

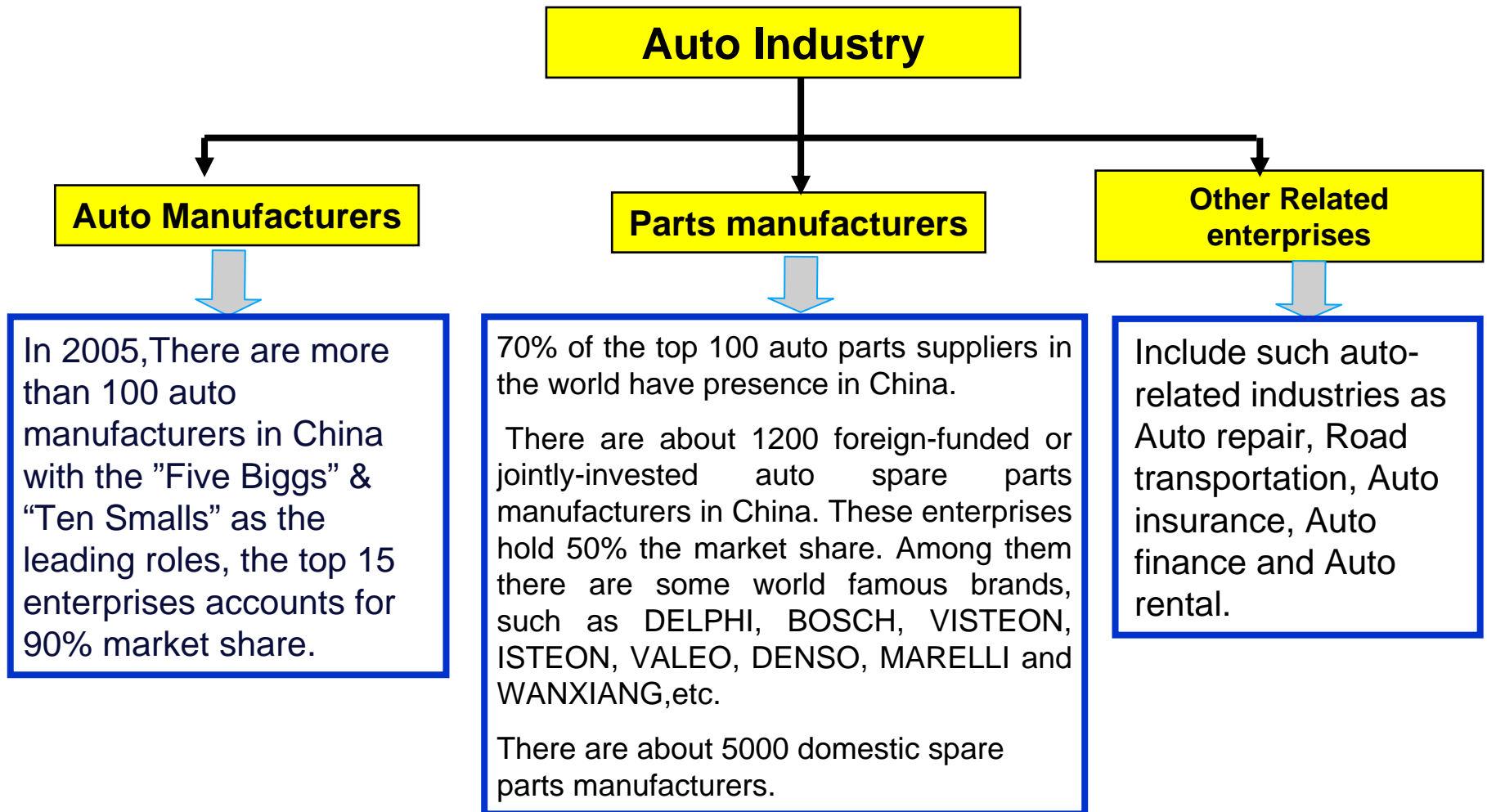


China IT Application Research

Sample: *Auto Industry*

China ComputerWorld Research

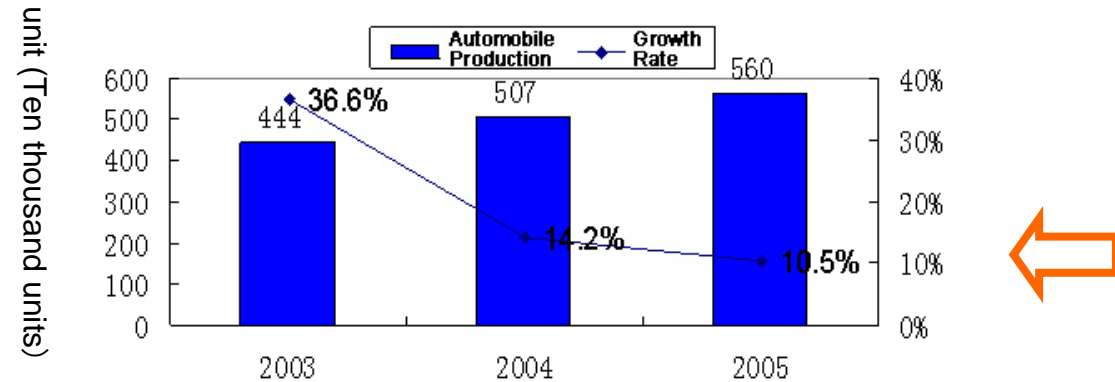
Definition of Auto Industry in China



Overview of the Development of Auto Industry

China's auto production and Growth rate (2003-2005)

2003~2005 Development of Auto industry



In the year of 2002 and 2003, auto industry grew very fast, because of the huge customer demands for private automobiles accumulated prior to 2000.

In 2005, China's auto industry growth smoothly. The automobile production in 2005 reached 5.6 million units, with a year-on-year growth rate of 10.5%.

Performance of the Auto Industry in the first half of 2005

Sales Revenue (RMB 100 Million Yuan)	5 1 4 0 . 1 4
Year-on-year Growth of Sales Revenue	4 . 7 2 %
Profits (RMB 100 Million Yuan)	2 1 6 . 3 1
Year-on-year Drop of Profits	4 8 . 8 3 %
Rate of Return on Sales	4 . 2 1 %
Loss (RMB 100 Million Yuan)	5 4 . 5 6

After the booming of the auto industry in 2002~2003, nowadays, The profit margin of auto industry is gradually dropping to the average profit level of manufacturing industry .

In first half of 2005, the revenue of Auto industry is 4.72%, and the profit drop 48.83%, to 21.6 billion RMB.

Factors Influencing the Development of Auto Industry

Regulatory framework of Auto Industry

- In 2005, several policies, such as “Implementation Methods for Auto Sales Management”, “Auto Trade Policies” and the policies on taxes of imported automobiles, were officially issued. These policies regulate the auto industry in terms of both production sector and circulation sector.

China's economy will keep steadily growing

- From 2003 to 2005, China's economy maintained high growth rate for three consecutive years. In 2006, China economy will keep steadily growth, helping development of the automobile market, especially, the family car market.

Auto Industry

- In 2005, there are some case about mergers and acquisitions in China's auto industry, especially for small enterprises. In 2006, the Auto manufacturers will face hard competition.

Competition and restructuring

- In 2005, the energy strain caused the skyscraping prices for such raw materials as oil, iron & steel, power. This situation restrained the market demands for automobiles, especially the family cars to some extent.

high price of energy

Challenges of China's Auto Industry

Post WTO

Since the year of 2006, in order to fulfill the WTO commitments, great changes will take place in China's auto market. Lowering of the duties and canceling of importation quota will impose great impact on the prices of automobiles in domestic auto market. China's auto market should be opened more widely. The international competition will greatly influence domestic markets

Production capacity oversupplied

Currently, China's auto industry has a production capacity of 8 million units/year, an under-construction production capacity of 2.2 million. Upon completion, the accumulated production capacity will reach 10.20 million units/year. Production capacity is more over the market demands.

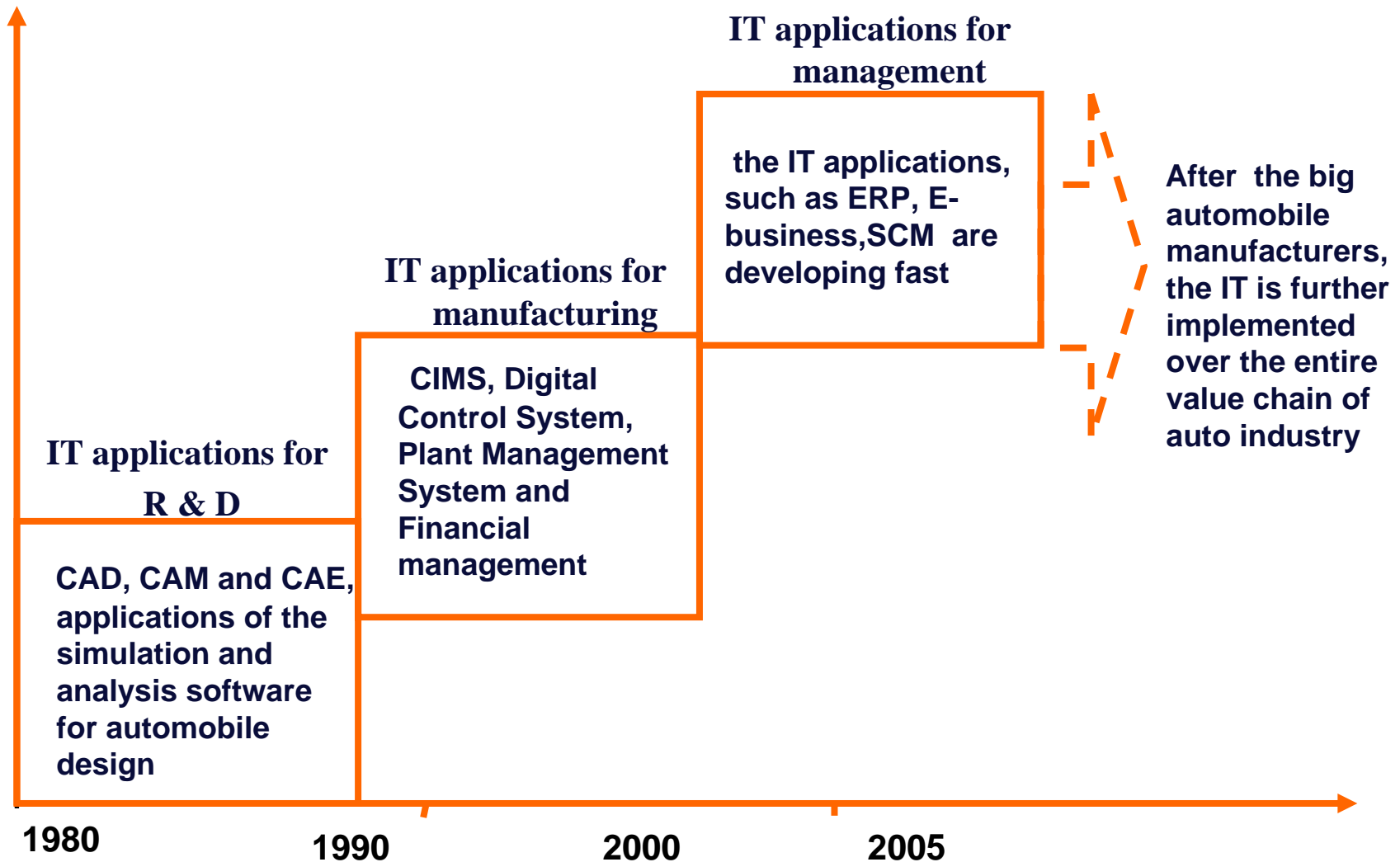
High costs and declining profits

The Costs for China's auto manufacturers are still high. From January to October, 2005, compared with the same period last year, the major economic indexes in China's auto industry, The revenue of products grew slightly; the profits dropped.

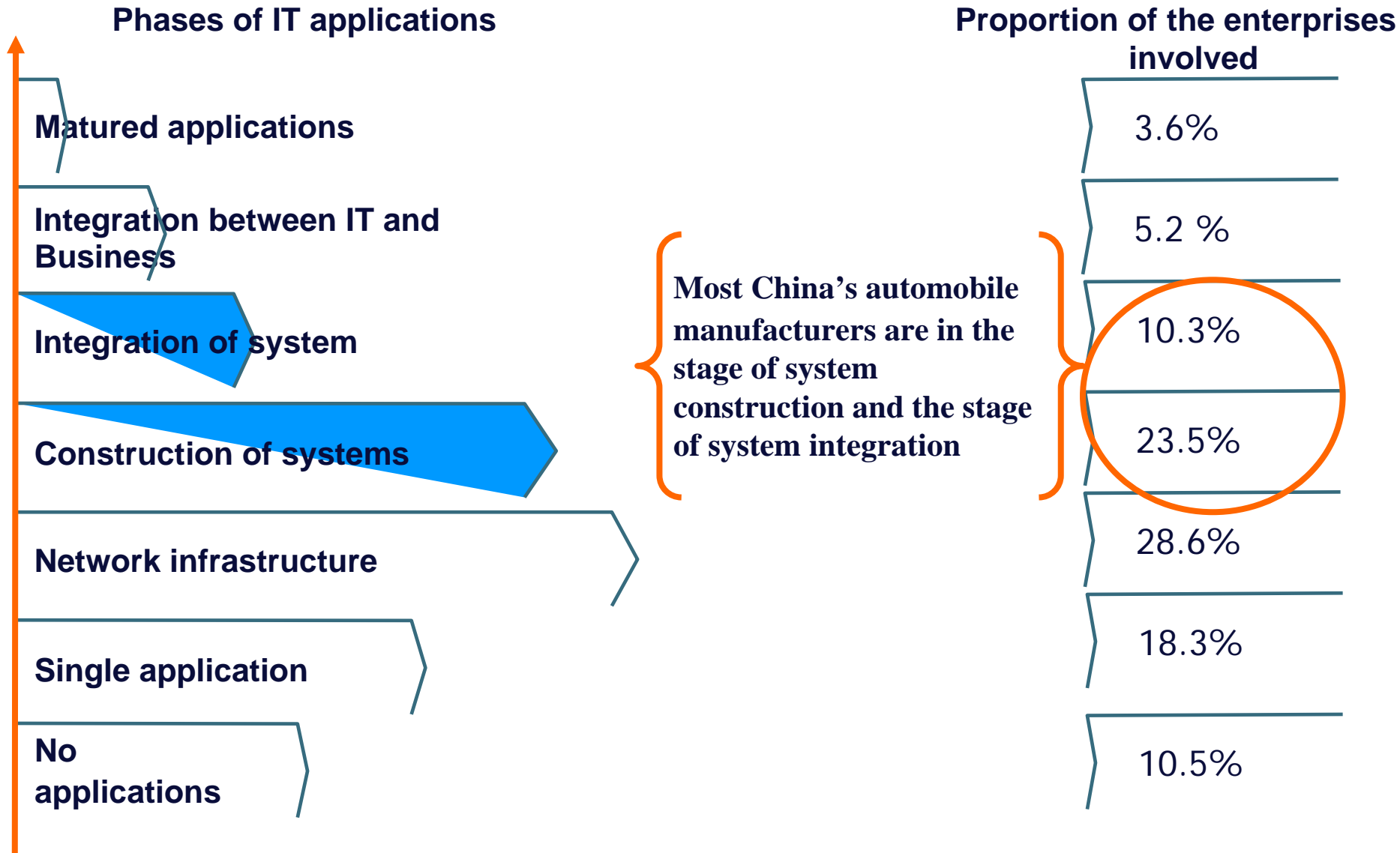
Energy strain

Nowadays, energy strain is a kind of threat facing each country, but the Auto industry face more challenges than others. The high energy price will add the manufacturing cost, and reduce the market demand.

Development of IT Applications in Auto Industry

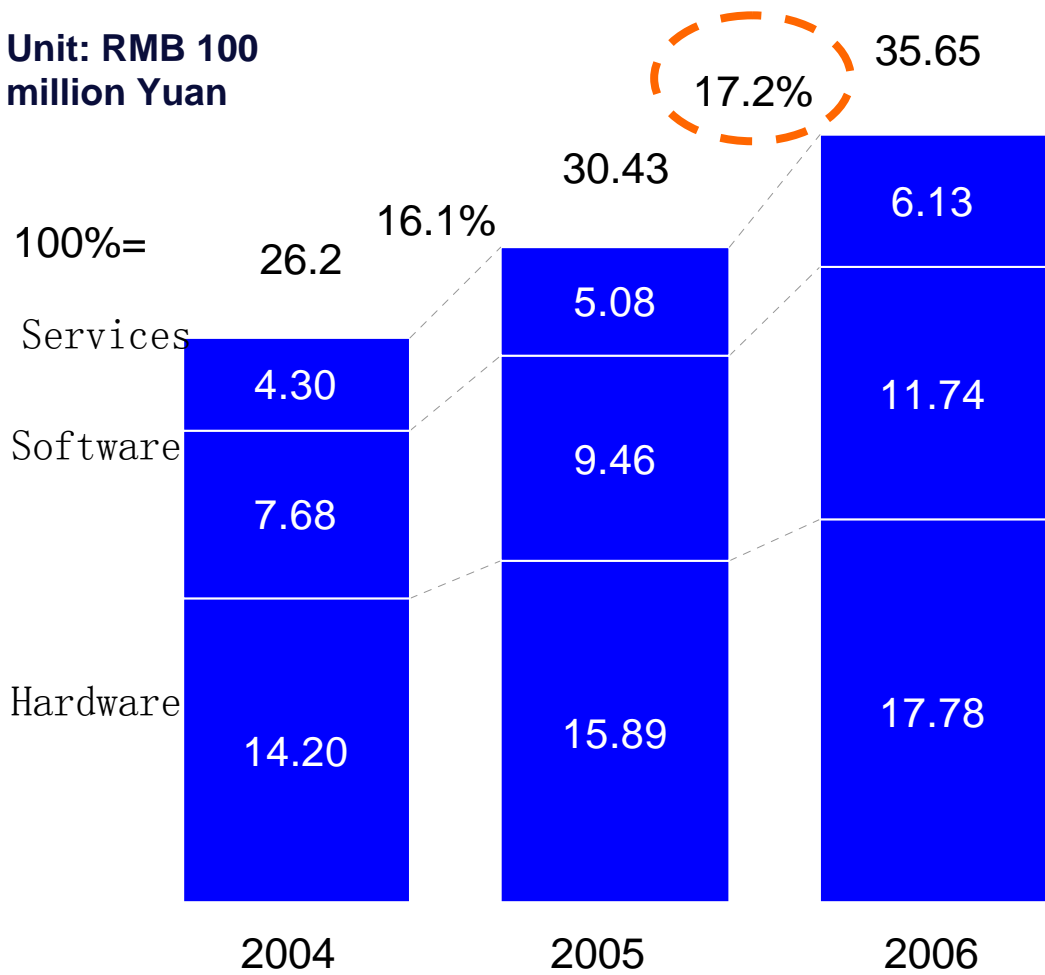


The Current Situation of IT Applications in Auto Industry

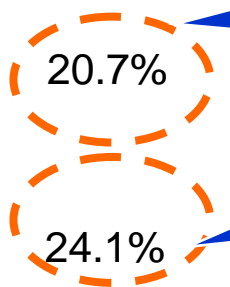


IT investment in Auto industry

Unit: RMB 100 million Yuan



Growth rate (06/05)

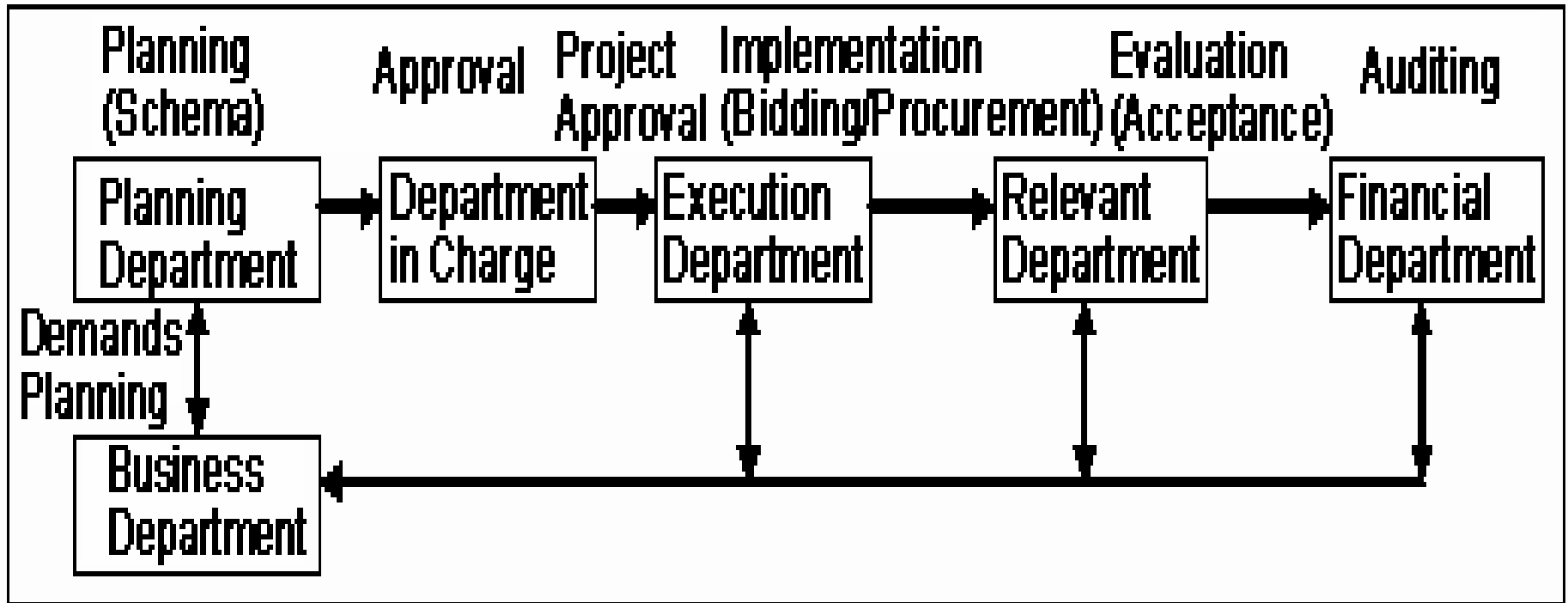


In 2006, the growth rate for software and services will be two times than that for hardware

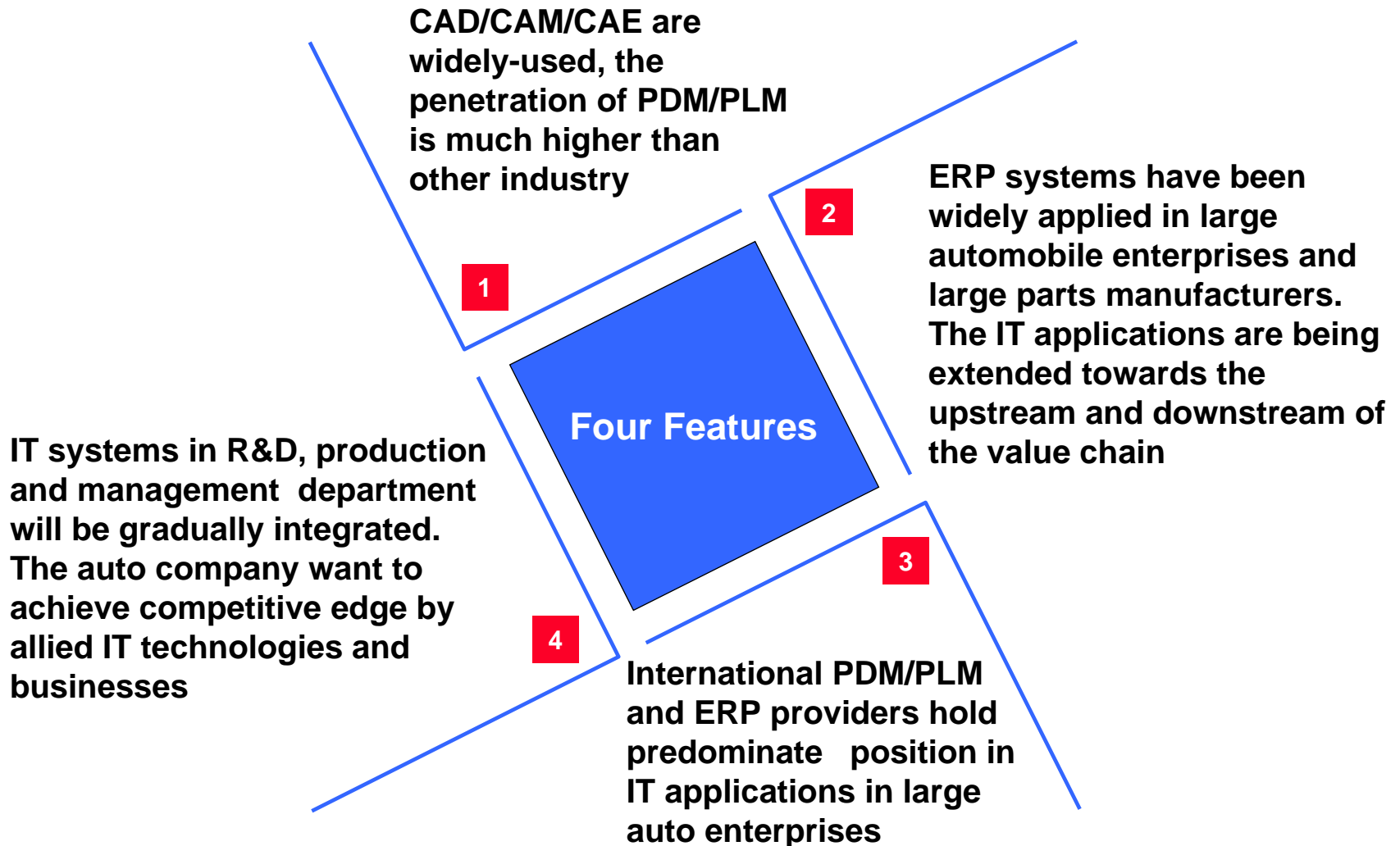
Management software and middleware software shall be two kinds of fastest-growing products in 2006

Investment on storage devices, information security devices will growth fast

The Procurement Processes for IT Systems in Auto Industry



Four Features of IT Applications in Auto Industry



The Common IT Architecture in China Auto Industry

BI/OA/Portals

Through OA, portals and BI system, the unified information and data can be achieved

R & D	Procurement	Production	Sales
<ul style="list-style-type: none">▶ CAD▶ CAM▶ PDM▶ Simulation▶ PLM	<ul style="list-style-type: none">▶ Supply chain management▶ E-procurement platform▶ Inventory Management	<ul style="list-style-type: none">▶ ERP▶ Plant management▶ Financial management	<ul style="list-style-type: none">▶ CRM▶ E-business platform

The specific solutions will be implemented in each process of an auto enterprise, finally use IT throughout all business processes of the enterprise

Networks Servers Storage OS Database

So far, the IT infrastructures for automobile enterprises have come into being.

The IT infrastructures for small and medium-sized enterprises automobile are under construction

The key IT Systems Established in Auto Industry

Key IT system	The major business challenges need to be addressed
ERP system	Standardizing the business operations and improving the efficiency
Production & manufacturing system	Establishing agile manufacturing environment
SCM/E-procurement system	Reducing the procurement costs
CRM system	Increasing customer satisfaction
Sales management system (E-business)	Strengthening sales competence
PDM/PLM	Speeding up going-to –market of new products
OA system	Improving the work efficiency

IT Applications in the larger Enterprises in Auto Industry

FAW Volkswagen

FAW Volkswagen took the lead in implementation SAP/R3, in production, procurement, finance, sales and spare parts management. Now, both CRM and SCM have been set up.

Shanghai GM

Currently, PDM, ERP, DMS, CRM and SCM have been implemented. Shanghai GM has successively deployed and integrated the new system in its three automobile manufacturing bases: Shanghai GM Dengue Motors Co., Ltd based in Yantai, Shanghai GM Banishing Motors Co., Ltd based in Shenyang and the south production base of Shanghai GM in Jinqiao, Shanghai.

Chang'an Auto

The E-business suite from Oracle has been applied. A complete set of Oracle products, including Oracle9i database, ERP, CRM and SCM, have been used.

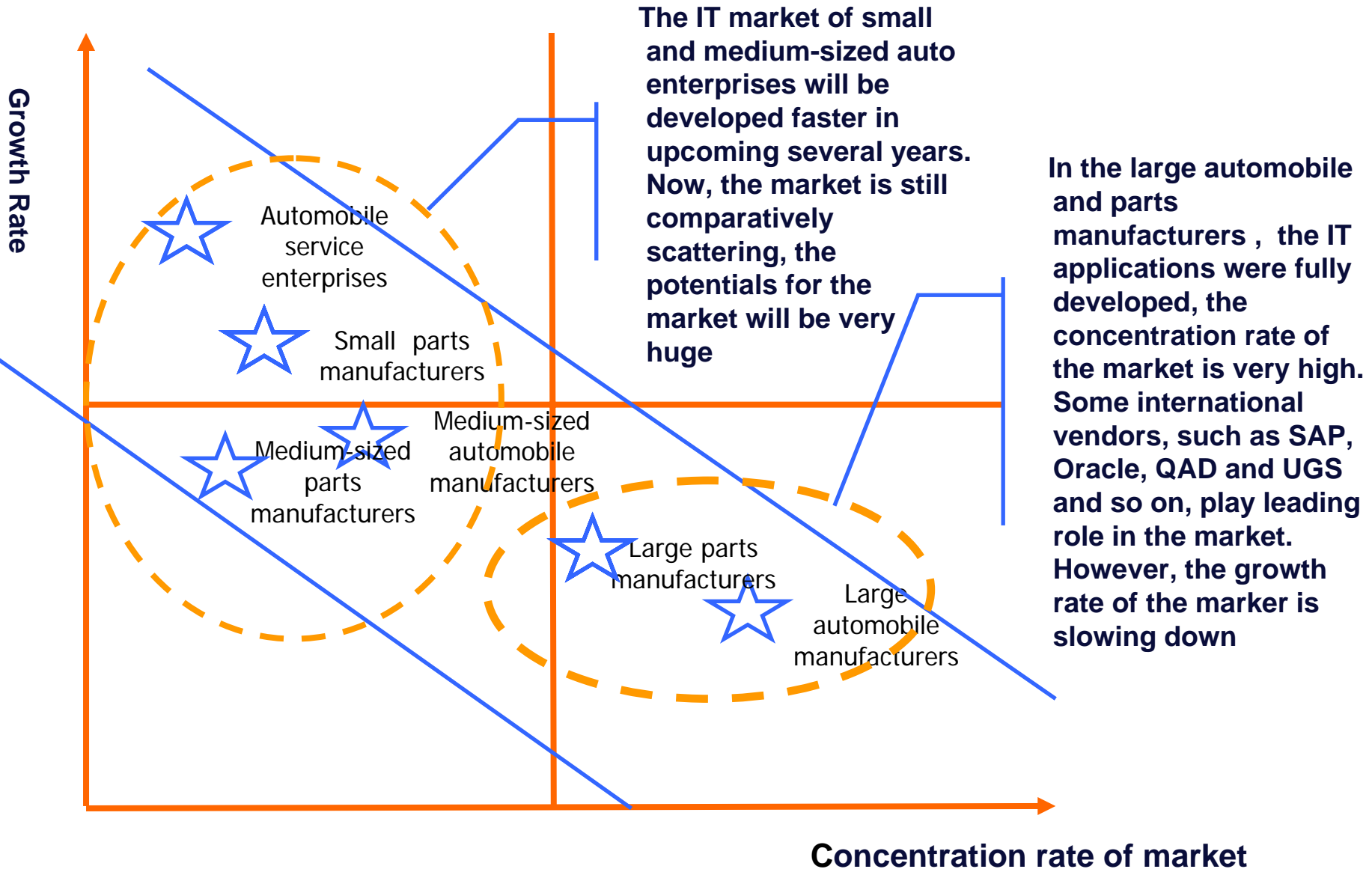
Jianghuai Auto (JAC)

At present, CAD, CAPP, CAE and PDM have been put into operation. The ERP system has been deployed in two branches. The ERP technology shall be widely used to cover supply chain management and E-business.

Beijing Futian Auto

Now, the small sales system has been set up. In 2005, some IT application projects (such as PDM) have been piloted while continued to strengthen construction of IT infrastructure. In 2006, Beijing Futian Auto will build the overall platform for IT applications (including such systems as ERP, CRM, PDM).

Analysis of IT Markets in Auto Industry



Market Opportunities for Key IT Systems

