

# International Logistics Management



- dr Marian Krupa

# AGENDA:

- 1. Introduction to the International Logistics Management**
- 2. International Supply Chain Management (SCM)**
- 3. IT and International Logistics Management – ERP software overview**
- 4. International transportation systems**
- 5. International logistics structures and networks management**
- 6. Global Logistics Excellence – case study**
- 7. Strategic and operational information management in Logistics - towards Global Business Intelligence (BI)**

# 6. Global Logistics Excellence

## Excellence and Management ?

**In Search of Excellence** (by Peters & Waterman)

**McKinsey SCM Excellence** (by SupplyChainDigest)

**GLCD** (Global Logistics Capabilities Diagnostic) **tool**  
(by RedPrairie)

**Excellence in the Space** (Destination Mars)



# **Excellence and Management ?**

# Excellence and Management?



## Excellence – definitions:

- ✓ Perfection - a state of completeness;
- ✓ Something superlative (*crème de la crème*);
- ✓ The best solution, the best business model, the best ...
- ✓ **Excellence** (1) - surpasses (extra)ordinary standards;
- ✓ **Excellence** (2) - continuously moving target;

# Excellence and Management?



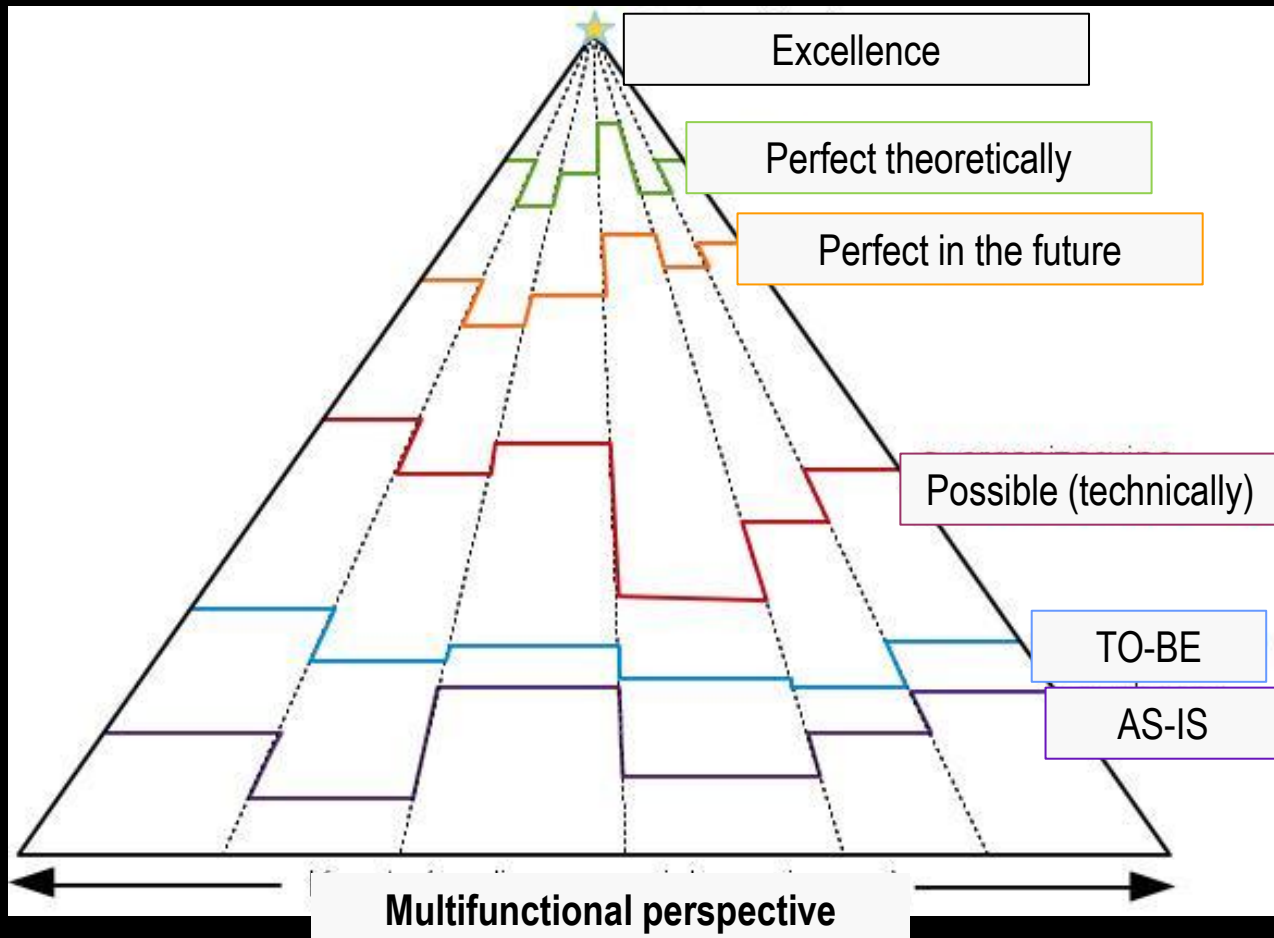
## Excellence in Management – definitions:

- ✓ To be a **leader** (better than an average company?);
- ✓ **Continuous improvement** – being always a little better (management / KAIZEN philosophy);
- ✓ To be able to create a standard for the industry – to be a **benchmark** for others;
- ✓ Entirely **waste free** production and distribution;
- ✓ Perfect **compliance** with the best standards (EU).

# Excellence and Management?



## Excellence in Management – Nadler's triangle:



# **In Search of Excellence**

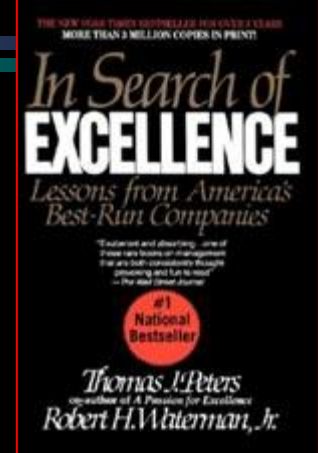
(by Peters & Waterman)





# In Search of Excellence

## Tom Peters, Robert Waterman – background:



- ✓ Peters and Waterman were both consultants at the McKinsey, the office based in San Francisco (USA).
- ✓ The research has presented 43 “excellent” American companies publicly traded on the stock market.
- ✓ ***In Search of Excellence*** was first published in 1982, it is one of the biggest selling and most widely read business books ever!

# In Search of Excellence



## The research facts - methodology:

- There was no definition what „excellent company” is all about.
- There were 75 stock companies in the original sample – the research in-depth analysed 43 – six major industries.
- They adopted **six financial measures** of the long term superiority:
  1. Compound ASSETS growth
  2. Compound EQUITY growth
  3. Ratio of MARKET VALUE to BOOK VALUE
  4. Average return on TOTAL CAPITAL
  5. Average return on EQUITY
  6. Average return on SALES

# In Search of Excellence – findings (1/2)



## 8 principles (Eight Themes) of EXCELLENCE:

1. **A bias for ACTION**, active decision making - 'getting on with it'. Facilitate quick decision making & problem solving tends to avoid bureaucratic control.
2. **Be CLOSE TO the customer** - learning from the people served by the business.
3. **AUTONOMY and entrepreneurship** - fostering innovation and nurturing 'champions'.
4. **Productivity through PEOPLE** - treating rank and file employees as a source of quality.

# In Search of Excellence – findings (2/2)



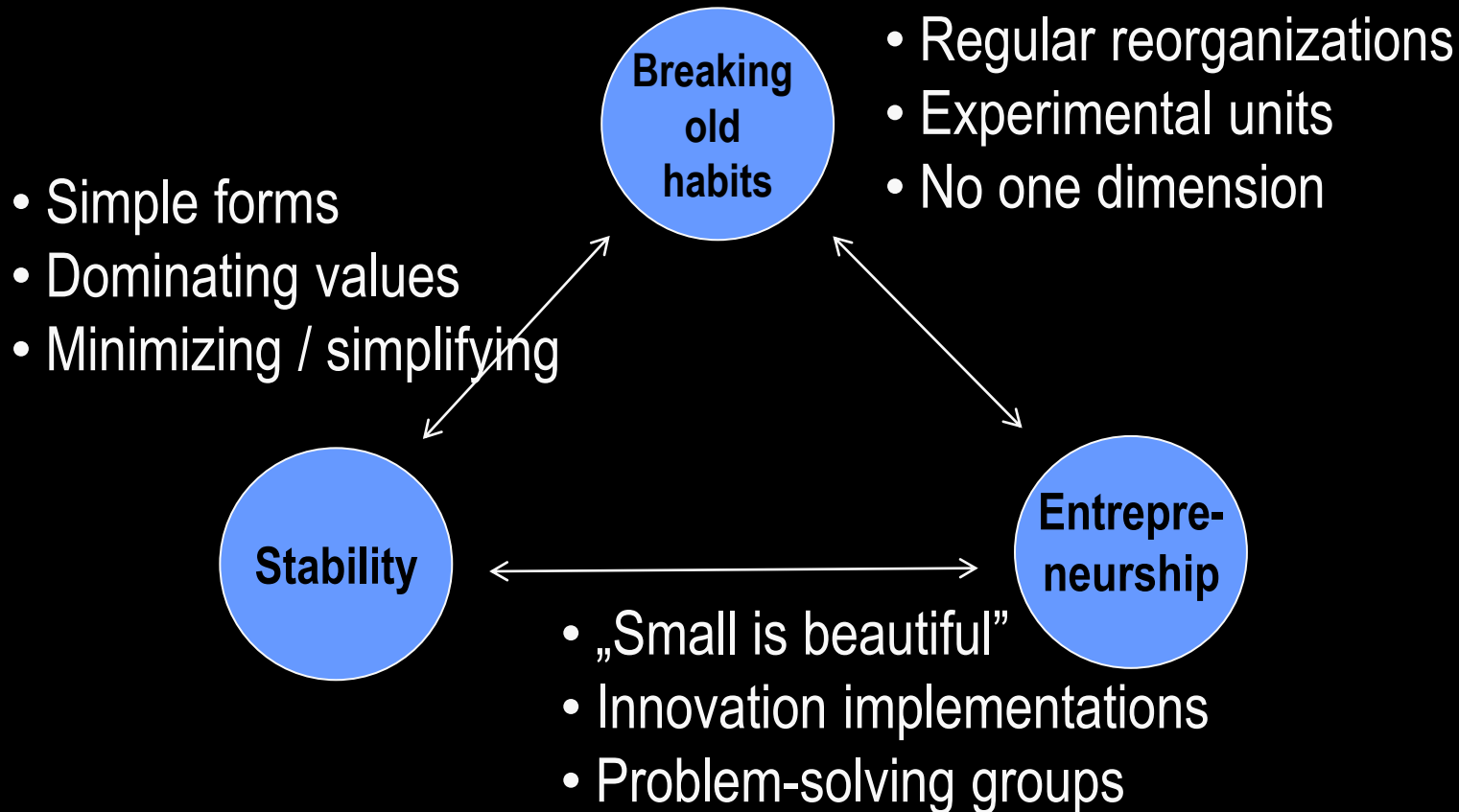
## Eight Themes / 8 principles of excellence:

5. **HANDS-ON, value-driven** - management philosophy that guides everyday practice - management showing its commitment.
6. **Stick to the KNITTING (be EXPERT)**- stay with the business that you know.
7. **Simple form, lean staff** - some of the best companies have minimal HQ staff.
8. **Simultaneous loose-tight properties (Mutual VALUES)** - autonomy in shop-floor activities plus centralized values.

# In Search of Excellence



## The three pillars of the „Structure of the eighties“:



# In Search of Excellence

Forbes



## FORBES – stock index analysis:

- ✓ ...if you invested **\$10,000** in the **Excellence index** 20 years ago and then did nothing at all, you would have **\$140,050**. An equal investment in the **Dow index** would have yielded just \$85,500.

Excellent? Totally \*Excellence Index is based on 32 public companies listed in 'In Search of Excellence' by Thomas Peters and Robert H. Waterman (Harper & Row, 1982); the average returns are unweighted by company market capitalization. Source: FactSet Research Systems

	1982-1987 Total Return (%)	1982-1992 Total Return (%)	1982-2002 Total Return (%)	20-Year Annualized Return (%)
<b>Excellence Index*</b>				
Average Return	251.32%	400.50%	1305.32%	14.1%
Median Return	219.97	331.79	898.45	12.2
<b>DJIA</b>	190.74	258.51	755.04	11.3
<b>S&amp;P 500</b>	168.37	241.31	581.27	10.1

# In Search of Excellence

Forbes



## Excellent Index (32 companies) – stock index (1/2):

	1982-1987 Total Return (%)	1982-1992 Total Return (%)	1982-2002 Total Return (%)	20-Year Annualized Return (%)	Forbes 500s Rank 1982	Forbes 500s Rank 2002
<b>Excellence</b>						
<b>Index*</b>						
Average Return	251.32%	400.50%	1305.32%	14.1%		
Median Return	219.97	331.79	898.45	12.2		
<b>DJIA</b>	190.74	258.51	755.04	11.3		
<b>S&amp;P 500</b>	168.37	241.31	581.27	10.1		
3M	209.49	347.69	1,260.94	13.9	70	119
Amdahl **	283.98	44.25	105.20	3.7	none	none
Amoco **	166.35	325.54	1,098.68	13.2	none	none
Avon Products	116.61	338.04	1,819.52	15.9	252	250
Boeing	317.37	658.08	1,627.50	15.3	44	14
Bristol-Myers	269.22	437.50	1,063.36	13.1	171	98
Squibb						
Caterpillar	140.53	83.87	563.73	9.9	49	93
Dana	275.27	244.82	224.19	6.1	246	176
Data General **	173.96	-9.38	85.42	3.1	none	none
Delta Air Lines	111.70	139.66	-14.29	-0.8	169	139
Digital	378.37	-8.15	42.16	1.8	204	none
Equipment **						
The Walt Disney Co.	494.30	997.06	1,426.05	14.6	none	70
Dow Chemical	499.80	474.56	1,210.70	13.7	31	58
DuPont	334.13	527.97	1,257.25	13.9	16	71
Eastman Kodak	135.72	88.83	97.91	3.5	40	147

# In Search of Excellence

Forbes



## Excellent Index (32 companies) – stock index (2/2):

Emerson Electric	189.22	354.93	855.43	11.9	178	129
<b>Frito-Lay, a</b>	<b>210.91</b>	<b>889.02</b>	<b>2,284.07</b>	<b>17.2</b>	<b>71</b>	<b>60</b>
unit of PepsiCo						
Hewlett-Packard	184.51	118.48	464.24	9.0	167	26
IBM	145.86	58.75	448.29	8.9	9	8
Intel	266.67	479.55	4,163.59	20.6	none	63
Johnson & Johnson	152.13	436.33	2,898.75	18.5	100	43
Kmart	235.99	409.10	-88.04	-10.1	20	38
Maytag	332.54	146.37	452.96	8.9	none	358
McDonald's	258.81	528.79	997.28	12.7	263	128
Merck	508.58	1,194.07	3,263.24	19.2	220	23
National Semiconductor	265.45	107.54	111.33	3.8	none	none
Procter & Gamble	152.86	468.45	2,421.88	17.5	33	33
Raychem **	229.04	154.51	424.93	8.6	none	none
Schlumberger	52.12	152.76	286.86	7.0	none	none
Texas Instruments	171.05	59.23	941.47	12.4	140	227
Wal-Mart Stores	777.97	2,664.86	9,904.60	25.9	259	1
Wang Labs **	1.84	-97.07	70.94	2.7	none	none



# In Search of Excellence



**Conclusions:** *The test of a first-rate intelligence is the ability to hold two apposed ideas in mind at the same time and still retain the ability to function. [S. Fitzgerald]*

- To be the best (excellent) in the business it doesn't mean that you can survive all changes in the environment such as: obsolescence, government policies, law etc.
- Excellence is founded (research findings) on a **mix of**: stability, change and entrepreneurship (*The three pillars*).
- Excellence means the art of managing ambiguity (**differentiation**) and paradox (**contradiction**).

McKinsey

# SCM (logistics) Excellence

(published by SupplyChainDigest)



# Logistics Excellence

## The 10 Keys to Global Logistics Excellence



### Introduction:

- ✓ **Supply Chain Digest** has identified **10 key capabilities (indicators)**, encompassing processes, skill sets and technology, that companies striving to achieve **global logistics excellence** must develop.
- ✓ “Best practice” (global business model - benchmark) in this comparatively new discipline (SCM) **is being redefined on a continuous basis** - Supply Chain Digest.

# Logistics Excellence

## The 10 Keys to Global Logistics Excellence



### Methodology:

- ✓ Findings are based on **SURVEY** performed by **McKinsey** and the U.S. Chamber of Commerce of Western companies importing products from China (2007).
- ✓ FINDINGS #1: The majority of respondents believed **they were behind their competitors** in such areas as:
  - 1) total landed cost savings from offshoring,
  - 2) on-time delivery, and
  - 3) other key supply chain metrics (see illustration below).

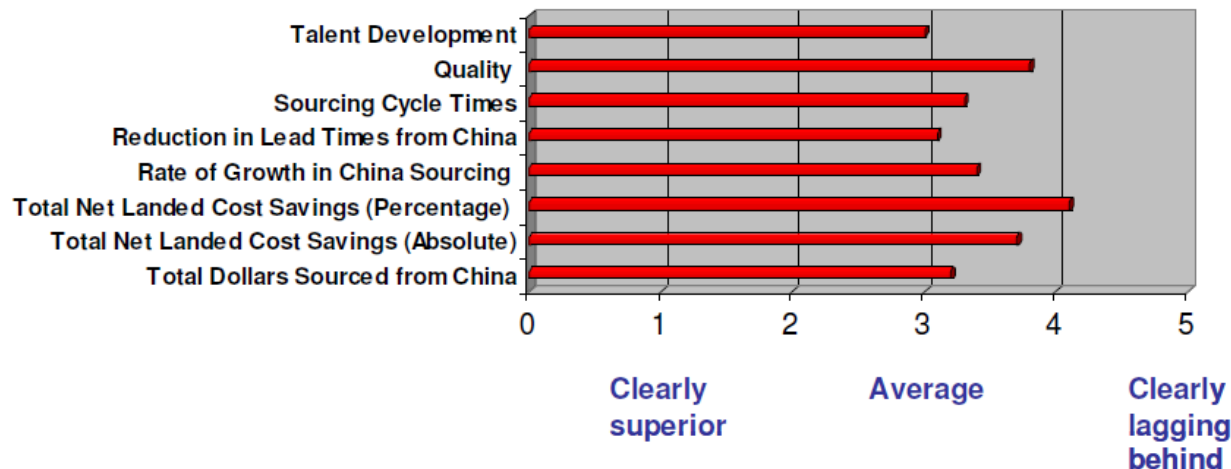
# Logistics Excellence

## The 10 Keys to Global Logistics Excellence



*The majority of respondents believed they were behind their competitors...*

### How Does Your Company's Performance in China Compare With That Of Your Competitors ?



**Source: McKinsey/American Chamber of Commerce**

# Logistics Excellence



## The 10 Keys to Global Logistics Excellence

### The 10 Capabilities of Global Logistics Leaders:

# Logistics Excellence

## The 10 Keys to Global Logistics Excellence



### 1. **Delivered Cost Management:**

*What is the real total cost?*

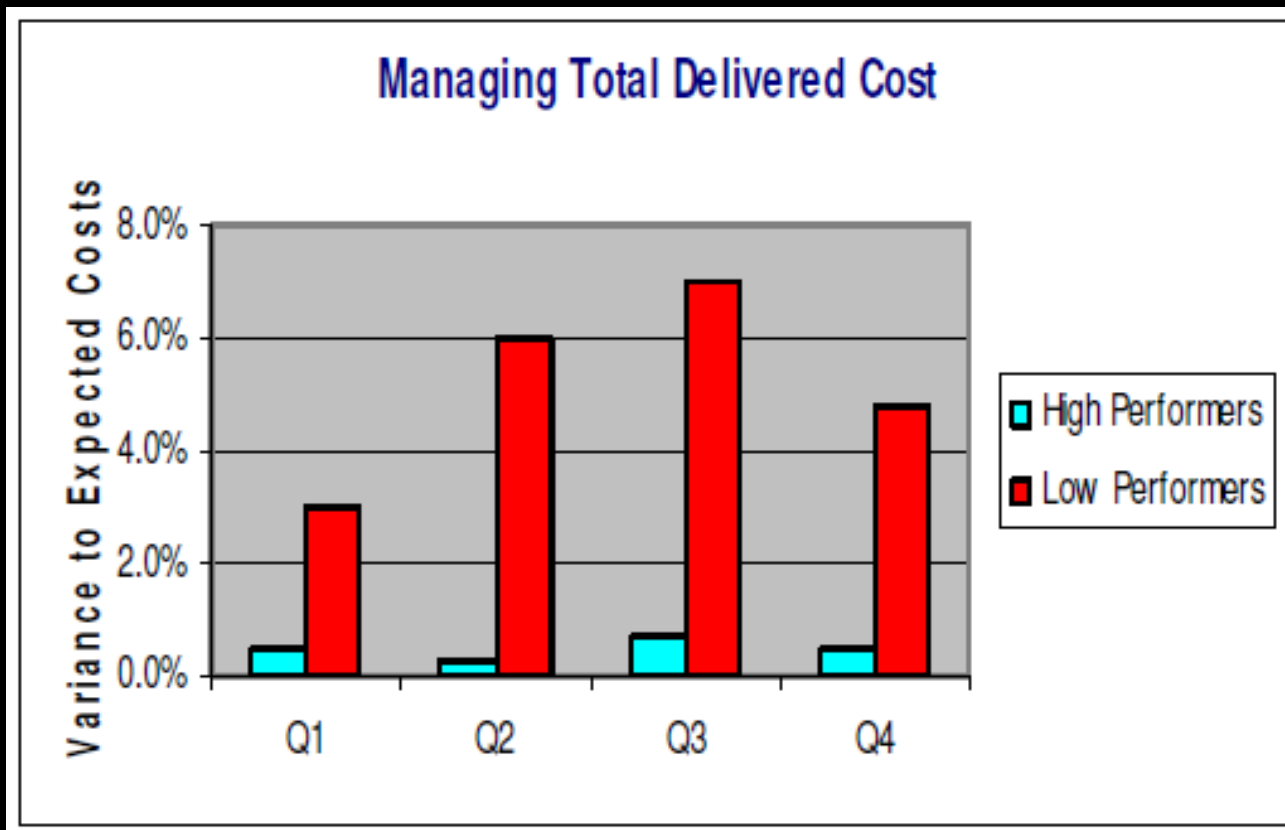
- ✓ Total Delivered Cost Management involves the ability to **ANALYZE and PREDICT the total supply chain costs** from the source of supply to its final point of distribution.
- ✓ It is required to make 1) **optimal sourcing** and 2) **logistics decisions**, and to ensure that execution is aligned with upstream sourcing decisions (supply chain partners collaboration issue).

# Logistics Excellence

## The 10 Keys to Global Logistics Excellence



### 1. **Delivered Cost Management:**





# Logistics Excellence

## The 10 Keys to Global Logistics Excellence



### 2. Global Logistics Process Automation:

*What is the level of automation of complex processes?*

- ✓ There are still too many manual steps in most organizations in area of global operations.
- ✓ The reality is that global logistics execution is simply much **more complex than domestic** transportation – logistics operations.
- ✓ The ultimate goal in global logistics execution: “one touch” information flow for all activities (workflow management).

# Logistics Excellence

## The 10 Keys to Global Logistics Excellence



### 3. End-to-End Visibility:

*What do we know about our shipments (in REAL TIME)?*

- ✓ Visibility - ability to answer very basic logistics (operational) questions: Where is it? When will it arrive?  
Is the expected date different from the planned date?
- ✓ Visibility systems should make it easy to find and drill down on information from many points of reference, such as the purchase order number, freight bill, etc.
- ✓ In a global logistics visibility of the information system, the timeliness and accuracy of information is critical.

# Logistics Excellence

## The 10 Keys to Global Logistics Excellence



### 4. **Supplier Portals and ASN (Advance Ship Notices) Capabilities:**

*Can we control (plan) our shipments in ADVANCE?*

- ✓ Integration (within information visibility) with offshore suppliers can be challenging, but it is essential to managing the global supply chain.
- ✓ ACCURATE **Advance Ship Notices** (ASNs) from overseas suppliers is critical for both effective inventory planning and to streamline the inbound flow of goods.
- ✓ Global logistic leaders reduce the time and cost of inbound processing by enabling their suppliers to produce ASNs and properly label the goods (IT).

# Logistics Excellence

## The 10 Keys to Global Logistics Excellence



### 5. **Total Product Identification** and **Regulatory Compliance:**

*Can we secure our shipment by complete **track and trace**?*

- ✓ SCM security concerns are growing, and are certain to increase.
- ✓ Partnership Against Terrorism (CTPAT), Operation Safe Commerce, and many others place an increasingly difficult array of burdens in the execution of global logistics.
- ✓ Technology provides some of the answer here, and will increasingly do so, especially as we enable complete track and trace and other capabilities through RFID-based systems.

# Logistics Excellence

## The 10 Keys to Global Logistics Excellence



### 6. **Dynamic Routing (Supply Chain Agility):**

*What is the level of flexibility in planning?*

- ✓ Many international logistics flows tend to be fairly static after they are designed.
- ✓ Since we face the high level of volatility in local and global economy ability to quickly and accurately determine the transportation alternatives and costs would be extremely valuable.
- ✓ Supply chain agility (dynamic routing) and risk mitigation (reduction) will be an increasingly common attribute of supply chain leaders decisions.

# Logistics Excellence

## The 10 Keys to Global Logistics Excellence



### 7. (Time) **Variability Management:**

*What is the level of time variability – time change management (Change Request / CR)?*

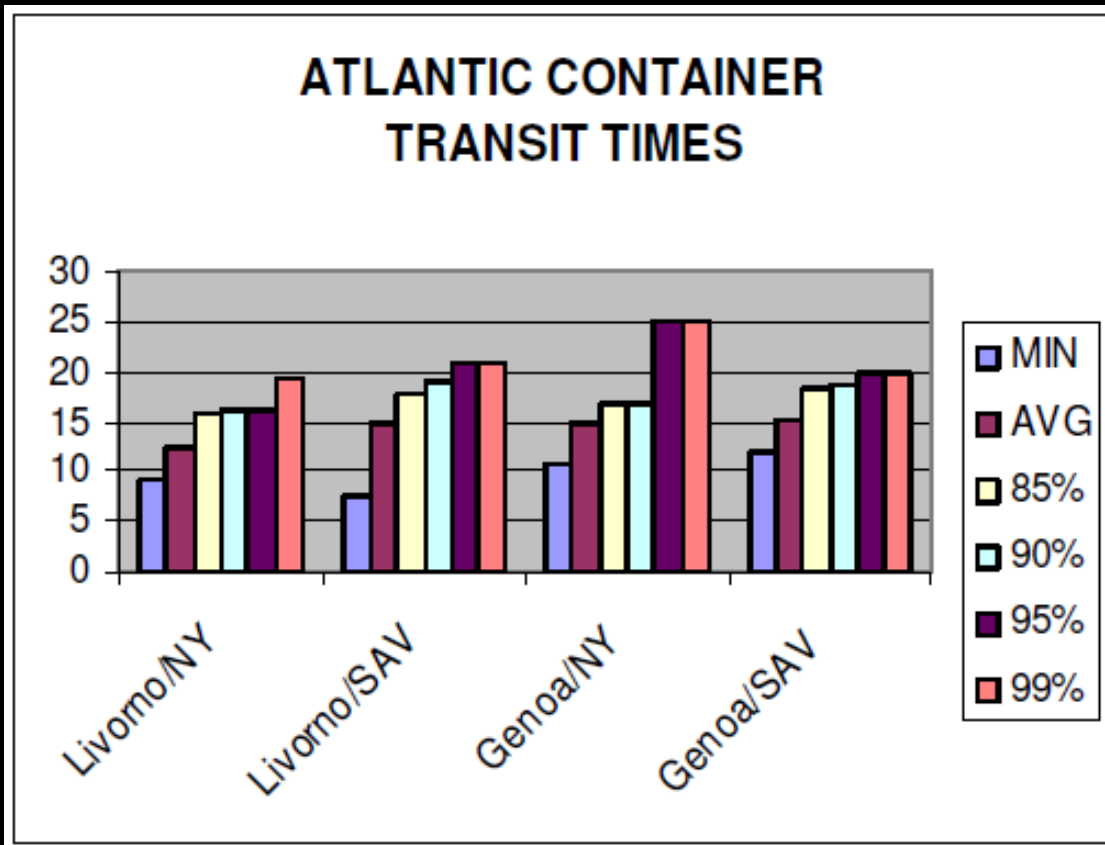
- ✓ Variability (permanent change) is **the Achilles Heel** of long supply chains.
- ✓ There is a significant level of variability in international logistics moves, with a tremendous impact on inventory levels and customer service (see illustration).
- ✓ **Reducing the variability by even 1-2 days can drive millions of dollars in inventory savings and reduce lost sales due to stock outs.**

# Logistics Excellence

## The 10 Keys to Global Logistics Excellence



### 7. (Time) **Variability Management:**



SAV: Sawai Sawai  
(Western Samoa)

NYC: New York

<http://www.infodriveindia.com/traderesources>

# Logistics Excellence

## The 10 Keys to Global Logistics Excellence



### 8. Integrated International and Domestic Workflow:

*What is the level of PROCESS INTEGRATION in order execution within SCM?*

- ✓ Most logistics companies were forced to manage the combined international and subsequent domestic moves really **as separate processes** from both a planning and execution perspective.
- ✓ Logistics leaders are deploying technology that enables them to have a single “work space” that contains both functionality and data across the full international planning and execution lifecycle.



# Logistics Excellence

## The 10 Keys to Global Logistics Excellence



### 9. Integrated Planning and Execution Platform:

*What is the level of data and INFORMATION INTEGRATION?*

- ✓ One of the challenges of global logistics is that the information that decision-makers need tends to be in **multiple places**, and is hard to access.
- ✓ Data could become real-time for scheduling, in-transit visibility and performance measures of carriers.
- ✓ By implementing **dedicated software (ERP, SCM)**, transportation planners have a full picture of the total delivered costs of the integrated domestic and international legs.

# Logistics Excellence

## The 10 Keys to Global Logistics Excellence



### 10. Financial Supply Chain Management:

*What is the level of cash flow control?*

- ✓ International SCM is about the management of materials, information and **cash**. The reality is that in most companies and most supply chain processes, the “**cash**” element of this definition is not really connected.
- ✓ Letters of Credit, financial settlement processes, and other financial related capabilities must often be mastered.
- ✓ Global logistics leaders will closely link the movement of cash to expand trading partner relationships maximize profitability, and ensure the flow of goods is not disrupted.

# Logistics Excellence

## The 10 Keys to Global Logistics Excellence



### IT and Global SCM - Conclusions:

1. Even sophisticated companies that have more global supply chain experience and were early adopters have only automated a small fraction of their global trade operations [Gartner].
2. Significant strides are being made in many areas of **global logistics software (ERP, LIS, BI)**, with many vendors now able to offer relatively comprehensive suites of solutions that address many if not most process requirements (10 Keys of Global Logistics Excellence).

# **Global Logistics Capabilities Diagnostic (GLCD)**

tool (by RedPrairie)



# Global Logistics Capabilities



## Global Logistics Capabilities Diagnostic (GLCD) –

### introduction:

- ✓ The GLCD diagnostic tool that was developed (by RedPrairie) to help managers to evaluate their performance in area of global logistics activities.
- ✓ It is founded on „The 10 Keys to Global Logistics Excellence” model (SupplyChainDigest).
- ✓ The full, detailed description is available at:  
[http://www.scdigest.com/assets/Reps/SCDigest\\_Global\\_Logistics\\_Excellence.pdf](http://www.scdigest.com/assets/Reps/SCDigest_Global_Logistics_Excellence.pdf)

# Global Logistics Capabilities



## Global Logistics Capabilities Diagnostic – intro:

- ✓ The diagnostic tool (by RedPrairie) gives you a good idea of your capability position vis-à-vis both other companies and against your potential for improvement in both capability and result (BENCHMARK approach).
- ✓ It can be used to develop a prioritized roadmap for improvement in:
  - ✓ people,
  - ✓ process and
  - ✓ technology within global logistics management
  - ✓ etc.

# Global Logistics Capabilities



## Global LCD – questionnaire structure:

- **Section A:** Total Delivered Cost Management / Global Logistics Process Automation.
- **Section B:** End-to-End Visibility / Supplier Portals and ASN Capabilities.
- **Section C:** Total Product Identification and Regulatory Compliance Dynamic Routing.
- **Section D:** Variability Management Integrated International and Domestic Workflow.
- **Section E:** Integrated Planning and Execution Platform / Financial Supply Chain Management.

# Global Logistics Capabilities



## Global LCD – detailed instruction:

- To evaluate your **company's level** for each capability, enter:
- **LEVEL zero: 0** - if you aren't even at Manual Level (no procedure exists),
- **LEVEL I: 3** - for only Manual execution,
- **LEVEL II: 7** - for Basic Competence Level capabilities (industry standard), and
- **LEVEL III: 10** - for Leadership Level capabilities - benchmark level (being the BEST)



# Global Logistics Capabilities

## Global LCD

– the questionnaire:



The 10 Keys to Global Logistics Excellence,  
Red Prairie, Springboro Ohio USA.

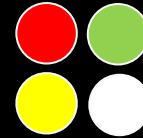
### Section A

	Total Delivered Cost Management	Global Logistics Process Automation
Score Yourself	<b>Level I: Manual/ Lagging</b>	
<input type="checkbox"/> 0 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 7 <input type="checkbox"/> 10	<p>"One off" analyses that manually estimate the total logistics costs of different sourcing alternatives - estimates that typically remain static.</p> <p><b>Characteristics:</b></p> <ul style="list-style-type: none"> <li>▪ Rule of thumb cost estimates</li> <li>▪ Infrequent revision of cost basis</li> <li>▪ Partial coverage of possible cost sources</li> </ul>	<p>Little systems support for global logistics planning and execution processes. Significant reliance on spreadsheets and other "improvised" technology tools.</p> <p><b>Characteristics:</b></p> <ul style="list-style-type: none"> <li>▪ Dependence on freight forwarder to handle</li> <li>▪ Phone call &amp; fax booking procedures</li> <li>▪ Booking is case by case, not a repeatable process</li> </ul>
	<b>Level II: Basic Competence</b>	
<input type="checkbox"/> 0 <input type="checkbox"/> 3 <input type="checkbox"/> 7 <input type="checkbox"/> 10	<p>Systemic approach to delivered cost analysis, using a database of carrier rates, customs, duties, tariffs, etc.</p> <p><b>Characteristics:</b></p> <ul style="list-style-type: none"> <li>▪ Spreadsheet-calculated costing</li> <li>▪ Cost basis regularly updated</li> <li>▪ Versions of cost elements maintained</li> </ul>	<p>Technology that solves the basic "ocean booking" problem and automates the routine tasks of global logistics execution.</p> <p><b>Characteristics:</b></p> <ul style="list-style-type: none"> <li>▪ Cross ocean shipper rate shopping</li> <li>▪ Paperwork submission integrated into booking workflow</li> <li>▪ Uploaded transit schedules</li> </ul>
	<b>Typical Results of Improvement to Level II</b>	
	Improved sourcing decisions from more accurate data and the ability to compare more alternatives, ability to estimate transport cost as cost of goods sold with reasonable accuracy.	Increased administrative efficiency and reduction in time from when a movement is planned to when it is booked.
	<b>Level III: Global Logistics Leadership</b>	
<input type="checkbox"/> 0 <input type="checkbox"/> 3 <input type="checkbox"/> 7 <input checked="" type="checkbox"/> 10	<p>Comprehensive, dynamic calculator of total delivered costs using detailed, highly accurate data across numerous cost categories, including the cost of inventory.</p> <p><b>Characteristics:</b></p> <ul style="list-style-type: none"> <li>▪ System calculated costing</li> <li>▪ Dynamically updated rate tables</li> <li>▪ Costs include both domestic and international movement components</li> </ul>	<p><b>Integrated ocean booking workflow including:</b></p> <ul style="list-style-type: none"> <li>▪ Automated paperwork submission</li> <li>▪ EDI booking transactions (tender/response)</li> <li>▪ Automated rate shopping</li> <li>▪ Optimized domestic planning to international movement planning for best port of exit/entry</li> <li>▪ Determination based on cost and service</li> </ul>
	<b>Typical Results of Improvement to Level III</b>	
	Best decisions with regard to lowest total cost sourcing options. Negligible differences between expected total global logistics costs and actuals, precise cost of transport accounting.	Better tactical deployment of day-to-day shipping to gain cost and transit time optimization. Automation of manual booking and paperwork activities.

# Global Logistics Capabilities



**Global LCD – Final Score Ranking:**



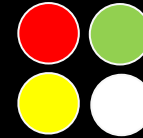
## Global Logistics Capabilities Diagnostic

#	10 Keys to Global Logistics Excellence	The leader	Your Company
1	Delivered Cost Management	10	10
2	Global Logistics Process Automation	3	7
3	End-to-End Visibility	7	0
4	Supplier Portals and ASN Capabilities	7	3
5	Total Product Identification and Regulatory Compliance	10	7
6	Dynamic Routing	7	0
7	Variability Management	10	7
8	Integrated International and Domestic Workflow	7	0
9	Integrated Planning and Execution Platform	10	3
10	Financial Supply Chain Management	10	3
<i>Totals:</i>		<b>81</b>	<b>40</b>
<i>scale: 0-3-7-10</i>			

# Global Logistics Capabilities



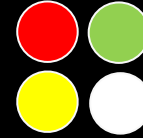
## Global LCD – Radar diagram:



# Global Logistics Capabilities



## Global LCD – Final Score Ranking:



- **0 to 40 points:** Your company is **significantly behind** the average company in terms of global logistics capabilities.
- **41-60 points:** Your company is probably about **average** for the market today, though many are rapidly adding capabilities.
- **61-80 points:** Your company is **well ahead** of most other companies, and you are delivering major benefits to your lines of business and shareholders.
- **81-100 points:** You are a **global logistics leader**; probably fewer than 5% of companies fall into this category, and we do not believe any could currently score a perfect 100 (?).

# **Summary**

(conclusions and recommendations)

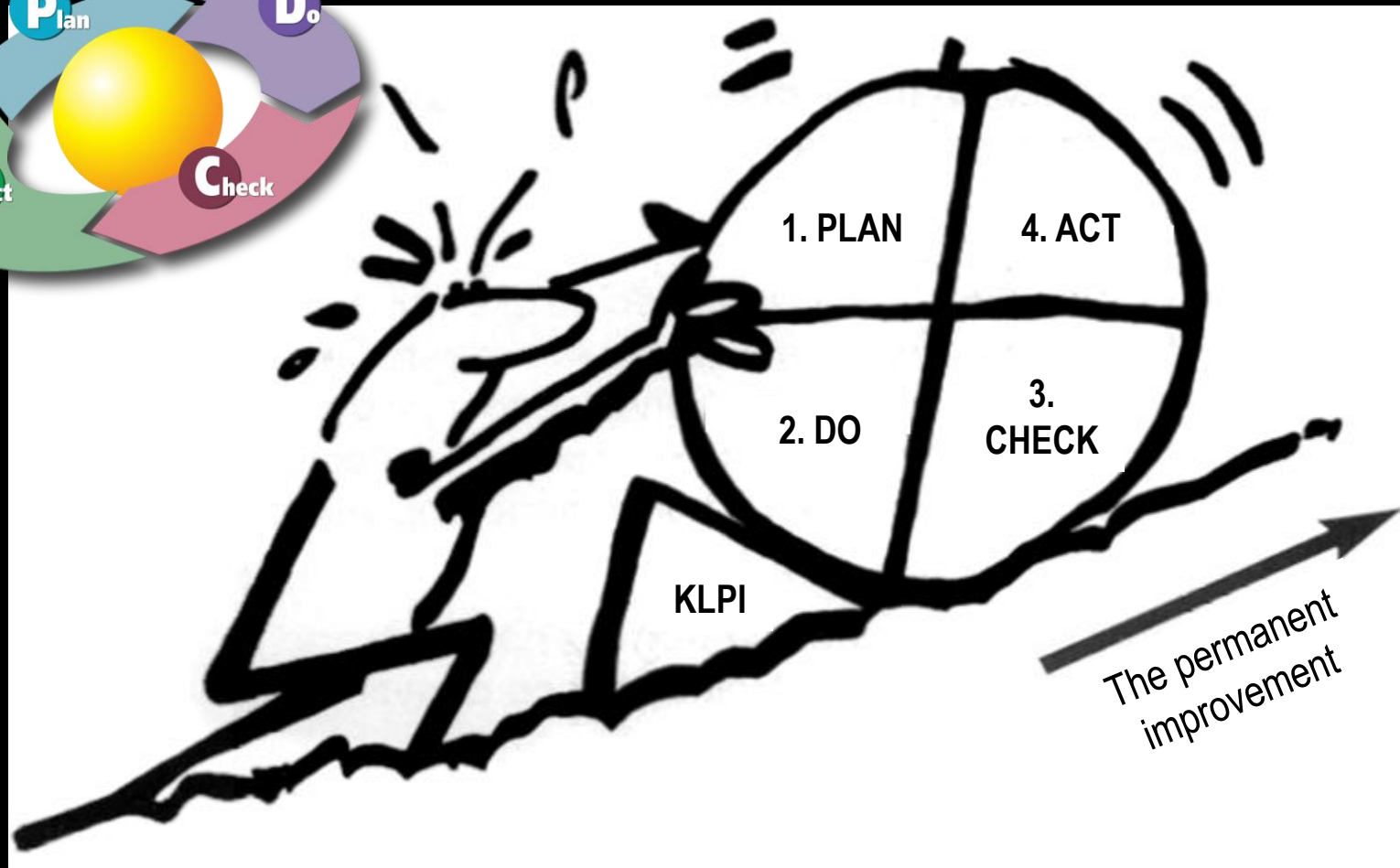
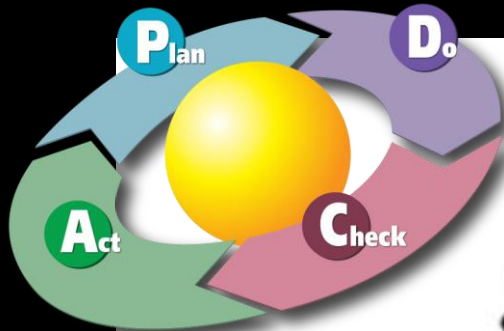
# Excellence in international logistics?



- Excellence starts with **a desire** to be the leader.
- It is necessary to define **Key Performance Logistics Indicators** (KPLI) / Key Logistics Capabilities (KLC) – recipe of success.
- It is important **to build the model** and **set priorities** – to define what is really important to achieve the business objectives / goals.
- Just **ACT**, take the controlled risk and learn from your mistakes.
- You must **be consistent** and **persistent** in the process of implementing your recipe (business model) of success.
- Remember – **excellence needs time**, so be patient and try to notice and reward any small success and improvement!



# Excellence in international logistics?



*The road to excellence ...*

# **Excellence in the Space**

(Destination Mars)





## Governmental Space Age

1969

Apollo landed on the moon

## Entrepreneurial Space Age

2009

SpaceX first successful launch of commercial payload

2010

SpaceX published launch prices enabled brokerage services

2012

SpaceX Dragon becomes first commercial space vehicle to berth with Space Station

2014

NanoRacks launches commercial operations via ISS

2015

Blue Origin demonstrates reusable rockets



60 Companies  
\$6,562 M



170 Companies  
\$5,323 M



17 Companies  
\$505.2 M



6 Companies  
\$115.9 M



5 Companies  
\$154.9 M



6 Companies  
\$55.6 M



7 Companies  
\$74.5 M



30 Companies  
\$9.97 M

Number of Companies Receiving investment<sup>(1)</sup>

303

\$12.8 B

Investment in Space<sup>(1)</sup>

\$10 B

USA

\$6 B

150

\$2 B

50

EU

UK

Asia

North America

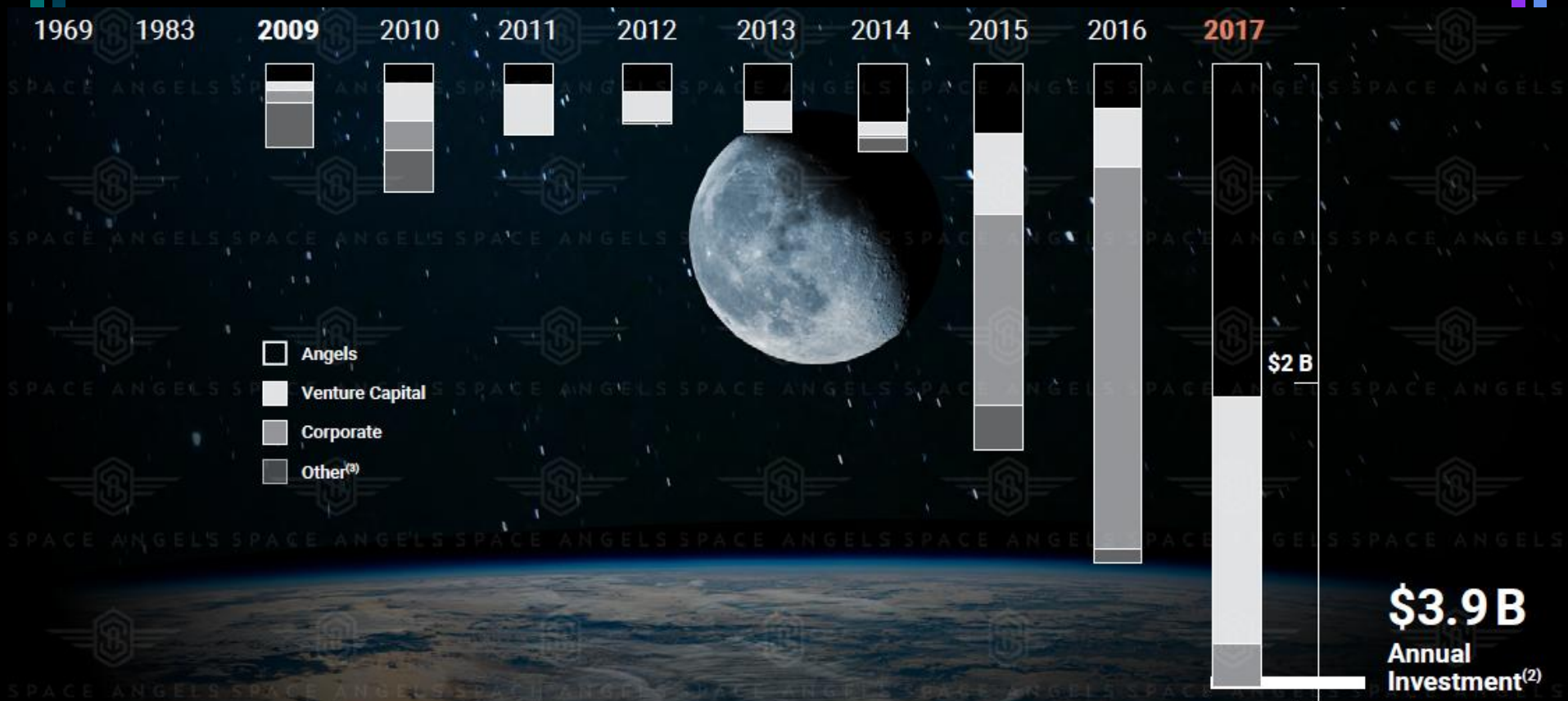
South America

Australia

Space Projects Investments

1969 1983 2009 2010 2011 2012 2013 2014 2015 2016 2017

# „Venture Capital” Space Projects



(1) Cumulative non-governmental equity investment

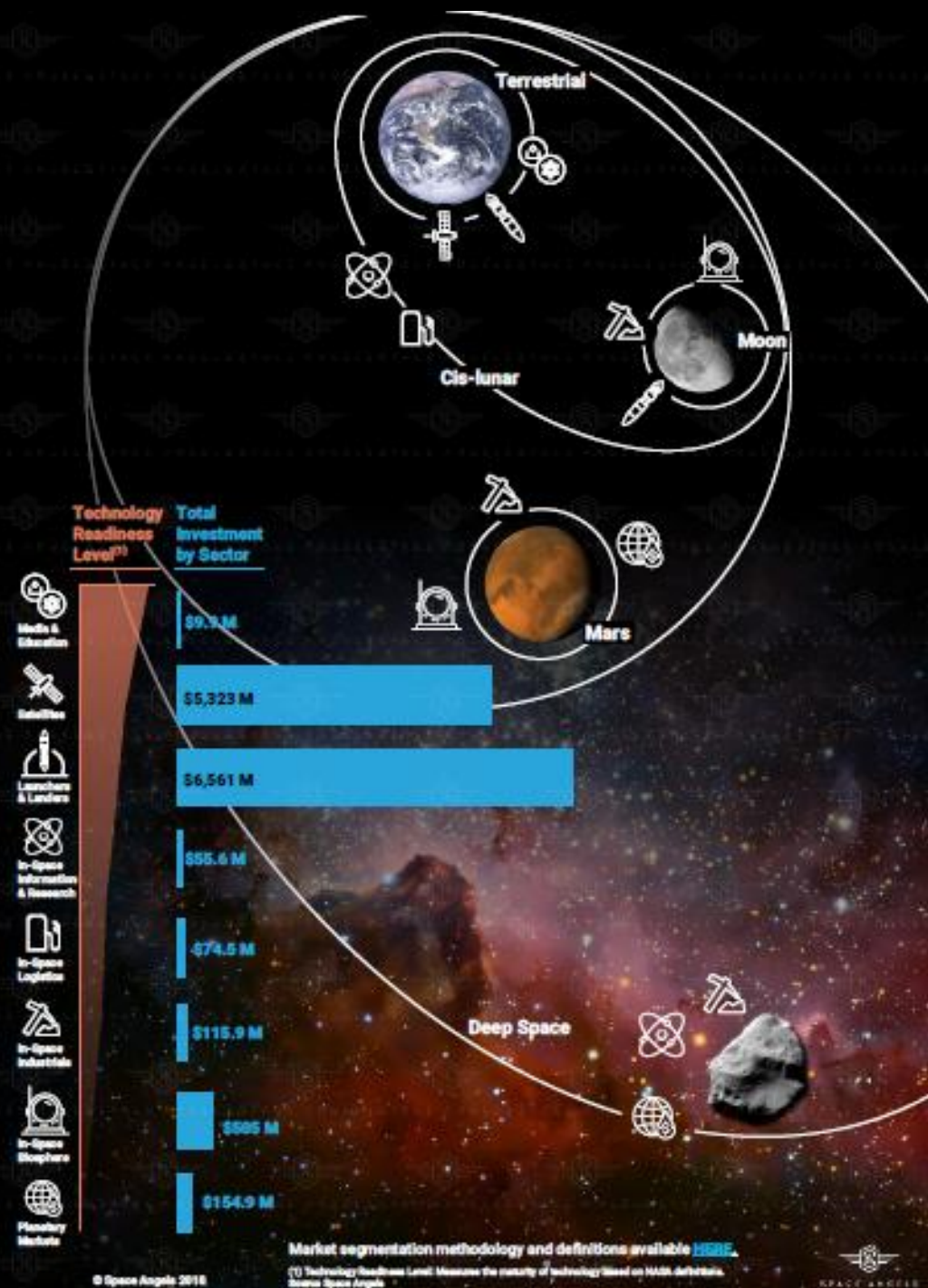
(2) Annual non-governmental equity investment by investor type

(3) Other includes Foundations, Private Equity, Sovereign Wealth Funds, Crowd Platforms, etc.

Source Space Angels



# Space Economy



# Excellence in the Space

Case study



# Destination Mars

**FALCON Project by SpaceX (Elon Musk):**



# Destination Mars

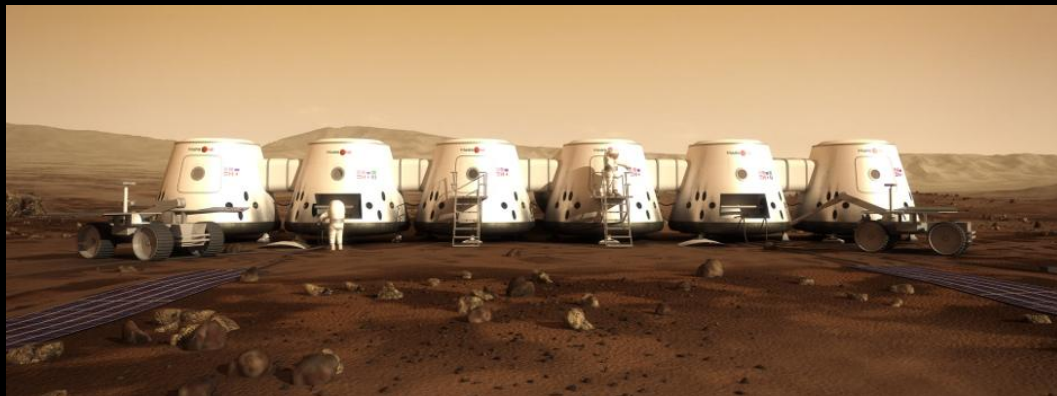
**Project by Boeing and NASA:**





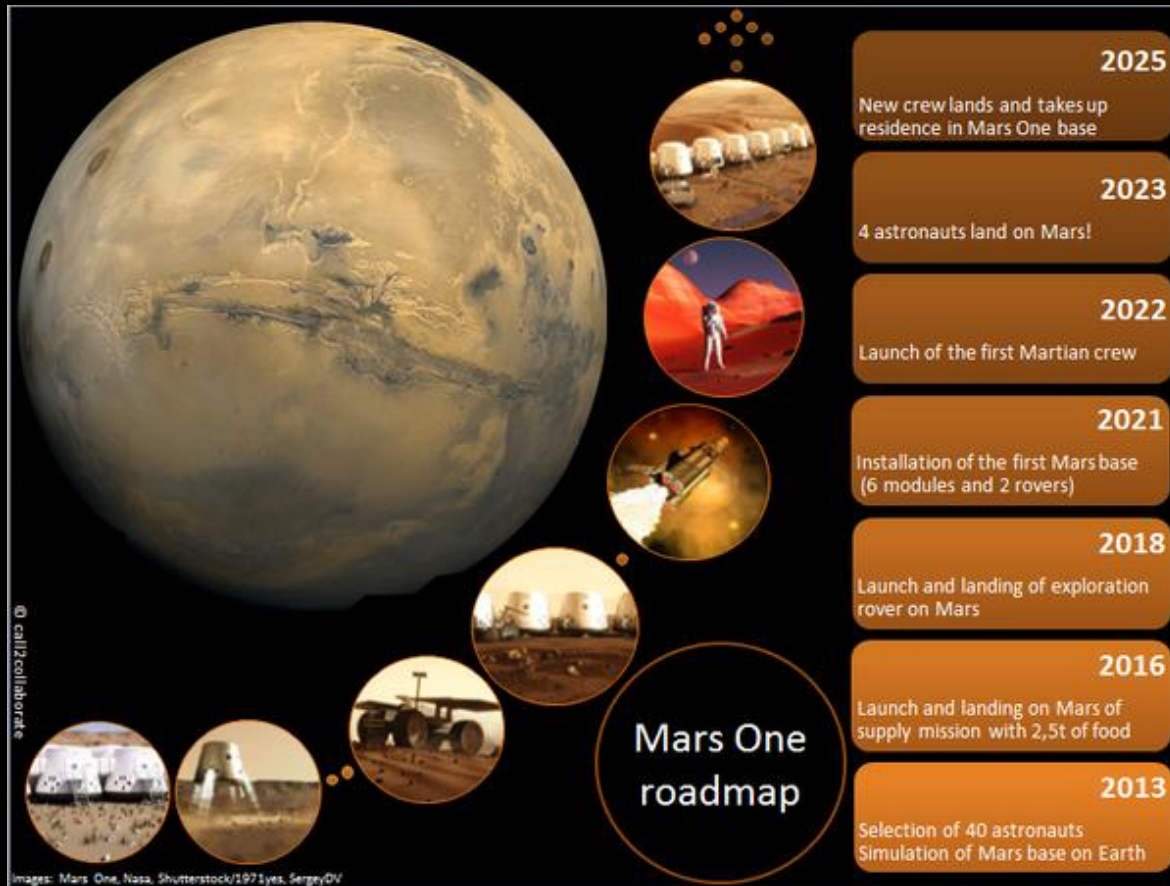
# Destination Mars

## Project MARS ONE:



# Destination Mars

## Project MARS ONE:





# Excellence in the Space



# Questions ?



- dr Marian Krupa

# Exam Questions (6):



- ✓ Highlight with short comment all keys to Global Logistics Excellence.
- ✓ Where Do the Lost Savings Go from offshoring and global sourcing initiatives?
- ✓ Explain the Lack of Global Logistics Technology Enablement.
- ✓ What is the Global Logistics Capability Diagnostic tool?
- ✓ What is the advantage of implementing BI solutions in global SCM?