVP, Business Development New Delhi, India



Dominique Farkas External Advisor, Aerospace Expert Paris, France



Brajesh Chhabra AVP, Finance New Delhi, India



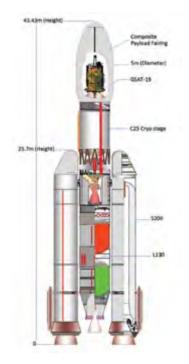
TBC External Advisor, Aerospace Expert USA



# A success story









# Our market entry.

- Recenty won a "Make In India" high-grade mission critical rubber part for Chandrayan-II launch vehicle motor
- Leveraged Group's experience, cost leadership to submit a winning value proposition
- Single vendor for flex seals on multi-launch vehicles
- Created additional opportunities for Motherson







A perspective on the market

#### Aviation industry was driving the global economy...

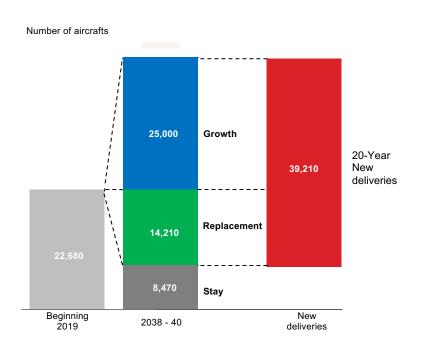




#### **Pre-Covid perspective**



# 40K new aircrafts expected to be delivered by 2040...



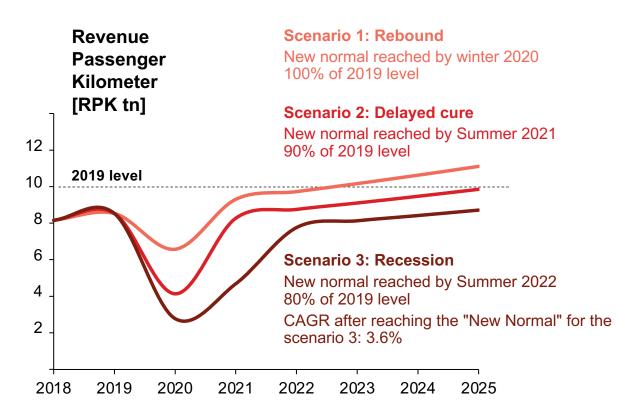
# ...creating a sizeable aerospace market in the long term







# And then Covid hit us all.



"New normal" defined here as the status of global travel demand once aviation RPKs stabilize following the COVID-19 crisis

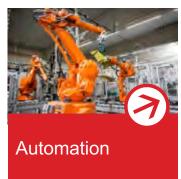


#### COVID-19 is expected to fundamentally change the industry by influencing key industry trends paving the way to a "New Normal"











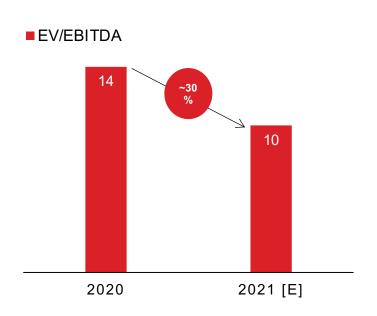




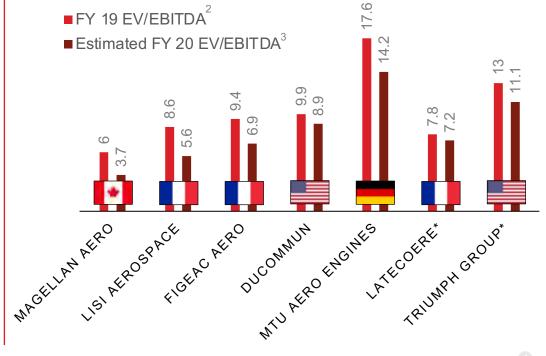
#### Valuations have seen a correction



# Average multiples of global public aerostructure companies<sup>1</sup>



# Multiples of MAJOR Aerostructures and Structural Component Manufacturers (median decline 12%)



## In a nut-shell: A potential up side created from a global crisis



 Severely impacted most industries but Aerospace hit hardest

 New aircraft deliveries are expected to shrink in the short term

 OEMs and suppliers have been forced to work on various cost efficiency measures

# Impact on the Industry going forward

- Localisation of supply chains and stronger regional ecosystems
- Widespread consolidation expected
- Opportunities for disruption and innovation

Tremendous opportunities for inorganic growth

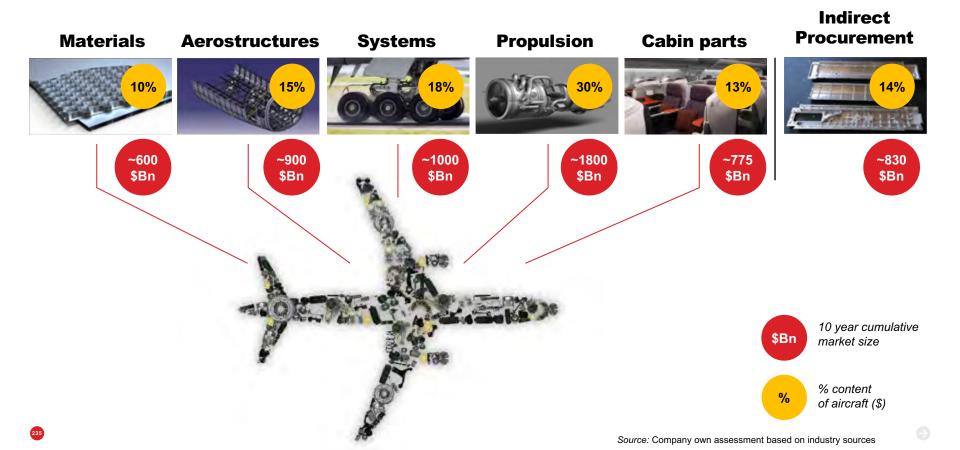




#### **Identification of focus areas**

# 6 major commodities of aircrafts





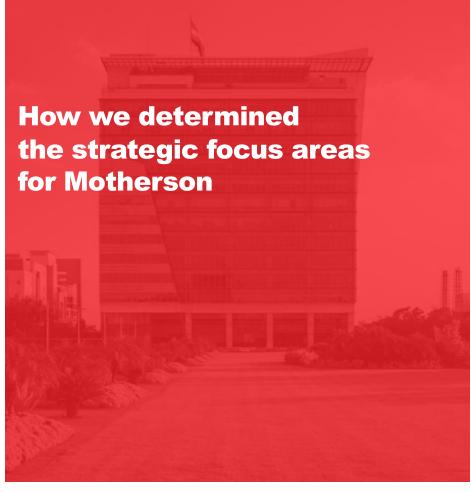




# **Motherson Strengths**

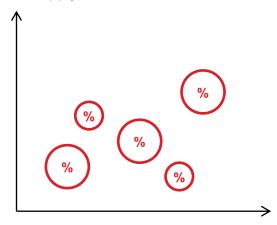
- Over 270 manufacturing facilities
- Strong presence in key Aerospace ecosystems
- Manufacturing DNA with quality, cost and performance
- Strong turn around track record
- Head start in wiring harness and plastics





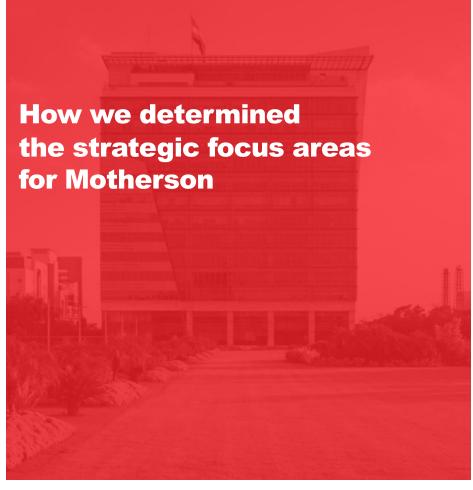
# **Profitability**

 Margins vs. value addition and complexity in supply chain









# **Future Growth Opportunities**

- Non-Aero companies entering the market
- Consolidation of supply chain
- Disruption through automation and new technologies
- Aerospace manufacturing moving to strategic low cost countries (China, India etc.)



#### Motherson focus areas



#### **Materials**

# ~600 \$Bn

- Detailed parts
   Titanium
   Aluminum
   Composites
- Standard parts
- Fasteners
- Electricals assemblies
- Chemical sealants
- Paints and coatings

#### **Aerostructures**



- Composite
   Structural assbly.
- Metallic assbly. Fuselage Doors Wings
- Payload systems
- Wiring harnesses

#### **Systems**



- Landing gear
- Landing gear machine parts
- Flight control systems
- Comm.
   equipment
- Navigation systems

#### **Propulsion**



- Engines
- Engine machine parts
- Pylons & Nacelles
- Fuel Systems & Accessories

#### **Cabin parts**



- Galleys
- Lavatories
- Overhead bins
- Seats (pilot and business class
- Gains
- Entertainment systems

#### Indirect Procurement



- Product Related
   Services
- Tech. Documents
- IT Services
- Machine Tools
- Travel & Logistics
- Building and Maint.



10 year cumulative market size

## We plan to build capability in a phased manner



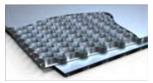
**Materials** 

**Aerostructures** 

**Systems** 

**Propulsion** 

Cabin parts











Short Bed - Hard Metal Machined parts

Short Bed - Soft Metal Machined parts

Small Metallic Assly.

Composites Parts & Assbly.

Wire Harness

Phase 1 (2020-2023)

Long Bed Machining

Additive layup/ 3D printed parts

Complex Composites Assbly

Galleys for Small Aircraft

**Partitions** 

Cockpit Doors

Phase 2 (2024-2025+)



## We will leverage Motherson's existing capabilities and add new ones



MOTHERSON FOCUS	ORGANIC		INORGANIC
Aircraft Commodities	Brownfield "Leveraging Capabilities"	Greenfield "Creating Capabilities"	M&A "Acquiring Capabilities"
Materials			
Aerostructures			
Wiring Harness			
Cabin Parts			



# **Our point of departure**



#### Point of departure (1/3)

Brownfield – Leveraging the Group's existing capabilities





#### Point of departure (2/3)

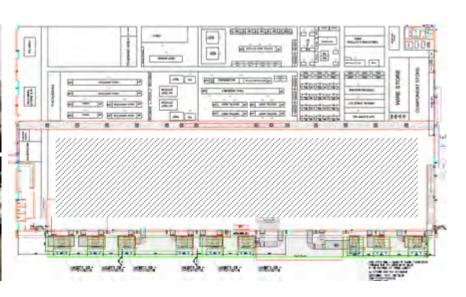
Greenfield – Setting up new facility with focus on Aerospace











- The upcoming ~36,600sqft. facility is co-located and will be globally connected with the Group's 77 existing wiring harness facilities
- The facility will be production ready by April 2021

## Point of departure (3/3)

M&A – Acquiring new capabilities

motherson 1

- Defined acquisition criteria based on geography, size, product, profitability, customer relationships, management team, etc.
- Created a short-list of potential targets in Europe; similar activity being done for North America
- Actively engaging with US & European Primes on consolidation opportunities
- Reviewing strategic assets in France, US, Germany and Canada

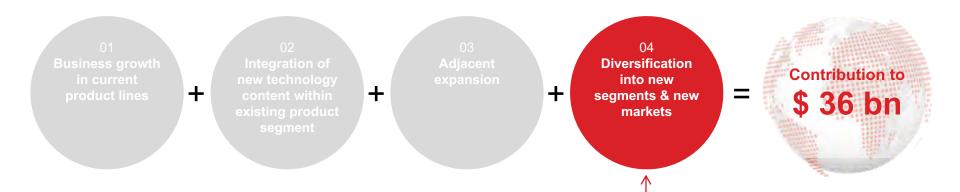




#### **Conclusion / Roadmap 2025**

#### **Aerospace Division**





- Aerospace industry is adapting to a new normal creating openings for new entrants
- Motherson's global presence and existing capability position us well to support aerospace OEMs
- Industry is ripe for consolidation providing inorganic opportunities for growth



© Motherson Group All rights reserved by Motherson and/or its affiliated companies. Any commercial use hereof, especially any transfer and/or copying hereof, is prohibited without the prior written consent of Motherson and/or its affiliated companies. In case of transfer of information containing know-how for which copyright or any other intellectual property right protection may be afforded, Motherson and/or its affiliated companies reserve all rights to any such grant of copyright protection and/or grant of intellectual property right protection. www.motherson.com



**Health & Medical Division**Investor Meet 2020







### **Main focus areas**

- Design, development and sale of Health and Medical Technologies
- Highly resilient globally local supply chain for manufacture of wellness and medical devices
- Medical Quality Systems and Regulations
- Artificial Intelligence and industrial-grade technology platforms

# The division's operations today

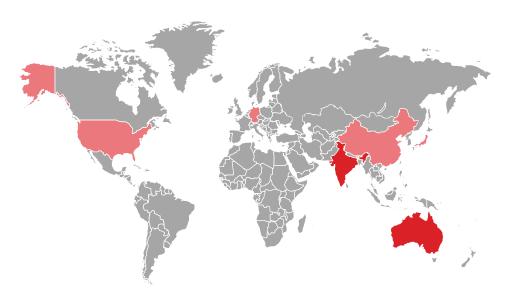




21 employees



**7** Offices



#### **Our specialised companies**

Motherson Medical Re-Time Pty Ltd

# **Experienced leadership**





Varun Sood Head – Health and Medical



Rahul Chitale CTO Motherson Medical



Simon Belcher Hardware Products Motherson Medical



Sam Vial CCO Motherson Medical



Nitin Goyal COO Motherson Medical



### **The Healthcare Sector at a Glance**

#### **Key Healthcare Segments**



### **Delivery**



02. Diagnostic Labs and Services



**Enablers** 





**05.** Health Technology

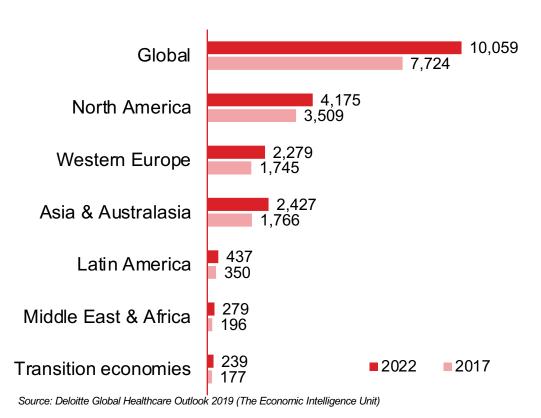


**06.** Pharmaceuticals



### **Projected Global Healthcare Spend (USD billion)**





## **CAGR**

**2.7%** 2014-2018

**5%** 2019-2023



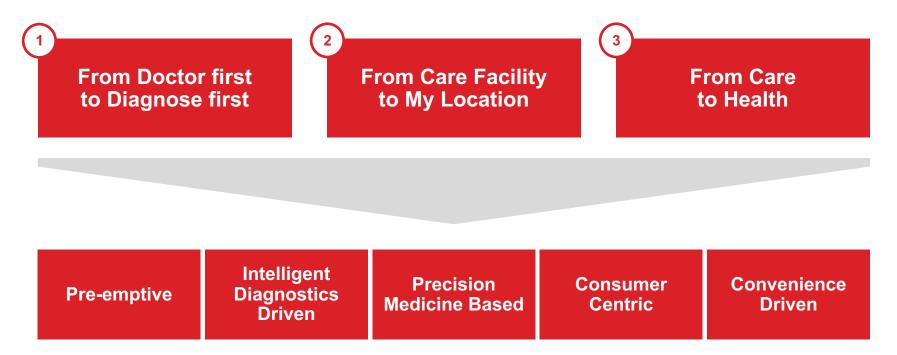
#### Macro Trends and Healthcare's Reality





#### The Future of Healthcare: Paradigm Shifts





→ Future models of healthcare have started emerging, though are at a nascent stage

#### Motherson's strengths and capabilities are very well aligned to Health and Medical

Global presence

DNA of Quality and Cost Focus

Long term partnerships

Engineering and Technology Talent Base

Diversified global manufacturi ng

Business and operational expertise



## **Our current presence**



#### We used our strengths to build a presence in Health and Medical



We quickly pivoted from automotive focus to MedTech in Australia through deep partnerships with Universities, Hospital Systems, Local Governments, and Companies



**Re-Timer**Sleep Therapy Glasses

- In market with revenues of ~ \$ 0.5 mn
- · Available in USA, Europe, Australia, Korea, Japan



Clinical Face Shield Class1 Medical Device

Launched in July 2020: ~ \$ 0.5 mn of revenues



Thim Sleep Training Ring

· Launching in market in Q1 2021



# **Contract Manufacturing Services**To Medical Device OEM's

- Supplying to GE Healthcare, Philips, others
- · Current size business ~USD 5 mn
- Operate ISO 13485 certified facility



#### And leveraging them, we are continuing to build new products





**3dBioPen**For cartilage regrowth in knee reconstruction

 Used to print live stem cells that promote regrowth of cartilage



MaXm Skate
Fully integrated
rehabilitation device

 Captures and reports exercise data, results are immediately accessible by physiotherapist



Bladder Cancer Sensor "Lab-on-Chip" for detection of urothelial cancers

Disrupts current test: < 2 hours, using urine sample <u>vs</u> invasive biopsy, results in 2+ days



And more products under development



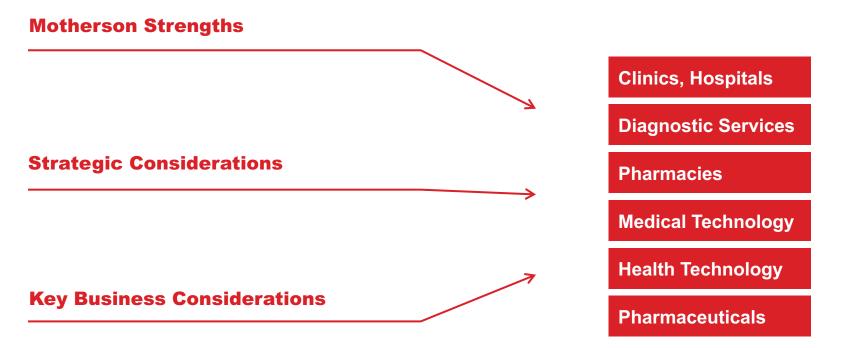


## **Our Vision 2025**



#### We evaluated and assessed Healthcare Segments...





#### ... And going forward will focus on 2 segments = 1 Trillion Market in 2024\*



**Core to Healthcare Delivery – Now and in the Future** 

Will morph into each other – and into healthcare delivery

Highly synergistic and inherently global businesses

Largest source of usable health data

We have existing presence in these

**Strongly aligned to our Capabilities and Strengths** 

Clinics, Hospitals

**Diagnostic Services** 

**Pharmacies** 

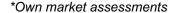
**Medical Technology** 

\$ 770 bn in 2025\*

**Health Technology** 

\$ 310 bn in 2025\*

Pharmaceuticals |





### **Understanding Classes of Medical Technology**



### Class 1

Low risk to human life

Examples: Bandages, Handheld Surgical Instruments, Beds, Nonelectric Wheelchairs

## Class 2

Intermediate Risk to Human Life

Examples: CT scanners, infusion pumps for intravenous medications, Lab Analyzers, Flectric Wheelchairs

## Class 3

High Risk to Human Life, Very important to health or sustaining it

Examples: Pacemakers, Deep-brain stimulators, Stents, Orthopedic Implants

#### **Regulatory and Quality Requirements**

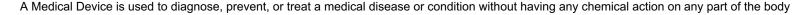


Risks (For Product/ Brand Companies)



Margins and Value









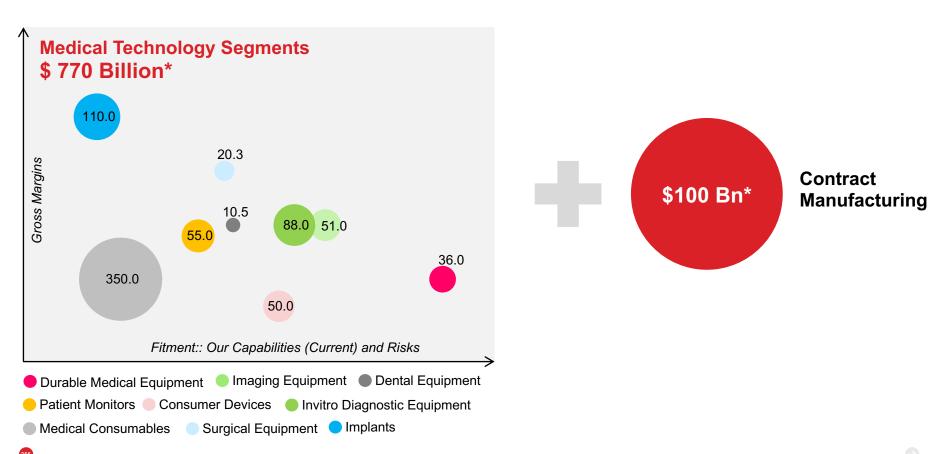


#### **Our aspiration**

- Positively Touch 1+ billion lives by 2025
- Create Global presence of Substantial Scale & Size

#### **Key Segments in Medical Technology – Projected 2025 Market Sizes**





#### We will build our Business on 3 Fronts



Continue to build portfolio of own products

Focus on Point of Care Health and Medical Technologies



Build a large global medical devices platform

Spanning MedTech Manufacturing, and Products & Brands

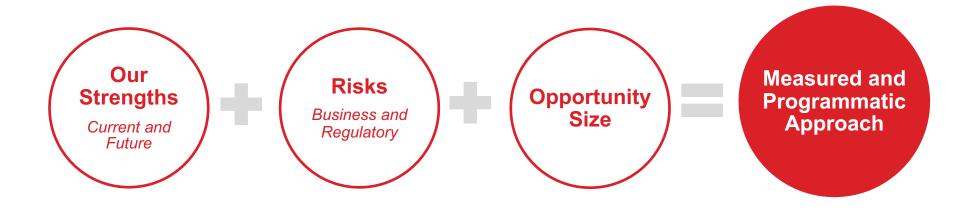


Grow share of MedTech contract manufacturing

Diversify existing contract manufacturing business

# We are taking a measured and programmatic approach to build the business





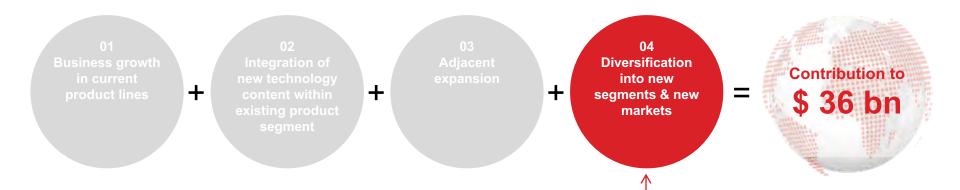
And COVID-19 provides an opportunity to rapidly build the business



#### **Conclusion / Roadmap 2025**

#### **Health and Medical**





- In India, North America, Europe, and Asia
- Launch Point of Care health and medical technologies
- Inorganically build large global medical technology platform
- Grow share of Medical Technology Contract Manufacturing Business for existing operations



© Motherson Group All rights reserved by Motherson and/or its affiliated companies. Any commercial use hereof, especially any transfer and/or copying hereof, is prohibited without the prior written consent of Motherson and/or its affiliated companies. In case of transfer of information containing know-how for which copyright or any other intellectual property right protection may be afforded, Motherson and/or its affiliated companies reserve all rights to any such grant of copyright protection and/or grant of intellectual property right protection. www.motherson.com