The rise of Smart Warehousing in India:

Por a fast-evolving global economy like India, a sophisticated logistics, and warehousing system is a key driver for consistent growth. The Indian warehousing and logistics sector is estimated to attract nearly \$10 billion investments over the next 4-5 years, with an addition of around 200 million sq. ft. of warehousing space, across major ports, airports, and tier 2 cities. Further, while this capacity is expected to double by 2020, the average size of warehouses in the country is also estimated to increase from around 20,000 sq. ft. to 2-3 lakh sq. ft. in a few years, thus putting the entire sector on an accelerated growth track.

While this massive potential is largely driven by a rise in Indian economy and globalization of businesses, the shifting trend of warehousing from a commoditized expense to a smart asset is changing not just industry perceptions but is also transforming the old 'godowns' into well designed and 'smart' warehouses. As demand for high-quality, sophisticated warehousing rises, several players in the supply chain business is leveraging the opportunity to upgrade and transform their warehouses into infrastructure assets. Some key trends to measure this transformation can be listed, as under:

- Use of Technology

Technology advancements have disrupted several industries while positively transformed others. The logistics and warehousing industry has also come a long way since the bar code reader of 1950s. Adoption of Warehouse Management System (WMS) and other IT-driven solutions have resulted in increased efficiency and competitiveness in the industry. Further, technology adaptations in the form of automatic identification and data capture (AIDC) technology, Real Time Locating Systems (RTLS) and Radio-Frequency Identification (RFID) is receiving widespread popularity. While the bar



code readers are still widely used, newer inventions like Quick Response (QR) Code are gaining prominence to encode data to computer-compatible digital data and accelerate the flow of a shipment among it's beneficiaries. Considering the cost-effectiveness and easy adaptability, the sector has been prompt in adopting these technology innovations that are facilitating optimum utilization of resources, inventory management, tracking, and seamless distribution of cargo, warehouse management is transforming into a valuable infrastructure.

- Outsourcing Opportunities

As logistics and supply chain management assumes the function of a profit driver instead of an 'overhead cost' for industries like manufacturing, ecommerce, etc., many businesses are opting for outsourcing a significant part of their operations to

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warehousing companies. Just-in-Time techniques have put a large responsibility on warehouses of maintaining optimum efficiencies thus enlarging their role. Even as the size of individual warehouses increases, many of them are transforming into large cargo hubs for multiple clients. This has led to the efficient management of resources and cost-effective 'smart' warehouse services that are managed by one contract manager. Additionally, warehouse owners and clients enjoy a win-win partnership where they can effectively leverage their resources. For a warehouse owner, a lean period for one client could be the peak period for another while clients can save on costs and resources that would have otherwise been required to maintain a warehouse and its operations, even in a lean period.

- Strategic Infrastructure Development

2018 witnessed a 22% Y-o-Y growth in total stock in Grade A & B warehousing space while the absorption clocked an unprecedented growth of 60% Y-o-Y, to nearly 32 million sq ft in 2018 from around 20 million sq ft in 2017. The robust growth in absorption further reflects that the demand for warehousing is outstripping the supply significantly, with vacancy rates dropping below 10%, for the first time ever! However, even as technological adaptations are driving smart operations and drastically improving in-house infrastructure, rising real estate and construction costs are pushing warehouse operators to maximize utilization of each available square feet of space and to also, explore more economical structures. As a result, alternative construction systems like pre-engineered steel buildings are becoming more popular and feasible. Further, coupled with the high demand, prodevelopment government policies, and grants to develop specialized 'logistic parks', are helping the sector to overcome supply challenges, while also attracting large scale investments from Indian as well as International players. Developments of logistic parks and warehouses at strategic locations, around ports and airports are facilitating free cargo movement, ensuring effective, time-bound, and efficient operations, at economical costs.

- Value Added Services

The current warehouse industry in India broadly comprises of three categories - the Laggard or traditional warehouses, the Leader warehouses, and the Niche or the specialized, high-investment, warehouses that cater to very specific demands of certain industries/ clients. While the Niche warehouses offer the highest degree of perfection, due to accurate customization, they usually come at an astronomical price. However, with the advancement in technological and physical infrastructure, coupled with the rise in multi-client, multi-site warehouses that offer premium third party (Outsourced) services, more and more 'smart' warehouses are evolving to offer specific valueadded service that can be customized to suit the needs of high-end clientele. From specialized temperature sensitive storage requirements for pharmaceuticals to value-added 'kitting' services for Automobile manufacturers, modern warehouses are evolving to meet the versatile the demand of the global economy while retaining a 'customized', client-focused, service approach.

With a rising global presence, large scale domestic and international investments, and disruptive technology innovations, the next decade of warehousing and the supply chain is set to witness the best in emerging technology, from AI and Robotics to ML, becoming one of the key drivers for India's global businesses and the overall economy.

About Robinsons Global Logistics Solutions (RGL)

RGL, a warehousing and distribution company than has been spun off from the reputed Robinsons Cargo & Logistics (RCNL), it brings a strategic combination of technology, international best practices and deep domain expertise to the Indian market. Building on the 65 years of legacy of RCNL's market leadership, RGL is built on the firm values and business ethics of integrity, commitment, customer satisfaction, and drive for excellence.

With a strong network of 40 warehouses in 20 states; and an extensive experience of delivering superior services for the past 23 years, RGL aims to offer expert warehousing and distribution solutions that are aligned to the dynamic needs of modern business. Through a well-crafted strategy that combines technology and strong business values, RGL is committed to creating a niche presence in the areas of customized warehousing and innovative distribution solutions to clients across sectors like Manufacturing, Retail, Infrastructure, IMPEX and SME's. Apart from this,

RGL also provides customized, technology-enabled Warehousing and Distribution solutions for Cold Chain, Automotive, Garments, as well as for Consumer Electronics sectors.

About Mr. Aditya Vazirani, Founder Director, RGL

Aditya Vazirani is a passionate and meticulous professional with a vision to transform the Logistics and Warehousing industry by leveraging the new age technological advancements. In his previous role as Vice President for RCNL, Aditya overlooked the Freight Forwarding, Customs Clearance, & 3PL aspects ensuring the highest level of quality service is maintained. He was also instrumental in obtaining the Good Distribution Practice Certification for Freight Forwarding and ISO 9001:2015 for RCNL, making it the first Indian Logistics & Supply Chain Management Company to be awarded the quality accreditation. Before he decided to consolidate and bring his rich experience to drive focused growth in the warehousing and distribution solutions, with RGL, he had been driving strategic improvisation by implementing Industry best practices, applying business intelligence, and data analytics to implement superior training and digital tools for RCNL.

Alumni of the prestigious Bordeaux Business School (KEDGE) France, Aditya holds a MSc in Global Supply Chain Management and also has obtained an Advanced Certificate in General Management from Massachusetts Institute of Technology (MIT), Sloan School of Management. Having lived and worked across the globe, learning and improvising Supply Chain, Logistics, and management practices, Aditya calls Mumbai his home, is an ardent foodie and enjoys spending his free time caring for his pet pooch.

ZF to help China with new electric central drive for commercial vehicles

The new unit is designed to meet the particular conditions of the Chinese market and the requirements, the company said in a statement.

uto-component manufacturer, ZF on Monday has said that will support China with supply of a new electric central drive for buses and medium-duty trucks.

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The new electric central drive was developed by a local ZF development team to meet the specific requirements of the Chinese market in terms of safety, performance and cost-effectiveness.

According to the company, it is designed for city and shuttle buses with a length of 10-12 meters as well as medium-duty trucks up to 12 tons, and meets all the necessary standards for integration into established vehicle platforms.

In addition to the unit itself, ZF will also be able to supply inverters and control units including the appropriate software. This guarantees optimum efficiency between battery and drive and reduces testing and homologation costs for the manufacturer.