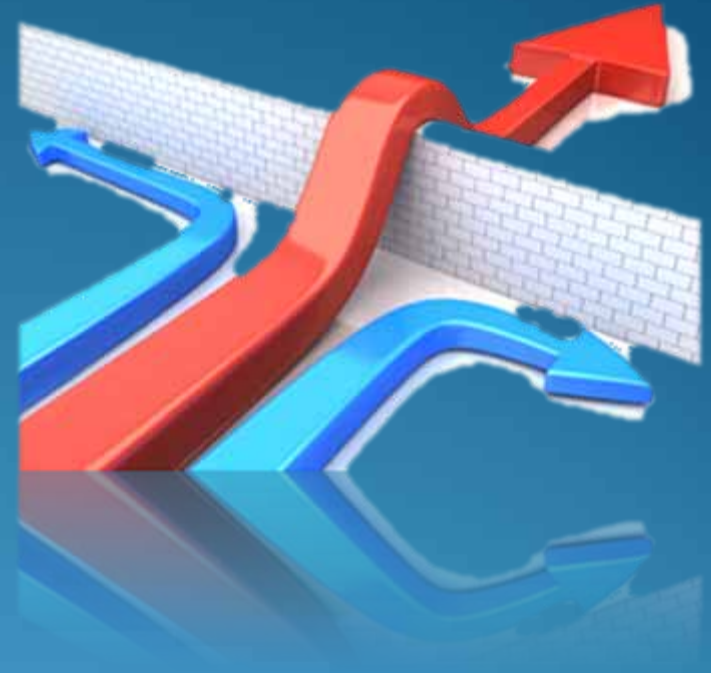


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# Supply Chain Strategy



# Strategy!

- **Strategy**, a word of military origin, refers to a plan of action designed to achieve a particular goal.
- In game theory, a *strategy* refers to one of the options that a player can choose.

# Strategy!

- Classic texts such as Chanakya's Arthashastra written in the 3rd century BC, Sun Tzu's The Art of War, written in China 2,500 years ago, the political strategy of Niccolò Machiavelli's The Prince, written in 1513, or Carl von Clausewitz's On War, published in 1832, as with the Japanese classic The book of five rings by Miyamoto Mushashi written in 1645, are still well known, and highly influential. Even though the term was not used before the end of the 18th century, and subsequently shifted its meaning (see definitions, above), there were several insightful writers on strategy between Machiavelli and Clausewitz, like Matthew Sutcliffe, Bernardino de Mendoza, Santa Cruz de Marcenado (Álvaro de Navia Osorio y Vigil, marqués de Santa Cruz de Marcenado), Guibert (Jacques Antoine Hippolyte, Comte de Guibert), and August Otto Rühle von Lilienstern. In the 20th century, the subject of strategic management has been particularly applied to organizations, most typically to business firms and corporations.



# Some truth for now and the future

- Tied up working capital is a no no!
- Inventory needs velocity & momentum!
- People will continue to be an expensive commodity!
- Technology will assume an importance way above what it has now!
- Information is as important, in many cases, as the product in place, on time and undamaged!
- Network and transport tracking and visibility will be normal and expected!
- Global / Local is the name of the game!
- Railheads, Ports and inland exchange points will continue to grow – multi modal is the name of the game!

# Executive Summary

## India Scenario

### Market

- Nascent Yet increasingly Demanding, Estimated USD 9 billion in 2015.
- Increasing Volumes and global exposures.
- Domestic development, burgeoning parity.
- Fragmented and disjointed.

### Drivers & Challenges

#### Drivers:

- Growth in Organized Retail
- Shift Towards Horticultural Crops
- Growth in Processed Food Sector
- Government Initiatives
- Growth in Bio-Pharma sector

#### Challenges:

- Human Resources
- Lack of Logistical Support
- Uneven Distribution of Cold chains
- Cost Structure
- Power Supply

### Trends

- Cold Chains based on Public Private Partnership (PPP) model
- Rail Based Reefers, organised distribution.
- Backward Integration, forward economy.
- Cold Chain Facilities for exports.

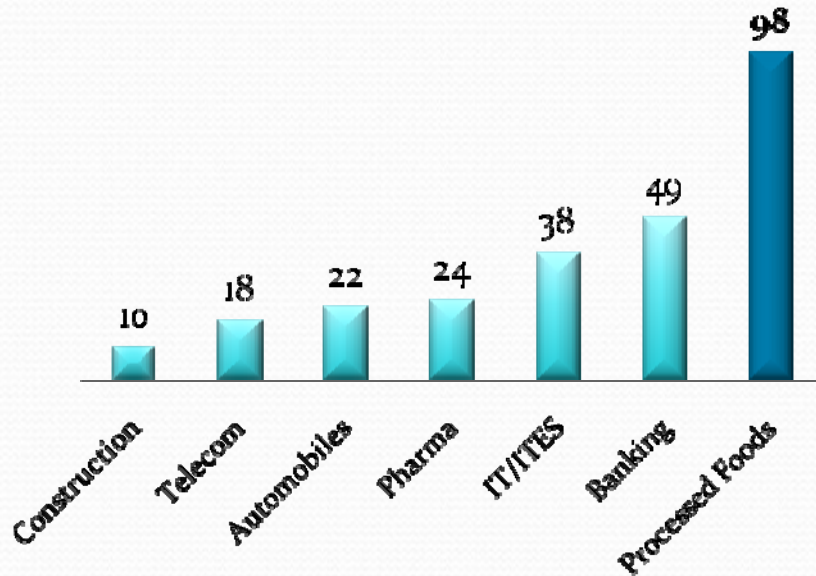
### Competition

- Minimal: Few Private and State owned players.
- Surface Storage comprising of both organised and unorganised.
- At least 50 companies are offering refrigerated transport services in India
- Captive establishments & New entrants.



# Food Sector

Industry turnovers (US\$ bn)



Segment	Size-output/value (2007-08)	Projected growth	Processin g levels	Organise d players
Dairy products	US\$ 62.67 billion	15%	37%	15%
Fruits & Vegetables	2.33 million tonnes	20%	2%	48%
Meat and poultry	US\$ 13 million	10%	1%	5%
Fisheries	6.4 million tonnes	20%	12%	N/A
Packaged foods	US\$ 2 billion	8%	3%	80%
Beverages	US\$ 155 million	27%	N/A	77%

Source IBEF






- Food processing (US\$98 bn), 9% of GDP, growing at 15% last 3 years.
- Vision 2015** (GOI) action plan to double processed foods to US\$210 bn.
- MoFPI** Envisages investment of US\$21.05 bn in next 5 years.
- FICCI-E&Y** study sees investment opportunities to shoot up by 42.5% to US\$ 181 billion in 2015 and to US\$ 318 billion by 2020.

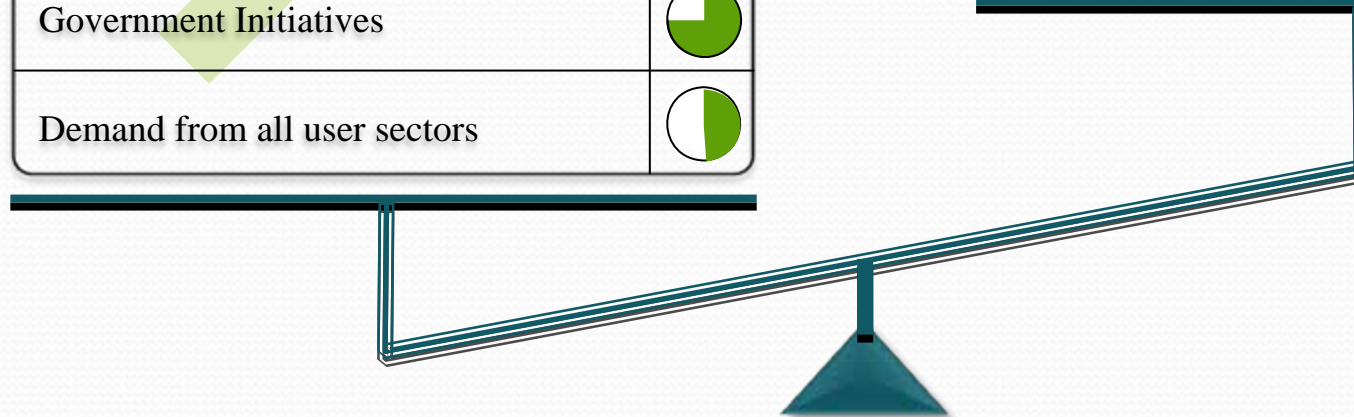
# Drivers / Challenges

## Drivers

Growth in Organized Retail	
Shift towards horticultural crops	
Growth in Processed Food Sector	
Government Initiatives	
Demand from all user sectors	

## Challenges

Human Capital, Domain Skills	
Lack of Logistical Support	
Uneven Distribution of Cold Stores	
Cost Structure (Capital), Parity	
Power Supply (Erratic)	





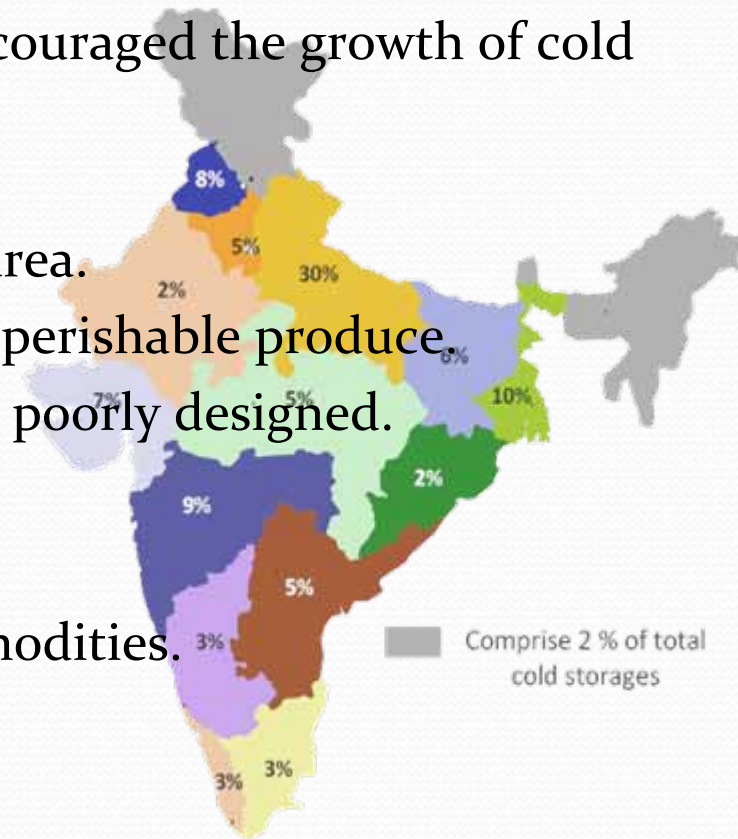
# Distribution Support

## Lack of Logistical Support (Agri-produce)

- Small Land holding; remains logistical challenge
  - Requires multiple farm gate collection centres.
- Fragmented cold chain industry has not encouraged the growth of cold logistics for horticulture produce.
- Minimal cooperative farming
  - Irregular parameters in one catchment area.
- Underdeveloped domestic market for fresh perishable produce.
- Standard Refrigerated Systems inefficient & poorly designed.

## Uneven Capacity distribution

- Capacity mostly for focused on single commodities.
- Financial viability due to seasonality.
- No proper origin/destination pairing.





# Other Bottlenecks

- Capital Intensive **Infrastructure**.
- Restrictive land use and other regulations.
- High Operational costs, Low yield models.
- High Insurance/risk coverage premiums.
- Nascent, Limited knowledge, limited experience.
- Large gap in demand supply conducive to small unorganised service providers.
- Users have developed captive resources.
- Federal tax and commercial regulations.
- No fast-track perishables corridor.

# Labor Management Systems in Distribution

- **What:** A combination of software, engineering and mindset change to improve logistics productivity.
- Labor management systems are typically built on discrete, engineered standards for specific tasks in a distribution center, plus detailed reporting at the individual operator level against the resulting dynamic goal time calculations for the day's work.



# Spend Management Visibility

- **What:** Software that provides greatly improved visibility to what a company actually spends, where, and with what vendors.
- **Why:** It's no different than a spending at home - when companies see where the money is really going, there are almost always opportunities to reduce spending levels. The visibility/attention alone has benefit, as well as providing a platform for consolidating purchases, improved negotiating power, and corralling so-called "maverick spend."

# Demand Management/S&OP

- **What:** A process, generally supported by some level of technology tools, of aligning the sell side and the supply side of the company around a unified financial and operations plan.
- While many companies have nominal sales and operations planning processes in place, the consistent feedback is that most are far from optimally effective. In parallel with the growth of S&OP is the concept of demand management, in which sales, marketing, finance and the supply chain work together to drive demand and sales that maximize profitability, rather than simply reacting to forecast demand.



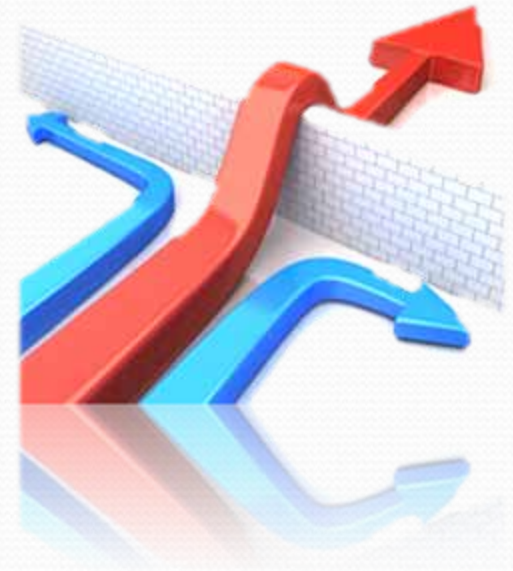


# Supplier Portals

- **What:** The technology has existed for some time now to relatively easily integrate suppliers through increasingly functional web portals.
- The scope of activities is very broad, from purchase order management, to providing demand visibility, to advance ship notice and bar code label generation, to generating dynamic inbound shipment requirements.

# Network Optimization

- **What:** Use of network optimization software to find the optimal balance between costs and service in the configuration of a company's supply chain network.
- Increasingly, these tools are being used more tactically than in the past, supporting global sourcing strategies, more short term inventory planning decisions, new product introductions, and even sales and operations planning.
- **Why:** The environment is increasingly dynamic, meaning that the "optimal" network of today loses optimality faster than ever, like a new car driving out of the parking lot loses resale value.





# Tpt Mgt Systems (TMS)

- **What:** Software systems that enable shippers to automate planning and execution, connect electronically with carriers, and reduce freight costs through optimal mode selection, optimal carrier assignment, shipment consolidation, and use of continuous moves
- **Why:** Despite a slight current reprieve, transportation costs have been rising dramatically, and capacity has been extremely tight. In addition, companies have become increasingly aware of the role of transportation in overall supply chain strategies. TMS improves transportation performance and generally delivers an outstanding financial payback.



# Strategic/Global Sourcing

- **What:** Use of a more integrated, consolidated approach to supplier selection and procurement, including evaluating total supply chain costs, and consolidating purchasing power. Rapidly, strategic sourcing is also tightly tied to off-shoring and global sourcing strategies. We probably could have moved this up on the list, but the opportunities vary dramatically company to company



# Wireless in the Warehouse

- **What:** While use of radio frequency/wireless terminals in distribution centers is at one level a highly penetrated and mature market, we continue to be amazed at the number of even fairly large companies that are still using paper-based systems in their DCs.
- **Why:** Moving to a paperless, real-time environment just makes sense. RF reduces labor and administrative costs, reduces errors, and can enable further productivity gains with more interactive system direction from a WMS. Virtually no one who implements wireless in the warehouse can imagine going back.



Howard James-Scott

Would like to say

‘Thank you’

please feel free to call

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