Ja.WAREHOUSE PROJECT ADVISORY SOLUTIONS.
FROSHEIN ADVISORS.

CHANGING GEARS TO MEET FUTURE OPPORTUNITIES.

A few decades ago, what we now call warehouses used to be dilapidated buildings called godowns. The industry has come a long way from those days, to become the backbone of the manufacturing and burgeoning e-commerce industry. The sector is evolving fast, with both the nature of the business and technology driving it and undergoing dynamic changes.

THE LEAP FORWARD.

- Average size of warehouses in the country is increasing from around 20,000 sq. ft. to 2-3 lakh sq. ft. in the coming years.
- Current industry estimates show that warehouse space in India will grow from the current 909.5 million sq. ft. to about 1,439 million sq. ft. by the end of 2020.

SLICING THE PIE.

- According to a report by Ernst & Young and the CII Institute of Logistics, the size of the Indian warehousing industry, across verticals, is estimated to be around Rs.560 billion.
- The Warehousing sector is growing at an average 10% per annum.
- Warehouses dealing with agricultural and horticulture products account for about 15% of the total warehousing industry, cold storages have a share of about 16%, goods meant for import/export accounts 14% share and retail players hold the maximum share, at 55%.
- It is important to note that customs-bond warehouses play a key role in faster shipment of export consignments or clearance of imported goods.

THE GROWTH ENABLER.

• With technological advances in automatic identification and data capture (AIDC); logistics and warehousing industry has gained in terms of optimum utilization of resources, tracking of consignment and seamless distribution of cargo.

CHANGING GEARS TO MEET FUTURE OPPORTUNITIES.

- Technologies like Real Time Locating Systems and Radio-Frequency Identification (RFID) have become essential for a wide range of automated data collection and identification applications that helps warehouse operator to keep a track of goods coming in or going out their perimeter.
- Adoption of Warehouse Management System (WMS) and other IT-driven solutions are becoming effective in increasing the competitiveness of the warehousing industry.
- WMS helps warehouse operators to track inventory, orders and provides data about the products stored and can also be transmitted back to the manufacturers.

WAY TO THE FUTURE.

- Logistics costs, as a percentage of GDP, in developed economies is around 7%, whereas the same in India is about 13-14%.
- An increasingly sophisticated manufacturing industry is looking towards third party logistics (3PL) providers to minimise costs and support them as a driver of growth. This is an immense untapped opportunity for the warehousing industry.
- E-commerce growth in India faces a major challenge due to lack of infrastructure and logistics support. There is an immediate need of warehouses to enable the e-tail sector to deliver goods to customers beyond the major metros.
- Industry experts say that e-commerce firms are expected to invest up to nearly \$2 billion in the next three years in infrastructure, warehousing, and logistics.
- Market experts envisage investments of up to Rs.15,000 crore annually to meet the requirements of all industry verticals.
- With better infrastructure through efficient use of technology and manpower and initiatives like "Make in India", the warehousing industry is bound to play a larger role in the growth of the Indian economy.



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ESSENTIALS OF AN EFFECTIVE WAREHOUSE MANAGEMENT.



ESSENTIALS OF AN EFFECTIVE WAREHOUSE MANAGEMENT.



01.

LOCATION.

Accessibility and Movement of Goods are some of the most fundamental factors influencing the selection of the location for a warehouse. 02.

SIZE.

Size of your property : The size of the warehouse determines all parameters to be taken into account in building the warehouse. 03.

BUDGET.

Properties which are better located with better facilities will command a higher rental. This also comes with higher investment. ROI needs to be right. 04.

INFRA.

Warehouses today require access for huge containers/ trailers along with wide access roads to accommodate them. 05.

LABOUR.

Choosing the right zones where labour is easily available and suitably skilled is a crucial factor.

ESSENTIALS OF AN EFFECTIVE WAREHOUSE MANAGEMENT.



06.

POWER.

It is imperative that all warehouses are located in zones where power can be easily and quickly made available. 07.

PRECAUSION.

Construction should be earthquake resistant and all general aspects that affect that zone should be taken care. 08.

APPROVALS.

It is important to ensure that the property is compliant with all Statutory and Regulatory Approvals. 09.

FINANCIALS.

Rentals, budgets, investments are essential terms that come into a contract. It is important to know what is on offer and how to optimize costs. 10.

KNOW-HOW.

Choosing the right consultants, suppliers, business partners, automation and IT experts determines the success of your project.

ADVANTAGES OF EFFECTIVE WAREHOUSE MANAGEMENT.

As India approaches the modern era of technological superiority, there is a growing shift towards more automated and sophisticated warehousing management techniques. A well equipped and automated warehouse can bring greater operational efficiency and drive the business towards increased productivity and profitability.

- SUPERIOR LEVEL OF PRODUCTIVITY.
- MINIMIZING THE RISK OF PROCESSING ERROR.
- REDUCING THE RISK OF ACCIDENTS.
- SIGNIFICANT REDUCTION IN LABOUR COST.
- INCRESED SUPPLY CHAIN EFFICIENCY & SPEED.
- IMPROVED INVENTORY MANAGEMENT.
- EFFECTIVE MANAGEMENT CONTROL.
- IMPROVED SUPPLIER & CUSTOMER RELATIONS.





fa. WAREHOUSE MASTER | END-TO-END PROJECT ADVISORY SOLUTIONS.



WAREHOUSE MASTER | END-TO-END SOLUTIONS.



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Modeling the Business Plan.

The First Move is for us to sit with you, invest time and resources, in understanding your Business, Nature of the Industry, Location, Products to be Handled and other relevant details.

Deconstructing the RFO.

Second Step, would be to deep dive into the specifics of the warehouse, understand the other details of the RFQ and understand the budget readiness of the client.

Location Analysis & Infrastructure.

It is vital to understand the location of the warehouse, analyse the goods movement and evaluate the infrastructure requirements (including incorporating Vaastu factors if necessary).

Automation **Requirements.**

Based on our decades of past experience, your specifications and nature of products to be handled, our technical team will determine/suggest the level of automation to be installed in the warehouse.

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END-TO-END SOLUTIONS.



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Architects, PMC & PES Consultants.

Based on the results of our evaluation and understanding of the requirements, we will suggest/bring in our Architects, PMC and PES partners most suitable for your warehousing projects.

Design & Cost Optimization.

At this stage, our expert technical team will have the required data points to suggest possible design improvements or cost optimization measures customized to the specifications of your warehouse.

Systems Integrations.

We will act as your systems integrators. We will integrate design partners, automation partner, distribution partners and other stakeholders required to fulfil the RFQ and successful implementation of the warehouse.

Defining the KPIs and KRAs.

Our experts will conduct a detailed scoping study that will help you define KPIs and KRAs for micromanagement of the warehouse. This will act as the benchmarks for successful implementation of the warehouse.

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END-TO-END SOLUTIONS.

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Commercial Negotiations.

As system integrators, we will assist your finance team in liasoning and negotiating with your end customer, suppliers and other stakeholders to match your initial Budget and ROI criteria.

IT infrastructure & Monitoring System.

We will bring/suggest the right technology partners for settingup of the Warehouse Management and Monitoring Systems that will match your business requirement and easy operations of the warehouse.

Project Execution & Implementation.

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We will hand-hold your team at each and every step of the set-up process to ensure timely and successful implementation of the warehouse as originally planned and intended matching the KPI and KRA benchmarks.

12

Modernization of Existing Facilities.

Our expert team will assist you in modernizing your existing warehouse infrastructure with required design, automation, IT and monitoring systems in multiple geographies to suit the requirements of the end customer.

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Our Service Philosophy.

We bring over 200 years of top management & industry experience in helping you with your requirements. Our Advisory Panel comprises of 32 leading Subject Matter Experts, Industry Partners and Ex-Bankers ensuring end-toend support in facilitating your projects.

Beyond projects, we integrate expertise and analysis about emerging developments and long-term trends in geopolitics, macroeconomics, technology and trade, in supporting you as you expand your international footprint or in assessing the next "breakout nations" or in identifying and cultivating over-the horizon opportunities. We draw upon our differentiated network to meet your challenges, help your businesses grow internationally.

Our service is defined by pooling our industry knowledge and expertise, leveraging our global resources in delivering a custom tailored solution for your requirements. Our relationship with our clients go beyond a specific requirement. We work closely with you as your 'Service Partners' over time, through business cycles, within and outside India.

This philosophy has helped us forge exceptionally close, cordial and long term relationships with our clients, that form the very core of our business today.

From Ground to Roof (GTF). From Supplier to Customer (STC).

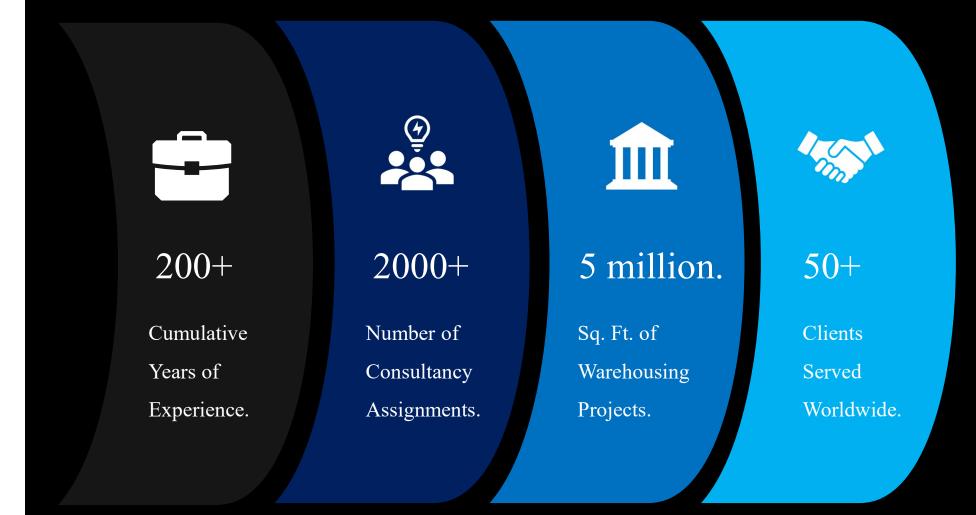
fa. COME TO US. WE ARE WAREHOUSE MASTERS.





TEAM CREDENTIALS.





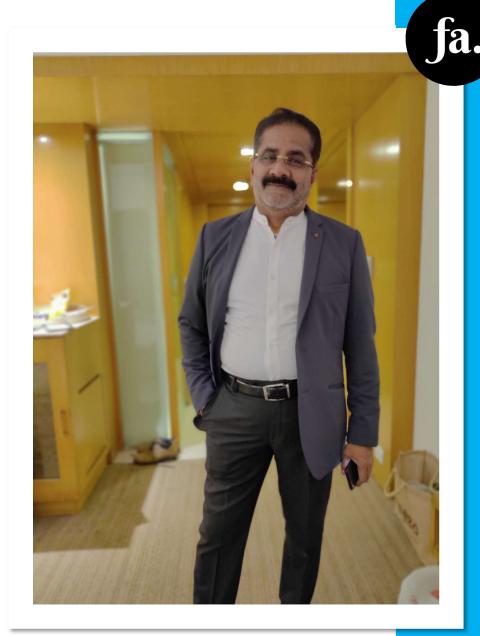
GS SWAMINATHAN.

35+ Years In Logistics And Supply Chain.

A complete multi-cultural, manufacturing and operational experience with varied products like Automotive/PVC Pipes/Glass Fiber/Glass Flaconage/Supply Chain services & Metals and Mining Industries has been 35 years of practical on hand experience in India and abroad for entire gamut of Supply chain and Logistics.

Past 15 years he has served in the senior management role of Logistics and Supply Chain professional with rich hands on experience in negotiating Logistics freight with major shipping lines, Transporters, 3PL's, and aggressively handled own captive coal mines after production till delivery as well linkage coal with subsidiaries of Coal India for generating 800 MW per day for Sambalpur cluster of Hindalco.

He has been instrumental in establishing operations and maintenance contracts as supply chain professional. Hands experience in Warehousing/Inventory Management/barcoding/RFID set up for inbound and outbound Logistics and Warehouse Management. He has pioneered to architect three important ERP startups for P2P, O2C & Plan to produce in the gamut of Supply Chain and Logistics.



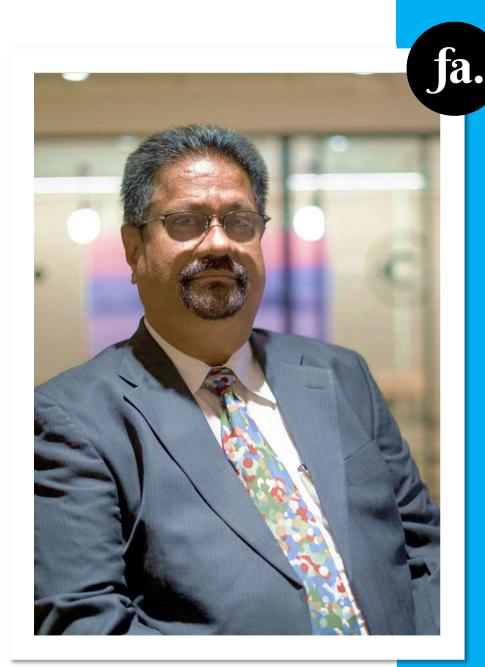
PK MOHANDAS.

36+ Years in International Projects.

Mr. Mohandas has an illustrious track-record of more than 36 years of being an international consultant for some very prestigious projects worldwide on behalf of United Nations Development Program, World Bank, Africa Development Bank and EXIM Bank of India. Mr. Mohandas has worked world over including countries like Russia, Europe, Africa, South America, UAE and India.

Mohandas completed his post-graduation from Calicut University India. He career started in Mumbai in the year 1982 spanning a fantastic 36 year period. Mohandas is well reputed, most sought after business advisor in the field of International Business, International Projects (Infrastructure and Constructions), Agricultural Projects and Mining Projects. The expertise he brings to our client's table is par excellent and unmatched.

He has conducted seminars and made several presentations, most noteworthy among them being at, INBAR at Asia-Pacific Forestry Week, International Bio-Fuel Conference, Global Forum for Chrome Ore, Global Forum for Manganese Ore and United Nations Conference on Trade and Development.



MKM IYENGAR.

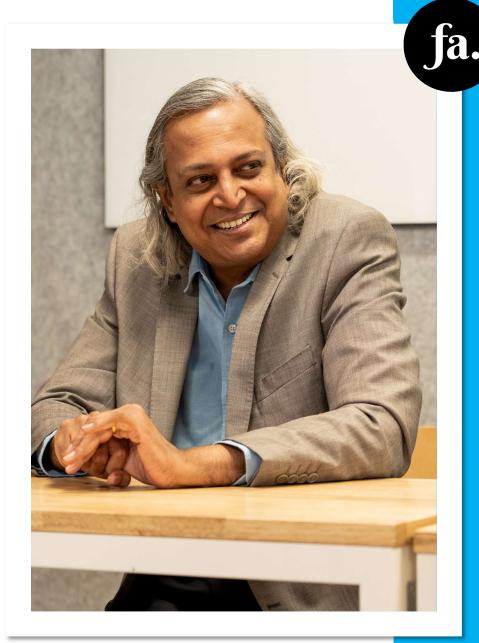
30+ Years in Corporate & Project Finance.

Mr. Iyengar, second generation entrepreneur, he began his career in the industry and then joined the family business in 1992. Since 1992, over a long standing career of 30 years, he has gained a stellar reputation of advising Indian Corporates (Government Owned or Private Owned) and Foreign Companies. His track record in the field of Risk Advisory, Due Diligences and Project Finance is unparalleled. He is well recognized in Mumbai and considered a seasoned veteran of our industry.

Mr. Iyengar is Chartered Accountant (CA) and Cost Accountant (ICWA). In his last 30 years, he has successfully addressed various corporate requirements thereby shaping destiny of various companies quietly for a better future in a fast changing and challenging business environment.

Few of his corporate clientele includes : CCF India, RCF Limited, Standard Chartered Bank, Fiat India, EID Parry Group, TUV Nord India, TVS Group, Godrej Group, Citi Bank, Kurlon Limited and many others.

In his spare time, he enjoys study of philately, agriculture and ancient history.







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