
# LOGISTICS & WAREHOUSING

# TRENDS IN ROMANIA

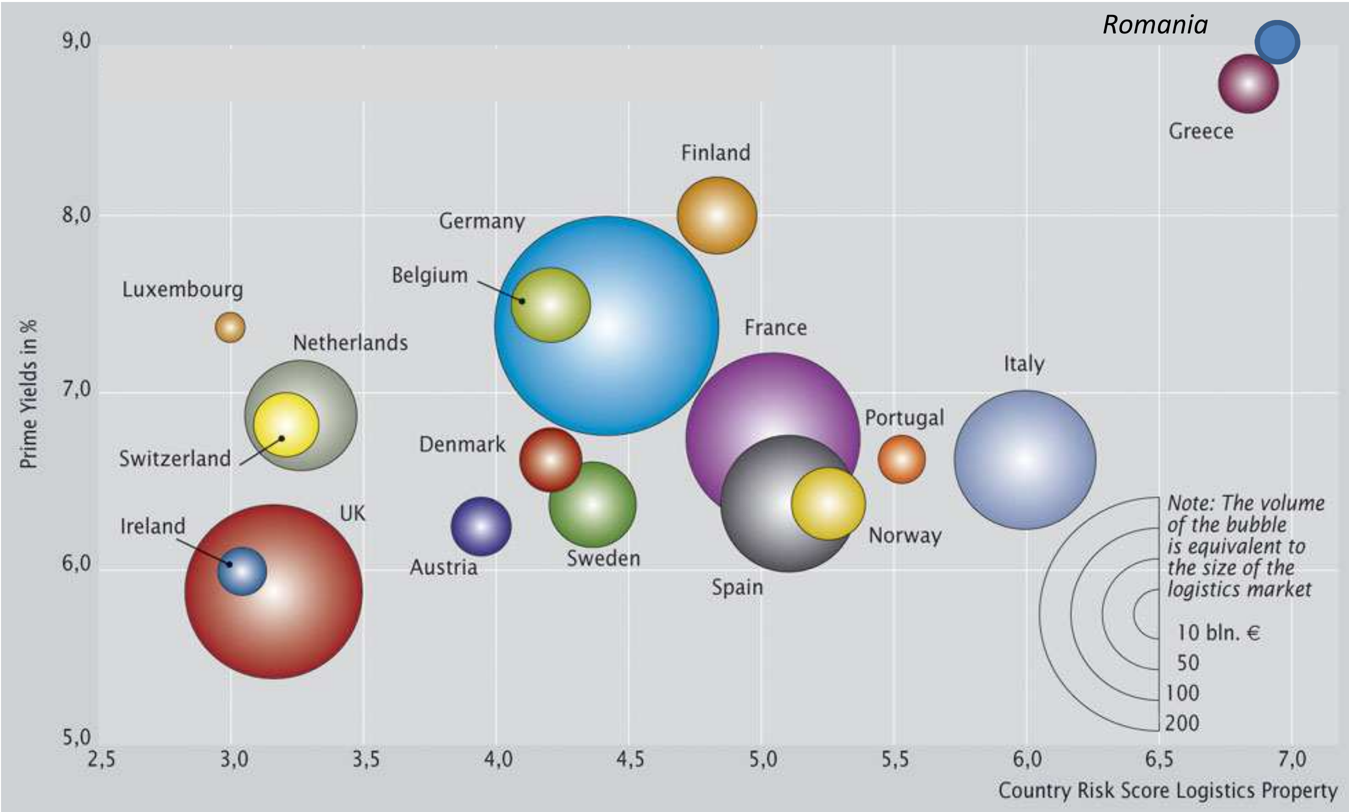
*4, July 2008*

Konstantinos Athanassiadis, Country Manager PLANNING ROMANIA

PLANNING ROMANIA

SUPPLY CHAIN INSTITUTE LTD
OF SOUTHEASTERN & CENTRAL EUROPE

# Romanian logistics market grow by more than 22% per year with 3PLs set to capture a significant share of this growth.



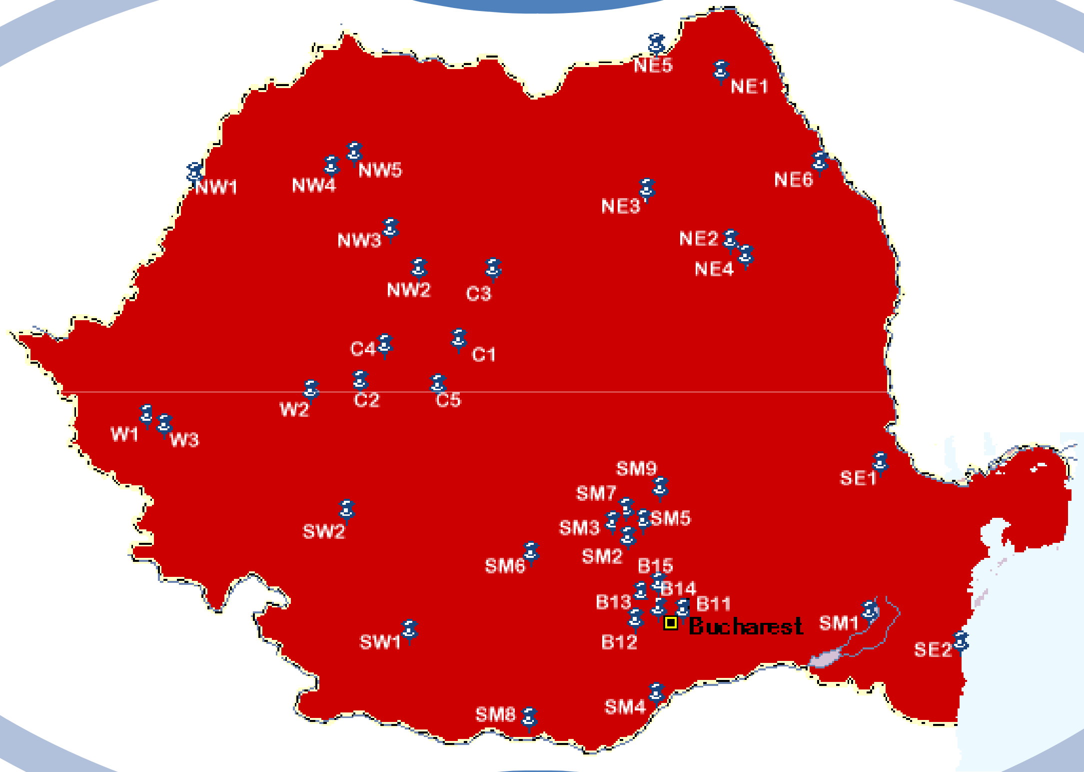
# Romanian 3PL market is under development

- Romanian 3PL market is rapidly expanding
- Market was fragmented to local small players
- New multi-national players have entered the market by either acquiring sites in modern logistics real estate projects or utilizing existing 3PL services
- Provision of 3PL services is moderate at present, however there are rapidly being upgraded
- 3PL services are mainly offered in Bucharest area
- Lack of groupage services to cover Pan-Romanian regions
- Romanian 3PL market  provides sectorial opportunities

# Romania follows the model of logistics parks

Currently there are 37 industrial parks and 6 free zones

High growth rate of logistics parks' number, (promotion through government ordinance no.65, approved by Law no.490 in July 2002




- Many small sized logistics parks of 15-20.000 m2
- Most industrial parks belong to key players of Real estate market

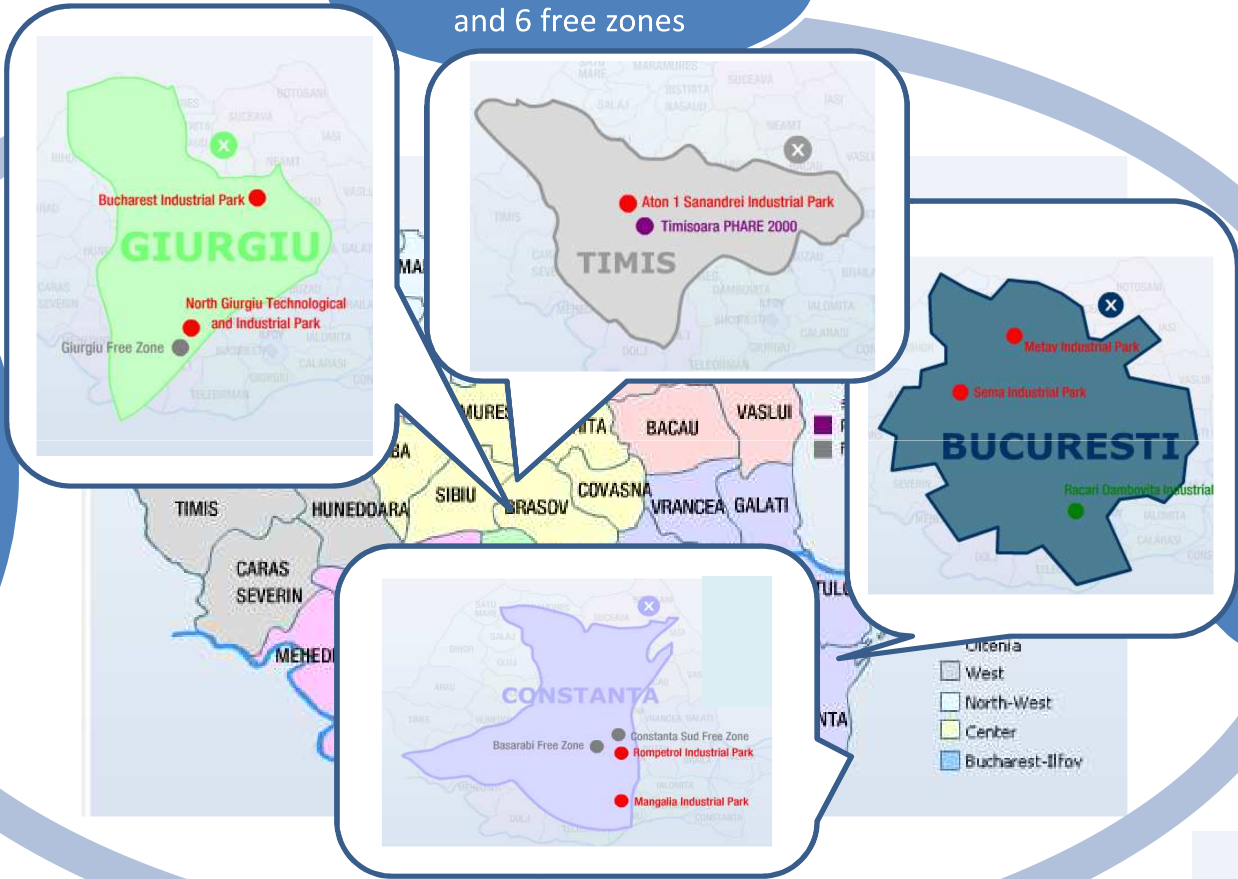
Higher development along A1 highway in Bucharest, due to poor infrastructure

The authority in charge of giving the go-ahead for the creation of industrial parks is the Regional National Development Agency (RNDA), which is also responsible for the management and distribution of funds to promote investments into these areas

# Romania follows the model of logistics parks

Currently there are 37 industrial parks and 6 free zones

High growth rate of logistics parks' number, (promotion through government ordinance no.65, approved by Law no.490 in July 2002




Small size of logistics parks, as the majority consists of 15-20 th m2

Higher development along A1 highway in Bucharest, due to poor infrastructure

LEGEND

- Industrial parks with title granted by Minister Order
- Industrial parks established by Government Decisions
- Applications for granting the industrial park title yet under study
- PHARE Infrastructure Projects
- Free zones

# Romania follows the model of Real Estate Logistics (rental)

- The logistics sector continues to be the main generator of demand, accounting for approximately 40% of the total rented area

- High demand of warehouses

- Specialists consider that Romania needs at the moment around 2,5 mil m2 of A class w/h, half of them being required in Bucharest

*In case of rent/acquire*

***existent building***

- Rents had been increased during previous years.

- However in 2007 supply exceeded marginally demand and rents in Bucharest were decreased last year

- In Bucharest there are around 600 th m2 of modern w/h

- Only 5% of them are un-rented

- Rents level depends on w/h area, equipment (with shelves or not) and age

| REGION | RENT NEW | RENT OLD |
|---|---|---|
| Bucharest | 4,0-7,0 | |
| Brasov | 5,5 | 2,0-3,0 |
| Cluj-napoca | 3,5-4,5 | 1,2 |
| Craiova | 3,5-5,0 | 3,0 |
| Iasi | 4,0-7,0 | 2,0-4,0 |
| Timisoara | 6,0 | 3,0-4,0 |
| Bacau | 2,0-3,0 | 1,0-1,5 |
| Constanta | 5,0 | 1,5 |

| REGION | ACQUISITION PRICE |
|---|---|
| Bucharest | 300-500 |
| Craiova | 50 |
| Constanta | 70 |

*Source: Magazine "Tranzit Logistika"*

# Alternative logistics model is constructing a premise

*In case of* ***construction***

Land price in Bucharest area ranges from 400 to 600 €/ sqm

Common features of a modern industrial building:

-10m clearance height

- 5.000kg/m2 floor loading capacity

- 200lux avg lightning level for w/h, and 400lux for offices

- Construction authorization used to be a bureaucratic procedure managed by Local Town Halls, including the following steps

- PUG – General Urban Plan
- PUZ – Regional Urban Plan
- PUD – Detailed Urban Plan
- CU – Urbanism Certificate
- AC – Construction Authorization

- The value of the designing activity is around 4%-12% of the investment value, depending of the complexity of work

- According to a recent improved procedure, if an authorization is not issued within 30 days it is presumed de facto as favorable.

PLANNING ROMANIA

SUPPLY CHAIN INSTITUTE LTD OF SOUTHEASTERN & CENTRAL EUROPE

# Typical factors for success of a Distribution Warehouse in Europe / Romania

- **Single-story building**
- **Building height 8 - 12 m (min. 8 m to bottom edge of headers)**
- **Column spacing as wide as possible within the >12.5 m grid, e.g. 25 x 25 m**
- **Design load-bearing capacity of floor > 5,000 kg/m²**
- **Large number of ramps and one large ground-level door per section (at least one ramp for 1,000 m² of warehouse space)**
- **Two-sided access in the case of handling centers**
- **Maneuvering/apron area with a minimum length of 35m**
- **Capable of being divided for multiple users**
- **Sprinkler system/ESFR sprinklers (ceiling-mounted high pressure sprinkler system instead of a bay-mounted sprinkler system)**

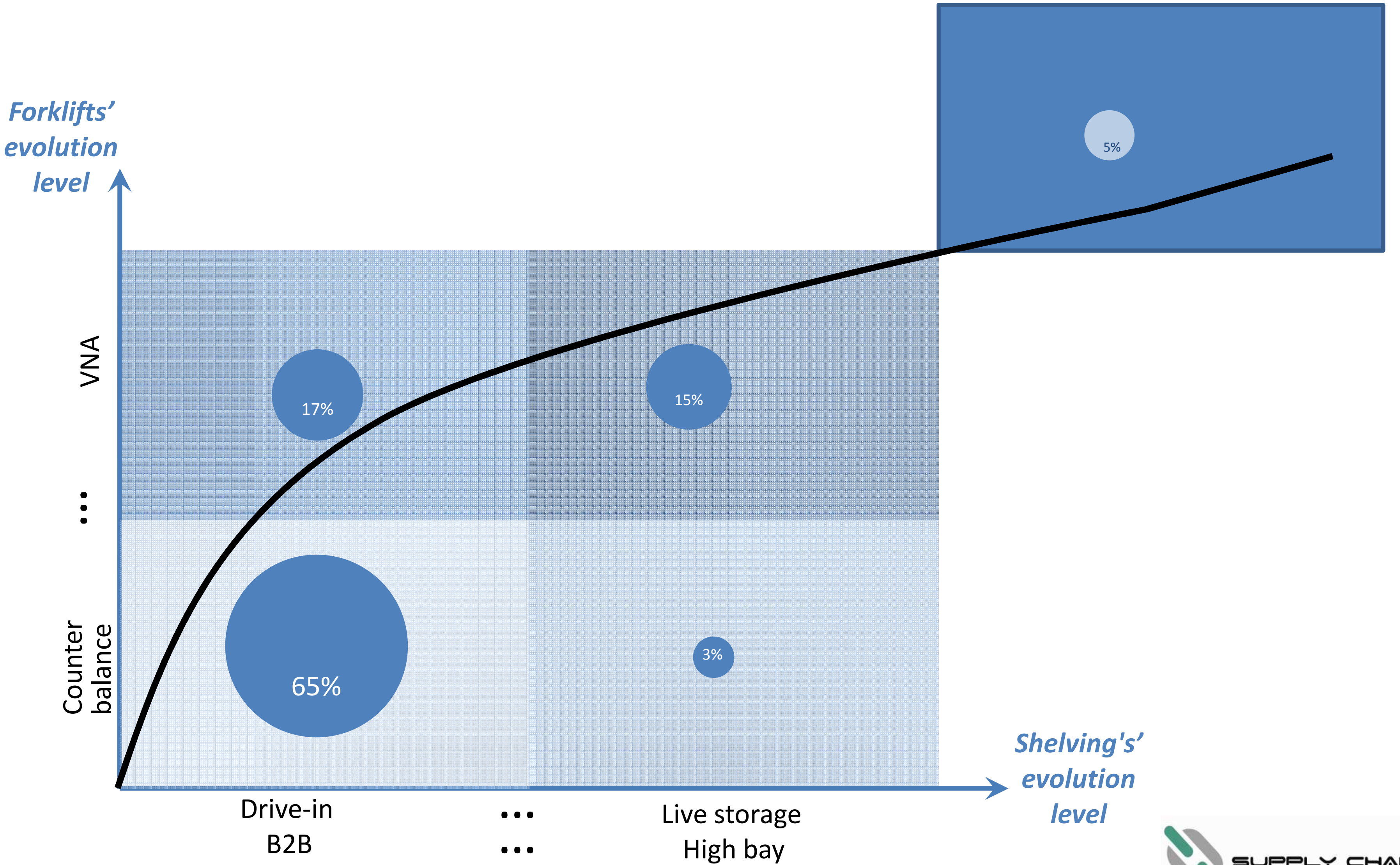
***Source: Jones Lang Lasalle***


# Typical factors for success of a Distribution Warehouse in Europe / Romania

- **Gas-fired heating**
- **Site fully fenced**
- **Sufficient parking space for cars, trucks and trailers**
- **Office space 5% - 10%**
- **45% - 60% of site developed**
- **Flexible use, guaranteeing multi-functionality and adaptability**
- **Highly suitable for third-party use**
- **Rents at or below market level**
- **From the developer's perspective, the building should have a minimum size of 10,000 m²**

***Source: Jones Lang Lasalle***

# Automation in logistics operations is used to resolve productivity issues




PLANNING ROMANIA

SUPPLY CHAIN INSTITUTE LTD OF SOUTHEASTERN & CENTRAL EUROPE

# Many parameters should be examined due to the dynamic Real Estate Logistics Model

- Country's geography and current road infrastructure leads to the development of a multi-warehousing network, where a central DC holds stock and several satelites service local needs
- Thus, central DC's are moderate in terms of size but expandability is a crucial factor
- Special attention should be given when locating the DC
- Master planning and layout design can increase logistics effectiveness, especially when renting premises
- Automation in warehousing is developed more rapidly than in cases of other similar countries, in order to fill the existent gap in logistics

## Although advanced IS applications have not been widely implemented in Romanian logistics sector, the positive reaction and the involvers' familiarity encourage IS investments.

### WMS Warehousing

- Highly growing market
- Romanian managers trust WMS
- An application implemented in order to achieve better organization level

### Routing & tracking systems

- Immature market
- Not expanded yet
- Use of mobiles is very spread
- Centralized monitoring

### ERP

- Segmented, non-centralized market
- Local ERP's of less capabilities
- Peripheral informational solutions, not-integrated

### Inventory Mgnt

- Positive reaction to informational systems for inventory management (i.e. Synchron)
- Helpful in problems regarding data files' management

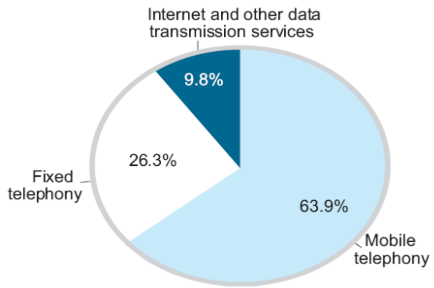
### Mobile sales

- Young people are funs
- Personnel easily familiarized with informational applications
- They seem to act like experts

# Telecom market has already achieved a high penetration level and it consists the basic tracking and monitoring tool in transportation activities.

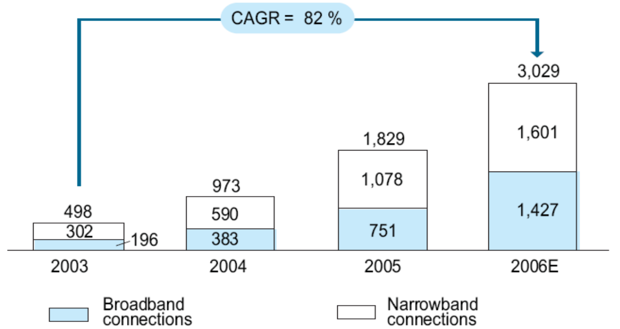
- The Romanian telecom market saw a robust increase in 2006, reaching a value of EUR 3,312 mn (USD 4,156 mn) from EUR 2,766 mn (USD 3,440 mn) in 2005.
- The Romanian telecom market has steadily increased over the last five years with mobile telephony playing the leading role

Breakdown of Romanian telecom market by segments, 2006 (%)



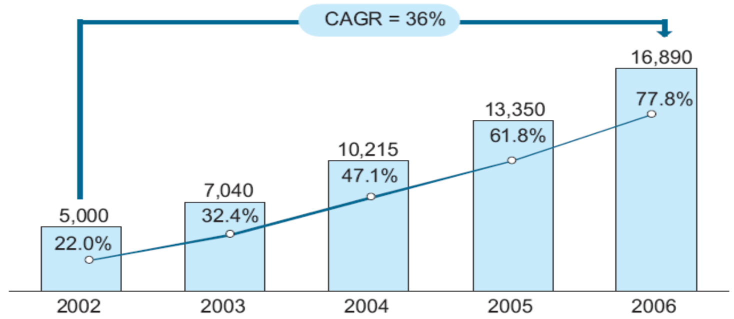

The data and Internet service market has experienced a strong uptake during the last couple of years

Evolution of the number of Internet connections, 2002-2006 (EUR mn)



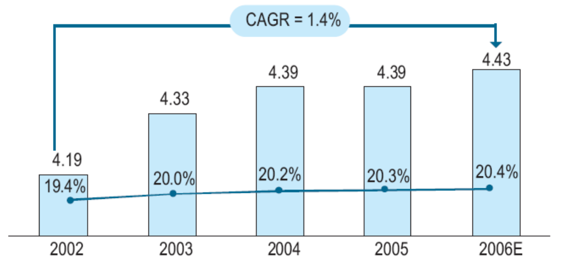

Due to the rapid development of the mobile communications in Romania, the penetration rate exceeded 79% by the end of 2006

Growth in the number of users[1] (thou) and the penetration rate (%), 2002-2006




The fixed telecommunications infrastructure has developed constantly over the last years

Development of the number of fixed telephone lines (mn) and penetration rate (%), 2002-2006




*Source: MCTI, ANRC, OTE, ITU, Roland Berger analysis*

PLANNING ROMANIA

SUPPLY CHAIN INSTITUTE LTD OF SOUTHEASTERN & CENTRAL EUROPE

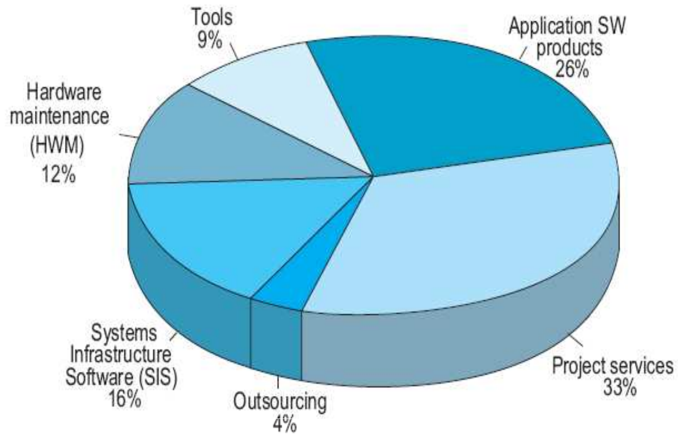

## IT Market presents a high growth rate, however the structure of IT expenditure, with a still high share of hardware, shows that there is rather long until the market matures

- The Romanian IT market had a late start, caused by the difficult economic situation in the last decade.

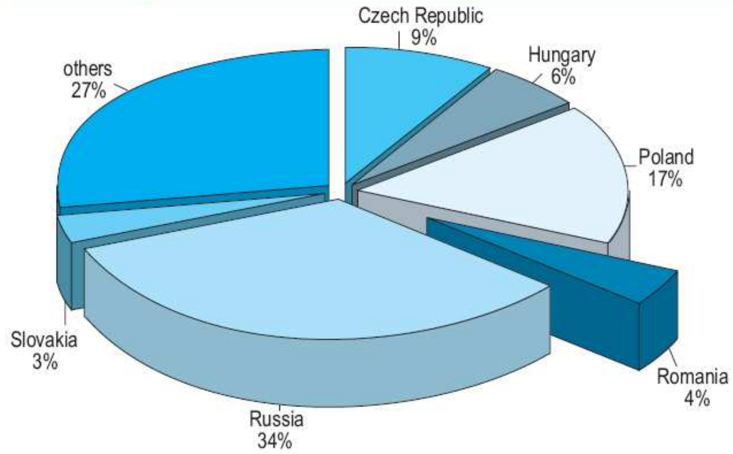
- In spite of the good development in the last few years and of the country's size, the IT expenditure in Romania represents only 5% of the Eastern European region.

- 51% of total SITS revenues came from software products (including system infrastructure software, tools and application software products), while, by comparison, software represented 27% in Western Europe and around 35% in Hungary or the Czech Republic

Software and IT Services in Romania in 2007




Total IT expenditure in Eastern Europe in 2007

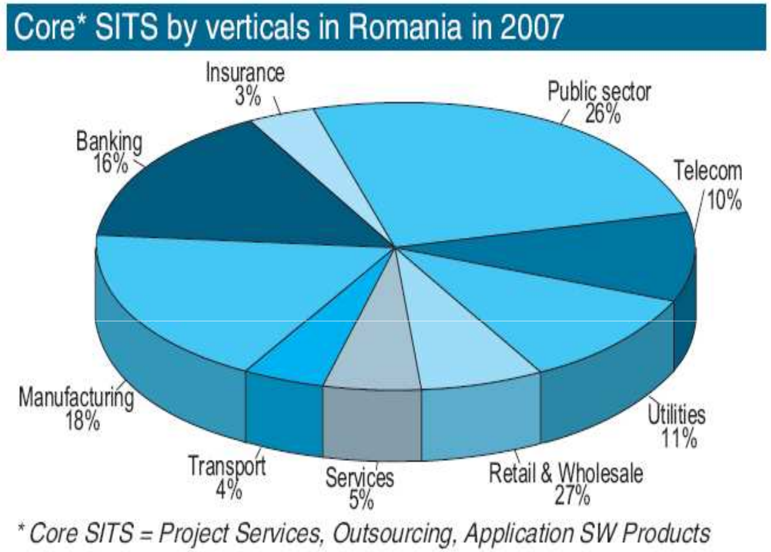



PLANNING ROMANIA

SUPPLY CHAIN INSTITUTE LTD
OF SOUTHEASTERN & CENTRAL EUROPE

# IT Market presents a high growth rate, however the structure of IT expenditure, with a still high share of hardware, shows that there is rather long until the market matures

- Increasing need for IT applications due to the expansion of the existing retail chains across Romania is a continuous process. & the increase of wholesalers' capacity and geographical coverage.
- Concerning IT investments, at this time, only few players could spend on large projects, while most of the local companies used to purchase more affordable local solutions. Thus, several **local software vendors and IT services providers** have gained a good position by specific solutions and adapted ERP products.
- At present, the major part of the IT spending in retail goes to infrastructure and project services, while **outsourcing is only marginal**.




# The ERP market – locomotive of growth for all the IT industry – is still undeveloped due to economical reasons of SME's, which prefer local accounting or payroll solutions.

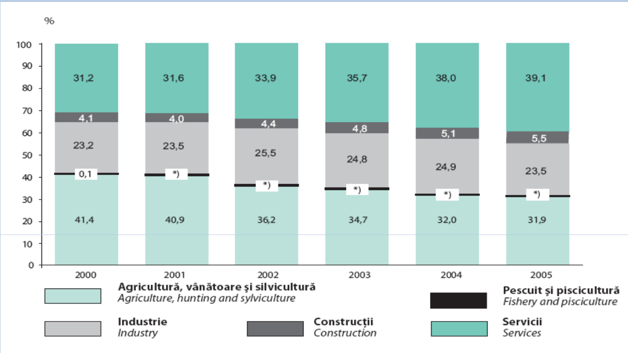
- The Romanian local market is, by far, one of the less developed ones (if not the least developed one) in the 2007 European Union.
- The price of software licences on the Romanian market is relatively high compared to the buying power of the local companies. As a consequence, the **share of licences in the budget** dedicated to the implementation of a complex ERP system is very often **much higher** than in the developed countries.
- The **ratio licences per services** (consulting, implementation, integration, training) is, generally, from **1:1** for medium projects (less than 500,000 euros) up to **1:3** for larger ones. There are also cases where the upfront payment is quite low, but the "maintenance" fees are higher than usual.
- Even if we do not consider them as ERP systems because of their limitation to one or two basic modules, there are tens of **small and very small software companies that develop and sell accounting or payroll solutions** on the Romanian market. These products are, somehow, competitors of ERP providers because they are cheaper and easy-to-use applications that answer immediate needs very fast.
- In terms of the customers' presence, the **largest part of contracts** is still signed **in Bucharest** and most of them are even **executed only** - or for the most part - **in the capital**. Romania being a very centric country, there is a rather limited business, completely autonomous, in other cities or regions, especially when we take into consideration the opportunities for IT projects.


## The ERP market – locomotive of growth for all the IT industry – is still undeveloped due to economical reasons of SME's, which prefer local accounting or payroll solutions.

- Logistics needs are covered through the use of peripheral solutions
- ERP's are not widely implemented
- HR is quite familiar and literate in IT/IS applications
- Although telecoms has high penetration, track and trace application though GPS has not reach similar degree
- IT investments are large, however these mainly concern infrastructure which shows the primitive stage of the Romanian Logistics market

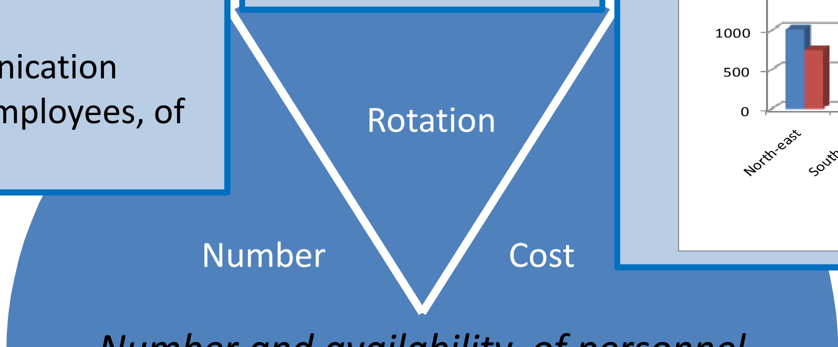

# Logistics labor market has high turnover rate and lack of specialized and skilled people

- Biggest labor shortage in the world
- Number of employees registered grew by 2,5%
- Services sector engage increasing number of employees (55,3% of labor force in 2007)



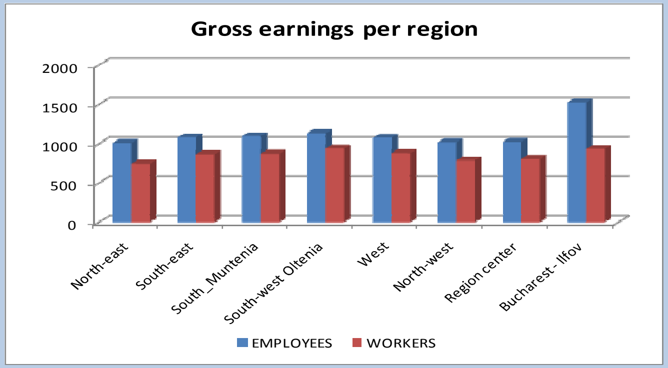

- The highest weight of employees in services is registered in the region of Bucharest – Ilfov
- Transport, storage & communication sector engages 7% of total employees, of which 71% are males

- High personnel rotation in storage sector, due to other seasonal more profitable professions
- As for the transport sector, the majority of drivers have their own truck and business cooperating with transport services' providers




*Number and availability of personnel*

- Gross average earnings of Romanian labor was increased by 18,4% in 2007
- Monthly gross earnings of employees in transport, storage & communication sector was 1.420 lei - , while monthly net earnings was 1.063 lei *(source: NIS).*
- Monthly gross earnings of workers in transport, storage & communication sector was 1.134 lei, while monthly net earnings was 861 lei *(source: NIS).*
- High wages' differentiation in hierarchy levels, Managing Director has 60% higher wage than this of rest administrative personnel



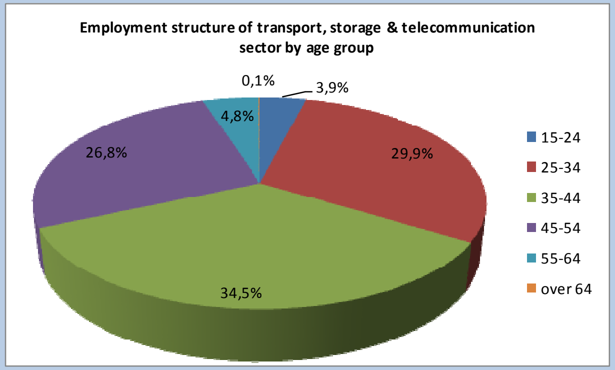

PLANNING ROMANIA

SUPPLY CHAIN INSTITUTE LTD
OF SOUTHEASTERN & CENTRAL EUROPE

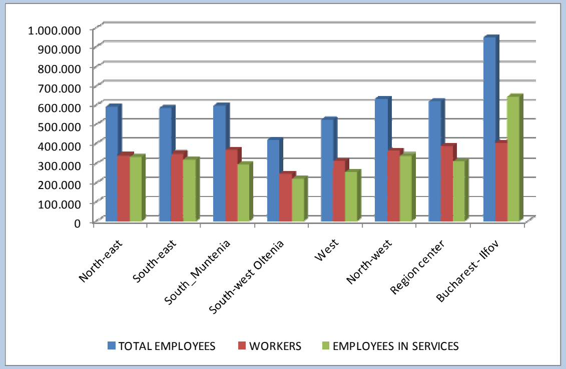
# Logistics labor market has high turnover rate and lack of specialized and skilled people

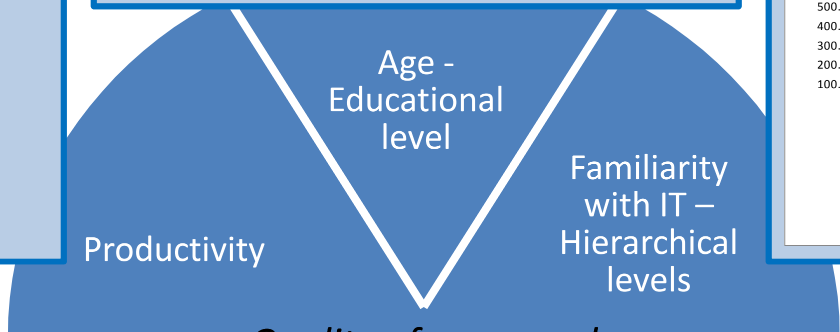
- Warehouse labor force presents low productivity comparing to more developed Balkanian countries
- Need for strict and intent guidance of labor force by foremen
- Productivity of Romanian labor is growing rapidly, due to entrance of multi-national companies as well as to higher standards of local companies
- However growth rate of productivity is still lower than increasing rate of wages

- Labor force in transport, storage & communication sector comprises by skill-less workers
- Employees of higher hierarchical levels are
- 68% of employees in transport, storage & telecommunication sector is younger than 44 years




- Quite familiar with informational solutions
- Workers are not “afraid” or “hesitant” in using technology applications
- Total employees in transport, storage & communication sector in 2007 were over 327 th people of whom:
  - 69,5% are workers
  - 29% are female




*Quality of personnel*



PLANNING ROMANIA

SUPPLY CHAIN INSTITUTE LTD OF SOUTHEASTERN & CENTRAL EUROPE


# Logistics labor market has high turnover rate and lack of specialized and skilled people

- Extremely high-turnover rate of labor
- Lack of industrial behavior
- Significant increases in wages experienced over past 2 years
- Lack of labor supply in Logistics
- Low average age of employees in logistics
- Need for educating / training of personnel in logistics

PLANNING ROMANIA



SUPPLY CHAIN INSTITUTE LTD OF SOUTHEASTERN & CENTRAL EUROPE