

# Warehousing in India – The Smart Way

The warehousing industry is undergoing radical changes and warehouses too are becoming increasingly sophisticated. **Abhishek Roy** explains in a prolific industry report.



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Over the past decade, we have come across many philosophies on supply chain that essentially focus on eliminating excess flab in the chain, or stock, or inventory as it is commonly known, and therefore eradicate the need for having a warehouse. These philosophies have largely changed, and will continue changing in the years to come as can be seen with the changing nature of supply chain with the advent of e-commerce, Just-In-Time production and delivery, quick response systems and supply chain integration. These philosophies are further enabled by the changing business and regulatory scenario, which includes:

a. Steady growth in India's economy and globalization which allows greater variety for the customer and in turn, fuels customer demand for even more variety of fresher, newer products.

b. Economic reforms, such as gradual rationalization of tax systems.

c. Better transportation connectivity and improved communication infrastructure.

Companies have gained a fresh perspective to supply chain. Maturing from a cost-centric approach, they have begun to view it as a profit driver and as an enabler to generate more revenue by providing the customer with more variety, better access, fresher products and an unmatched service experience.

## Changing Roles of the Warehouse

Where does that leave us with the warehouse? Does it mean that companies have begun to revamp their entire supply chain and do away with all the inefficiencies that resided in the form of stock? In many cases, yes. Have they all moved from a multi-tier network to a direct-

to-store or customer-to-door approach? In some cases, they have. In other cases, they are planning to. Has the need for having a warehouse, therefore, been entirely eliminated? The answer to the last question is a resounding no. In fact, the need for good quality warehouses has never been better appreciated and desired.

From being just a stocking point, they have increased their utility portfolio and have become consolidation centers for multiple sourcing locations, a cross docking center for retail distribution, a sorting center for customer door deliveries and an assembly facility for final fabrication, kitting and bundling.

The increasing initiatives in supply chain are bound to increase the importance of zero-defect, high speed warehouses which handle a high number of small transactions with more product variety, and more value-added services in far less time than they were doing a decade ago. There will be fewer warehouses, but each of them will be bigger, faster, and more technologically advanced than their prototypes in the past.

### **The Ever-increasing Opportunity**

The warehousing industry in India provides a study in contrasts. The industry comprises both kinds of warehouses—the modern multi-purpose logistics centers as well as the traditional storage facilities, commonly known as godowns. More often than not, these two kinds of warehouses belong to two distinct types of warehouse providers as well. The modern logistics centers are provided by players from the organized sector, while the godowns largely belong to the unorganized sector.

Currently, the organized sector has only a minor share, approximately 10 percent or about 50 million sq. ft of the 500 million sq. ft strong warehousing industry, which is valued at an estimated ₹50 billion annually. However, when it comes to value, the organized sector claims a higher share of the pie, approximately 15 percent, or ₹8 billion because of the premium it could attract from customers on account of superior quality. Invariably, this sector is the preferred choice for investors, who are eager to know how it will turn out in future.

The low presence of organized sector players in the industry is primarily due to two reasons: First, the Indian industry is yet to completely wake up to the outsourcing scenario. With nearly 40 percent of the warehousing space being owned by companies themselves, the entry of warehouse providers is restricted. Second, the Indian logistics industry as a whole is in a nascent stage of maturity and the shift from storage godowns to logistics centers has only just begun. While the transformation is in its early stages, it has been steadily picking up. The organized sector is expected to grow at 25-30 percent per annum, while the warehousing industry as a whole is estimated to grow at 9-10 percent between 2010 and 2015.

### **The Smart Warehouse - Need Of The Day**

A major reason behind this growth is the changing perception of companies. An increasingly mature Indian industry is viewing supply chain not as a cost center, but as a profit center—a strategic arm which could be leveraged to increase revenue and the over-

*The Indian logistics industry as a whole is in a nascent stage of maturity and the shift from storage godowns to logistics centers has only just begun.*

**Fig.1 - Changing perspective of Indian companies**



all profitability of a company (figure 1). In this supply chain, logistics is a crucial element holding the key to both better customer satisfaction as well as cost reduction.

Modern logistics centers require better process-

es, technology, equipment, a trained workforce and of course, better infrastructure. But for Indian companies, all this also comes with a rider—the need to justify the investment, increase in rentals and other costs, thus boosting the need for smart warehouses (figure 2).

**THE DRIVING FACTORS**

So, what has changed the perception of companies? Is it the growing economy, increasing production or

**Figure 2 - What Is A Smart Warehouse?**

<b>S</b>	<b>Scalable:</b> Customers are looking for warehousing solutions that can cater to their long-term needs—while being cost-effective for their current volumes and SKU complexity. According to most companies, the volumes and SKU proliferation is increasing at very high rates every year and they want stable warehousing solutions which can handle such needs over a period of at least five years. Many companies find it difficult to migrate operations from one facility to another in short intervals and the benefits of supply chain integration are lost if due to the need for adequate space, the operations have to be spread across multiple facilities in the same region.
<b>M</b>	<b>Mechanization-compatible:</b> Many companies believe that if not immediately, most of their distribution centers should be mechanized and operated through sophisticated warehouse management systems, at least in the near future. Companies want high throughputs and high density warehouses in their supply chains which could perform the multifaceted roles of the emerging logistics centers, and mechanization is a crucial step forward. Supply chain directors are unanimous in their opinion that in order to handle the increasing volumes and complexity of products in the future, they have no option but to mechanize their operations, as otherwise managing the business will be next to impossible. Accordingly, warehouses need to be built with sufficient floor strength, column pitches, provisions for dock levelers, and equipped with adequate power supply and charging points.
<b>A</b>	<b>Accurate:</b> The customer today tolerates no mistakes, and companies can therefore afford none. They want their warehouses to be able to ship out the orders to absolute perfection. The increasingly large number of modern retail stores, combined with reduction in supply chain layers, puts the onus of handling a complicated upstream and downstream network on the warehouse and missed, damaged, or misplaced deliveries are not an option. As a result, warehouse processes have migrated from a simple put away or picking procedure to a much more complex, multi-step process which has sequential checks and balances, and which needs an entirely different approach to warehouse design. This design has to accommodate requirements such as adequate lighting and specific zones such as quality assessment, forward picking, or staging area. It also needs to provide for safety measures such as fire protection, and pilferage control as well as training staff about various hazards, protections norms and safe work practices.
<b>R</b>	<b>Responsive:</b> Not only does the customer not tolerate any error, but she also wants the products on her shopping list immediately and fresh, whether she buys it from her neighborhood supermarket or from an online store. Companies need their supply chains to be agile and their warehouses, more responsive than ever. Infrastructure has to gear up for extremely swift action, and the workforce motivated on the same lines. This, therefore, means that warehouses, from being the godowns of yesteryear, have to be turned into logistics centers of excellence. To take a step forward, warehouses need to attract, train, and retain staff to ensure responsiveness and good quality of operations, and accordingly, the work conditions and employment benefits have to increase in order to acquire a skilled workforce.
<b>T</b>	<b>Transportation-friendly:</b> Last, but not the least, is the need for warehouses to become conducive to emerging modes of transportation. Supply chain responsibility does not start or end at the gates of the warehouse; it is just as much a necessity to ensure that transportation operations are smooth. Modern warehouses, therefore, have to be designed keeping in mind the ever growing utilization of multi-modal transportation, of containerized loads, of longer trucks and trailers, and of material handling equipment such as forklifts being used for mechanized loading and unloading. The space outside the warehouse is as much an important aspect of warehousing as is the design within. Logistics centers need to provide adequate parking space for trucks, sufficiently wide roads and turning area for trucks of the largest size, and as is becoming increasingly important, adequate facilities for drivers.

Source: Miebach Research

**The most critical drivers are an increasingly demanding customer, increased SKU complexity, increased volumes, and an increasing demand for quick response from companies.**

higher volumes? The perception towards warehousing is changing because of all this, but also because of the increasing demands of the end consumer.

### The Power of the Customer

The growing economy has resulted in a burgeoning, demanding middle class in India, the segment which is diversifying in their discretionary expense and is exposed to the huge variety of consumer products available in the Indian market due to globalization. An increase in incomes has been leading to more consumption and higher economic growth which, in turn, provides more employment opportunities and higher salaries.

The members of this segment are becoming increasingly aware of new product ranges launched across the world and the importance of product freshness. They also have increasing access to modern retail formats, where

manufacturers of consumer products across the world are at war with each other to gain the highest market share. The customer today asks for more variety, higher quality and availability, and is not ready to wait. The new increasingly aware customer has made corporates wary and eager to devise agile and responsive supply chains.

In a recent Miebach study, *Miebach India Warehousing 2010*, close to 50 supply chain heads across different industries were surveyed on various warehousing decision parameters. According to them, the most critical drivers are an increasingly demanding customer, increased SKU complexity, increased volumes, and an increasing demand for quick response from companies. (figure 3).

### Government Support

Government initiatives have helped their cause to some extent and it will continue helping in developing a supply chain which relies on a short, compact supply chain, with thorough information flow, and a robust and swift transportation network (figure 4).

### India's Emergence as Manufacturing Hub

A major stimulant of the growth of India's warehousing industry has been the steady de-



**Fig. 4 - Government Initiatives to Facilitate the Growth of the Logistics Industry**



velopment of India as a global manufacturing hub. Along with the increase in domestic consumption, there has been a sizeable increase in India's Exim trade. With a stable GDP growth of 9 percent per annum, India has flourished in multiple industries, notably retail, auto, IT, telecommunications, pharmaceuticals and textiles. The volumes from these sectors have increased multiple times in the last decade and subsequently, their need for bigger and better logistics facilities has fuelled the growth of the warehouse industry.

### The Development of Infrastructure

The recent policies and fiscal plans have focused

heavily on infrastructure growth, the backbone of the country, without which any dreams of becoming an industrial powerhouse can never be realized by the country. The development of some infrastructure in plans for the Dedicated Freight Corridor, the Golden Quadrilateral and the East-West Corridor, along with the new ports and terminals on both the east and west coasts of the country, has resulted in increased growth in the warehouse sector as well. Apart from the rising number of warehouses along these corridors, the developing infrastructure has also created a new sector—multimodal logistics parks.

### THE INDIAN WAREHOUSING MAP - SELECTING A LOCATION

A very critical, if not the most critical decision, taken by a customer company during setting up or contracting a warehouse is the location of the warehouse. With the increased importance of each warehouse in the emerging consolidated supply chain scenario, a smart warehouse loses most of its inherent purpose if the location of the warehouse is wrongly chosen. A poorly chosen warehouse location can result in very high losses due to missed tax benefits, missed shipment deadlines on account of poor connectivity, unavailability of skilled workforce in a particular area or traffic bottlenecks, such as truck bans.

In such scenarios, the losses incurred would undermine any gains obtained from the best infrastructure and world-class processes within the warehouse. For these very reasons, logistics managers from various manufacturing companies stress heavily on identifying

the best location for their warehouses. The key parameters are listed in figure 5.

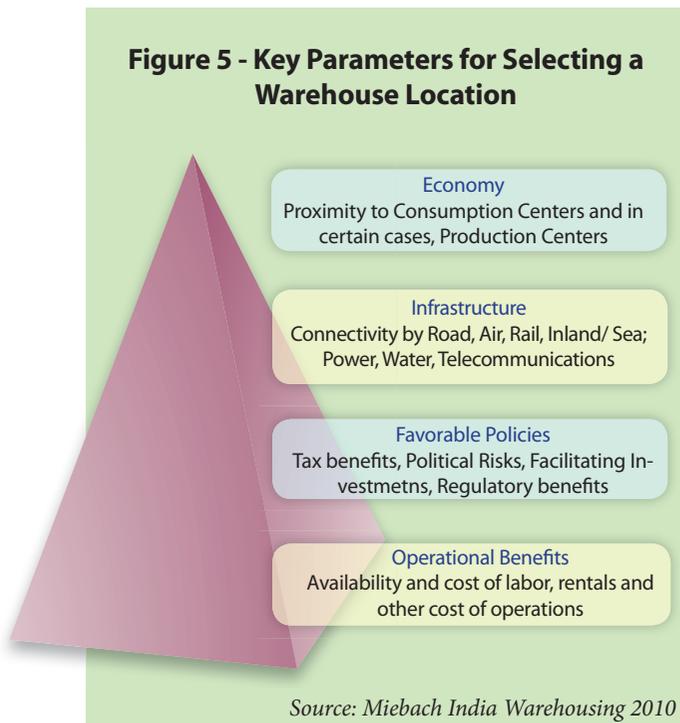
Most companies place a lot of emphasis on the economy and infrastructure of the region before selecting a location. However, policy-related initiatives by the national and state governments have helped develop many non-traditional locations as probable hubs for logistics, especially warehousing activities. Such initiatives include policies like the Goods and Services Tax, the development of logistics-friendly infrastructure such as the Dedicated Freight Corridor, the Golden Quadrilateral and the East-West Corridor, the

new ports, as well as new inland container terminals, container freight stations, and free trade warehousing zones across the country.

As a result of the development of the logistics map of India through various policy initiatives, and the growing demand of customers from surrounding regions, a large number of locations could claim to be very good hubs for warehousing in India. They could be categorized into three groups—the frontrunners, the challengers, and the newcomers (figure 6).

The job of the logistics manager, however, does not

**Figure 5 - Key Parameters for Selecting a Warehouse Location**



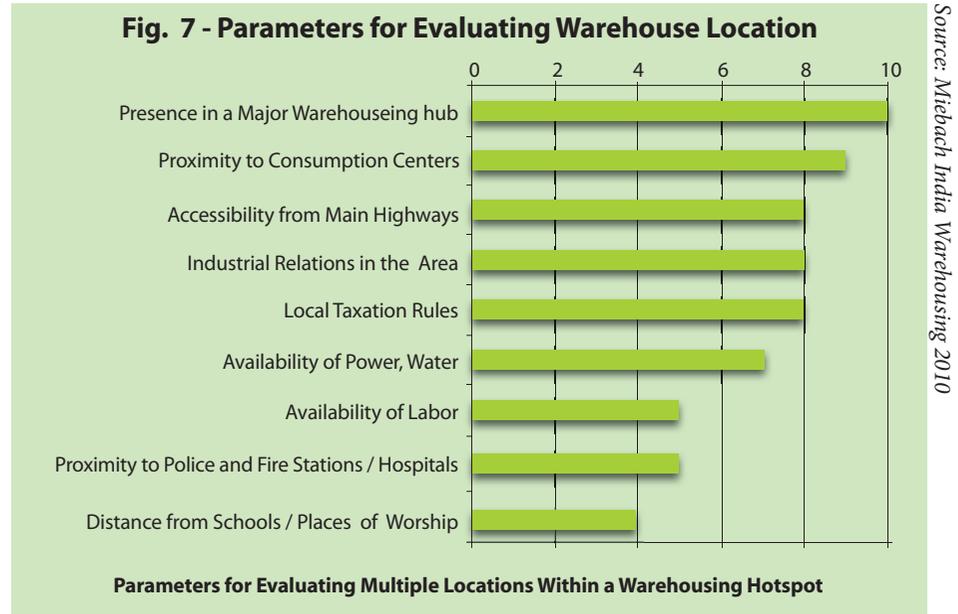
**Fig. 6 - Classification of Major Warehousing Hubs in India**

Category	Characteristics	Locations
Frontrunners	<ul style="list-style-type: none"> <li>Existing logistics hubs</li> <li>Primarily the major metros with a very large consumer base</li> <li>Excellent connectivity</li> <li>High availability of skilled labor and managerial workforce</li> </ul>	NCR, Mumbai, Chennai, Bangalore, Kolkata, Hyderabad, Pune
Challengers	<ul style="list-style-type: none"> <li>Mostly Tier I or Tier II towns</li> <li>Connected by existing roads and to be better connected by new corridors</li> <li>Location of major infrastructure projects such as ports</li> <li>A mix of rural and urban consumers</li> <li>Target of most consumer products and retail companies</li> <li>Growing pool of skilled, yet less costly workforce</li> </ul>	Ahmedabad, Surat, Vishakhapatnam, Nagpur, Chandigarh, Guwahati, Kochi
Newcomers	<ul style="list-style-type: none"> <li>Mostly Tier II towns</li> <li>High availability of labor but low on managerial workforce</li> <li>Linked to infrastructure projects</li> <li>Promising because of large development initiatives</li> <li>Existing infrastructure is not very conducive to logistics</li> </ul>	Vijayawada, Coimbatore, Jamshedpur, Lucknow

Source: Miebach Research

end at selecting the city. His job also requires going one step further, and selecting a site, typically on the fringes of the city and on a major highway, which will provide the greatest benefits in terms of the conditions stated above. Apart from the general conditions laid out before, logistics managers look for more specific details, the most important of which were covered by the study, Miebach India Warehousing 2010.

According to the study, the critical criteria put forth by most managers are: presence of a warehouse within a major warehousing or logistics hub, the proximity to the main demand center, accessibility to major highways, and local taxation rules. Most of these are similar to the general location selection criteria. However, in addition to these, the other important factors governing the selection of warehouse location are issues such as proximity to local police stations, fire



**Fig. 8 - Segmentation of the Warehouse Industry in India**

Segment	Laggard			Leader	Niche
Business Characteristics	Low Volume, Low SKU complexity	Low Volume, Moderate SKU complexity	Moderate Volume, Low SKU complexity	Moderate/High volumes, High SKU complexity	High/Very high volumes, Moderate/High/Very high SKU complexity
Storage Systems	Floor storage	Decks or Floor Storage	Block Storage	Racks or Hybrid Storage	Dense racks /Hybrid/ Automated storage
Height (meters)	5 - 6	5 - 6	5 - 6	8 - 9	12 - 16
Size (sq meters)	1,000 - 2,000	1,000 - 2,000	2,000 - 5,000	5,000 - 10,000	10,000 - 30,000
Current Supply	High	High	High	Low	Very Low, not readily available
Implication for Investors	High supply makes differentiation very difficult. The segment plays on cost and hence, value proposition is very low. Not an attractive segment to enter for new investors or service providers			Currently the SMART warehouse and preferred choice of many companies	May become the SMART warehouse of the future. At present, only build-to-suit

Source: Miebach Research

stations, and hospitals; distance from schools or places of worships, and most importantly, the environment of industrial relations in the area (figure 7).

Hence, most Smart warehouses can be found along specific belts or in warehousing hubs like Manesar, Okhla, Ghaziabad, or Sonapat in NCR, Peenya in Bangalore, Bhiwandi and Panvel in Mumbai, or in Dhulagarh in Kolkata.

### THE MARKET DYNAMICS

The current warehouse industry in India could broadly be classified into three segments—the Laggard or predominantly outdated categories of warehouses, the Leader or the Smart warehouse of today, and the Niche, specialized, high-investment, warehouses catering to very specific demands of certain companies (figure 8).

### Customer Demand

The Laggard segment is no longer the piece of the warehousing pie that the customer companies want. Most of them fail to meet the Smart criteria by a long shot;

while the Niche segment meets almost all the criteria to perfection, they come at a very high price. Many companies are yet to reach a position where they could justify the investments on a Niche segment warehouse if they were to build one, or the costs of operating it, as these warehouses also need very specialized material handling equipment.

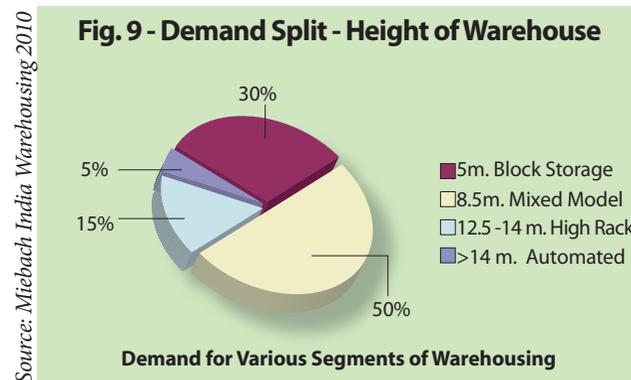
*The Miebach India Warehousing 2010* study also revealed that a majority of customers want 8.5m high (Leader segment) warehouse for their operations (figure 9) as this fulfils their requirement of a Smart warehouse under the present circumstances.

Companies which have become users of the Niche segment are generally companies with futuristic requirements or corporates with a trendsetting vision in supply chain. However, with the gradual migration of most companies towards the higher end of the warehousing value-chain, the Niche segment warehouses of today are destined to become the Smart warehouses of tomorrow, over a period of five to seven years.

### Money Matters

In line with the demand-supply scenario for the three segments of warehouses, the risk and return portfolio also changes for the investors and the developers across the country, only varying slightly from region to region (see figure 10).

As highlighted earlier, this industry is highly fragmented with a very low presence of players from the organized sector. As a result, a very large range of prices could be observed in the major warehousing hubs (figure 11). The lower end predominantly is quoted by



players from the Laggard segment, while the higher end is charged by the Leaders. The Niche players, by virtue of the fact that most get into exclusive contracts and build-to-suit agreements, have a long term arrangement and are therefore not a part of the range, which is meant generally for ready-to-occupy or public warehouses. Typical occupancy of the industry hovers around 65 percent-85 percent, which could be explained by two factors —seasonality, and the lean period between two successive contracts.

**For the Investors**

This industry, till recently, has been dominated by the Laggards, and hence, has been low on financial returns. However, the returns achieved by the Leaders and the Niche players have been much higher, and the shift of the industry from the unorganized to the or-

ganized also correlates to a shift from the Laggards to the Leaders and the Niche.

In the coming decade, this industry is poised to provide high and stable returns to the investors and developers who could provide the most required smart warehouses to customers. Simultaneously, investors and developers need to look beyond the four walls of the warehouse, and develop integrated logistics facilities. Instead of creating one Smart facility, they should create a park of multiple Smart facilities, sharing common amenities.

The organized warehousing market is set to grow threefold in size in the next five years (figure 12). The business opportunity is not just in terms of the share of the total area covered by warehouses (the share of organized warehousing will grow from 10 percent to 20 percent in terms of square feet), but it is in terms of the share of overall revenue from the market. From a 15 percent share of warehousing revenues, the organized market now commands 30 percent of the revenues from this industry, and that is a key driving factor which is influencing many investors towards investing in this market.

**Logistics Parks**

Creating a logistics park is in many ways more beneficial than creating stand alone warehouses, both for the customer as well as investors and developers. While a logistics park allows the developer to create common utilities, thereby reducing cost and maximizing the utilization of the overall area, the customer company benefits by getting better facili-

**Fig. 10 - Risk-return Profiling of Different Segments in the Warehousing Industry**

Category	Risk	Returns
Laggard	Very high supply, gradually reducing demand. New entrants may find no customers or customers at very low rates	Return on capital employed: Less than 10%. Requires very low investment and design know-how to develop.
Leader	Low risk, should avoid getting trapped by low rates offered by competitors from the Laggard segment	Return on capital employed: 10%-15%. Requires standard investment and design know-how, should incorporate good logistics practices during development.
Niche	Very high risk if built without an agreement with a ready customer, risks of not finding replacement customers if a running contract ends prematurely	Return on capital employed: 15%-20%, can be higher for very specific requirements, but are generally developed by customer companies themselves because of high complexity involved.

Source: Miebach Research

**Fig. 11 - Rentals of warehouses across major hotspots in India\***

Hub	Price Range (INR/sq.ft/ month)
NCR (Okhla)	35 - 45
NCR (Manesar, Ghaziabad)	12 - 16
Bangalore	14 - 18
Mumbai	12 - 18
Kolkata	14 - 18
Chennai	15 - 20
Hyderabad	12 - 16
Pune	12 - 16

Source: Miebach Research

\*June-November 2010 figures

ties such as a larger pool of trucks, guaranteed power backup from the park's power station, and most importantly, a comfortable work environment to attract talent which would otherwise have been reluctant to join this industry because of the perception of a poor work environment.

Many investors have already realized the benefits of developing logistics parks, and a large number of customer companies as well as third party logistics providers have started occupying warehouses in these parks. The more successful warehouses have been able to emulate the Smart warehouse closely, while those which have been unsuccessful, are facing the critical issue of low occupancy.

Another marked difference between these two types of developers is also that the former have gone for a mixed model of logistics park development, while the latter have opted for a standard warehouse park, thereby highlighting the trend that customers

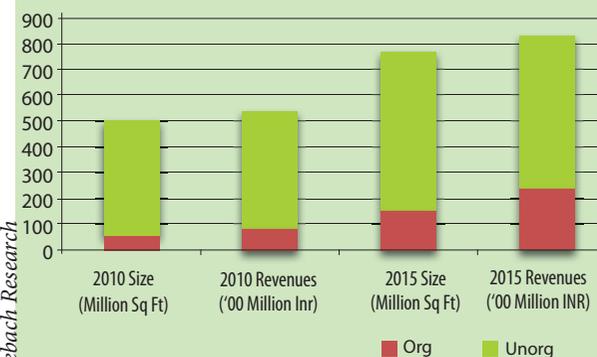
are more inclined towards a more integrated, mixed model of logistics park development (See figure 13). It will take some time, but by the middle of this decade, completely mixed model logistics parks will grow in numbers and by the end of the decade, they are expected to become the norm.

Apart from customers and investors, even the government both at the national and local levels is interested in setting up logistics parks. The grounds for this interest is because of two predominant reasons:

- Boost trade and along with it, the economy of the country or the region.
- Solve traffic congestion and urban problems such as environmental degradation in densely populated areas.

The logistics park, as a sector in the Indian logistics industry, is fast growing to become a sought-after

**Fig. 12 - Warehousing in India - Organized and Unorganized**



**Share of Organized and Unorganized Warehousing Revenues (Future revenues projected, correcting for inflation)**

Source: Miebach Research

*Many investors have already realized the benefits of developing logistics parks, and a large number of customer companies have started occupying warehouses in these parks.*

**Fig. 13 - Models for Logistics Park Development**

Logistics Park Segment	Characteristics
Entirely Mixed Model	Integrated logistics facilities along with residential, community, and commercial facilities which could cater to most of the day-to-day needs of the employees at the park
First Level Mixed Model	Integrated logistics facilities, comprising Smart warehouses, Niche Warehouses, multi-modal transport terminals, and a few commercial facilities to act as basic amenities for employees at the park
Elementary Warehousing Park	Integrated warehousing facilities with basic amenities and almost no commercial facilities at all

Source: Miebach Research

sector for investment. Figure 14 shows an illustrative list of recent investments in this sector. Apart from the huge potential of this sector, a critical characteristic that attracts investors to logistics park real estate is the stability of returns from this sector when compared to other areas of investment. While the internal rates of return are similar from both the logistics real estate and other commercial real estate sectors, logistics parks offer a steady stream of revenue and hence cash flow, when compared to the highly fluctuating nature of the commercial real estate business.

### Ground Realities - The Customer Need-Gap

Arguably, most customer companies expect their Smart warehouses in the Leader segment. But many of them are not satisfied by what is being offered by a large number of warehouse service providers or developers today, even if they claim to be in that segment (see figure 15).

The Miebach India Warehousing 2010 study revealed that today, three-fourths of the companies are being forced to bear with either average or sub-standard warehouse infrastructure, and only one-third of the companies believe that these warehouses will fulfill their needs in the future (see figure 16). The majority of the respondents said that the crucial components of a Smart warehouse are lacking not only in the Laggard warehouses, but also in about four out of five of the so-called Leader segment warehouses.

While few of the respondent companies have gone ahead and developed their own infrastructure, many are on the lookout for Smart warehouse providers who can meet their standards and for that, the companies are not averse to paying a higher rental. More than half of the companies agreed that they will consider an increase in rental prices (See figure 17), to the tune of 15-20 percent on current rates on a per sq. ft basis. They are, however, confident that the increase in cost will be covered by an even greater increase in storage and throughput capacity, performance and higher service levels.

However, the warehouse providers beg to differ. The suppliers believe that they know the value of good quality infrastructure. According to them, the customers do not fully realize the value and are not willing to pay a higher value (see figure 18).

Providing better facilities such as wider roads or truck turning areas, higher quality of flooring and sprinklers, leads to greater investment. Most custom-

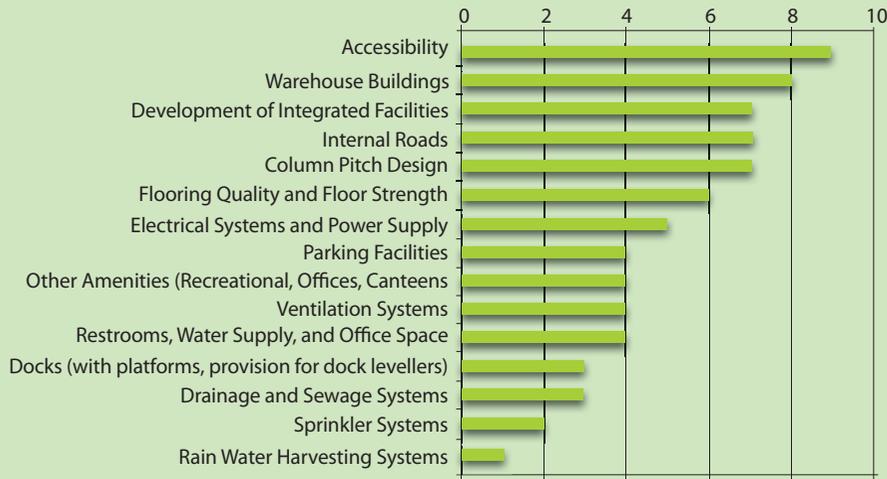
**Fig. 14 - Recent Investments in Logistics Parks in India**

Company	Based out of	Nature of Investment	When	Investments (Million USD)
Future Capital Holdings	India	Launch logistics fund for setting up warehouses through a JV with Realterm Global	Within three years, starting from February 2008	700
Arshiya International	India	Plans to set up five FTWZ	Announced in 2010, the first FTWZ operational in Mumbai since August 2010	560
Tata Real Estate	India	Tie-up with Jafza to develop logistics parks across seven major locations in India	Funding commenced from November 2008	537
K Raheja Group	India	Tie-up with Prolog to develop logistics parks in WB, Karnataka, Tamil Nadu, and Maharashtra	Work commenced from September 2008	515
Uniworld Logistics	India	Integrated logistics park	Opened in January 2009	500
Khaleeji Commercial Bank	Bahrain	Investment in developing India's largest integrated logistics park over 400 acres in Mumbai	Floated in August 2010	400
Everstone Capital Management	India	Raising new funds to invest in warehousing in India	First fund mobilized in Aug 2010, second part of fund to be raised by end of 2011	350
YCH Group	Singapore	Investment in next 5 years to set up 10 logistics parks across India	Announced in May 2008	225
Shree Shubham Logistics	India	Set up 41 agri-logistics parks across the country	Four parks completed by 2009, 11 more in 2010	135
Safexpress	India	Investing in 32 logistics parks	4 Parks before April 2010, 3 parks in south between April and December 2010, Plan to complete 2 more by February 2011 and the rest in 2 years to follow	135
SKIL Ports and Logistics	India	Raised funds to finance a port logistics project	Raised in October 2010	121
Vision India Real Estate	India	Planning to develop logistics parks	Commencing from April 2010	110
Aegis Logistics	India	Investment in oil terminals	Commencing from November 2010	100
DARCL Logistics	India	Investment in Project Logistics	Announced in July 2010	100
Shri Kailash Logistics	India	Launching new logistics park	July 2010	100

Source: Miebach Research

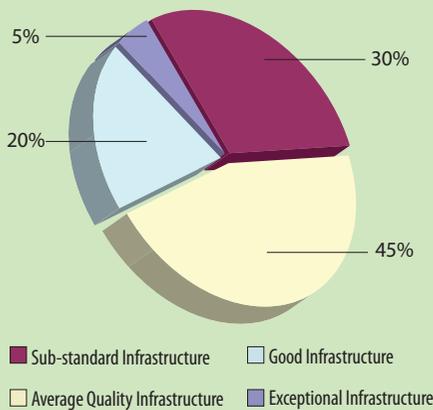
Source: Miebach India Warehousing 2010

**Fig. 15- Current Warehouse Infrastructure Supply Scenario**

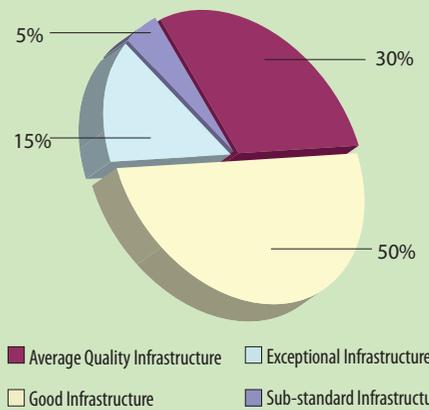


Source: Miebach India Warehousing 2010

**Fig. 16- Composition Warehouse Space - Present**



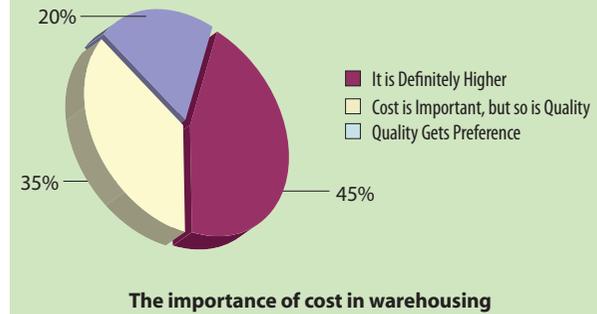
**Composition Warehouse Space - Desired**



**Composition of Warehouse Space by Different Categories of Infrastructure (Actual vs Desired)**

Source: Miebach India Warehousing 2010

**Fig. 17- The Importance of Cost**



ers do not need such infrastructure and therefore will not pay for such futuristic designs. However, suppliers also hope that with the increased presence of multinational companies and the growing maturity of the Indian supply chain, the demand for good infrastructure will increase, which will lead to substantial investment in quality infrastructure.

**CHALLENGES FACING THE INDUSTRY - OPINION OF THE STAKEHOLDERS**

Like any other emerging industry, the warehousing industry is not without its share of challenges. Some of the key challenges that are faced by the industry as a whole are:

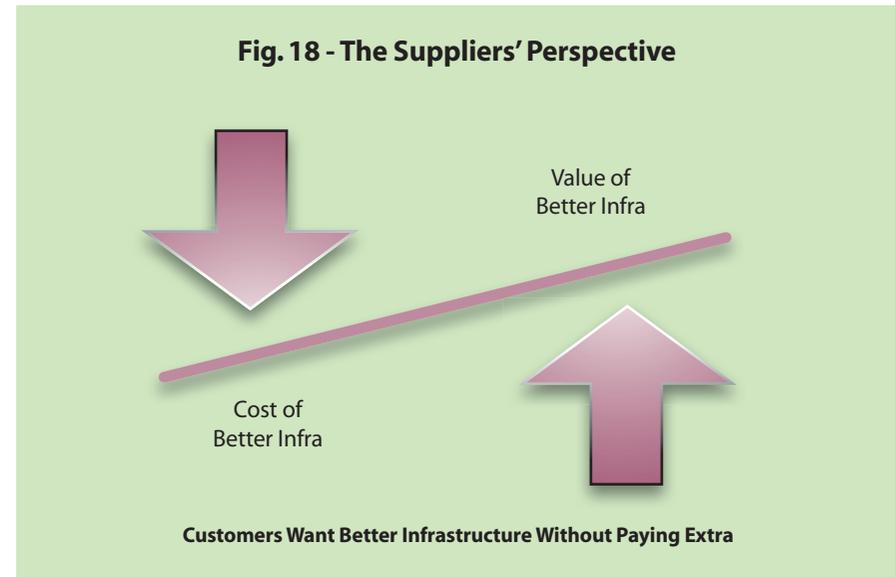
**Availability of skilled workforce:** The industry lacks trained personnel who can operate sophisticated material handling systems and warehouse management systems. Further, under the present working conditions, the job in a warehouse is not very attractive for skilled young people. Although with the changing mindset about the design of logistics centers and logis-

tics parks it is becoming more attractive, there is still a long way to go.

**Availability of land:** Procurement of land for warehousing is a difficult task, with the increase in real estate prices of land in and around major cities, most of which also happen to be mainly effective logistics hubs. Additionally, reclassification of land becomes a major concern when it comes to development of warehousing zones. Many industry players have raised a demand of relaxing land prices for logistics purposes and ease the rules on land classification for warehousing.

**Availability of an efficient, multi-modal transport system:** India is yet to fully develop a multi-modal transport system which could essentially harness the full capabilities of road, rail, sea, and air transport infrastructure. Such a system will reduce the overall logistics costs and extend the marketability of Indian companies worldwide without them having to rely only on global logistics players. At the same time, such a system will bring economies of scale and facilitate the migration of companies from existing warehouses to SMART warehouses.

**Implementation of policy reforms:** While the reforms are going to play a very large role in the changing scenario of warehousing in India, it is the constantly delayed implementation of these reforms which is holding back the growth of this industry at the same time. The GST implementation, for example, has been delayed due to disagreements between the central and the state governments, while the progress on the dedicated freight corri-



dor has been halted by various land-related issues. Unless the reforms are brought in expeditiously, the momentum with which this industry aims to grow will be lost.

## ROADMAP FOR THE FUTURE

The transformation of the logistics industry, and specifically the warehousing industry in India, has already started to happen. The end customer has got the ball rolling, and the companies have been left with only one choice—to put their supply chain strategy in place for this emergent, ever demanding Indian customer. The pull has come and will continue to come in the form of increasing consumer demand, the demand for better services, increasing product

*The customers and the suppliers are yet to reach a model where the relationship ceases to be a buyer-seller one and emerges as a partnership.*

variety, and higher responsiveness, and all of this at lower costs.

While the companies must modernize their supply chains, they will be increasingly constrained by the availability of SMART warehouses which can support any modernization effort. The demand is poised to far outstrip the supply and companies will either need to invest, or the investors and developers have to come up with Smart warehouses to satiate the demand for the same. At the same time, a demanding market will mean that companies have to focus on other areas, their core competencies. Logistics, as a function, will be almost entirely outsourced with the advent of 3PL players. For the same reason, investments in logistics facilities will be made by warehouse providers as companies will reserve their capital for business expansion.

The situation today is a classic example of an industry at crossroads: the two sides of this industry, the customers and the suppliers are yet to reach a model where the relationship ceases to be a buyer-seller one and emerges as a partnership. While it is evident that the current state of available infrastructure is inadequate for the supply chains of the future, both parties are waiting for the other side to take the first step.

The customers want developers to build high-end infrastructure and the developers want the customers to first increase their pay-offs. The situation does

provide a great opportunity for enterprising developers to get the early-mover advantage. However, the approach must lead towards a partnership model where the developer and the customer company enter in a trust-building exercise, sharing each other's long-term objectives and expectations.

The government both at the national and the state levels has to play an even more proactive role. It needs to implement the policy reforms with an increasing zeal and it needs to complete the large infrastructure development plans on time. Unless an efficient infrastructure and a suitable set of policies is in place, the consolidation of the supply-chain will remain a distant dream, and the wider migration of companies, from Laggard to Smart warehouses, will get postponed by a few years.

As the initiating entrepreneur, the developer needs to build or showcase a logistics park, consisting of Smart warehouses and added amenities, which facilitate an efficient supply chain. Subsequently, they need to engage the customers in relationship building, when the customers start appreciating the quality of the infrastructure and start looking beyond a cost-only approach to supply-chain management. The onus is on the developer or warehouse provider to educate the customers on the need of good quality facility, the tangible and intangible benefits of the logistics park, and take the industry forward. 🌅