

# SMEs' – Leveraging technology to compete in the future

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**Chief Executive Officer**  
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# **Agenda**

**SME's – Foundation of an economy**

**Business Challenges to I.T imperatives**

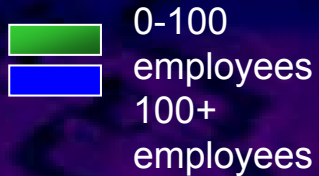
**SME – I.T Solutions**

**Case in Point: Thai Automotive Sector**

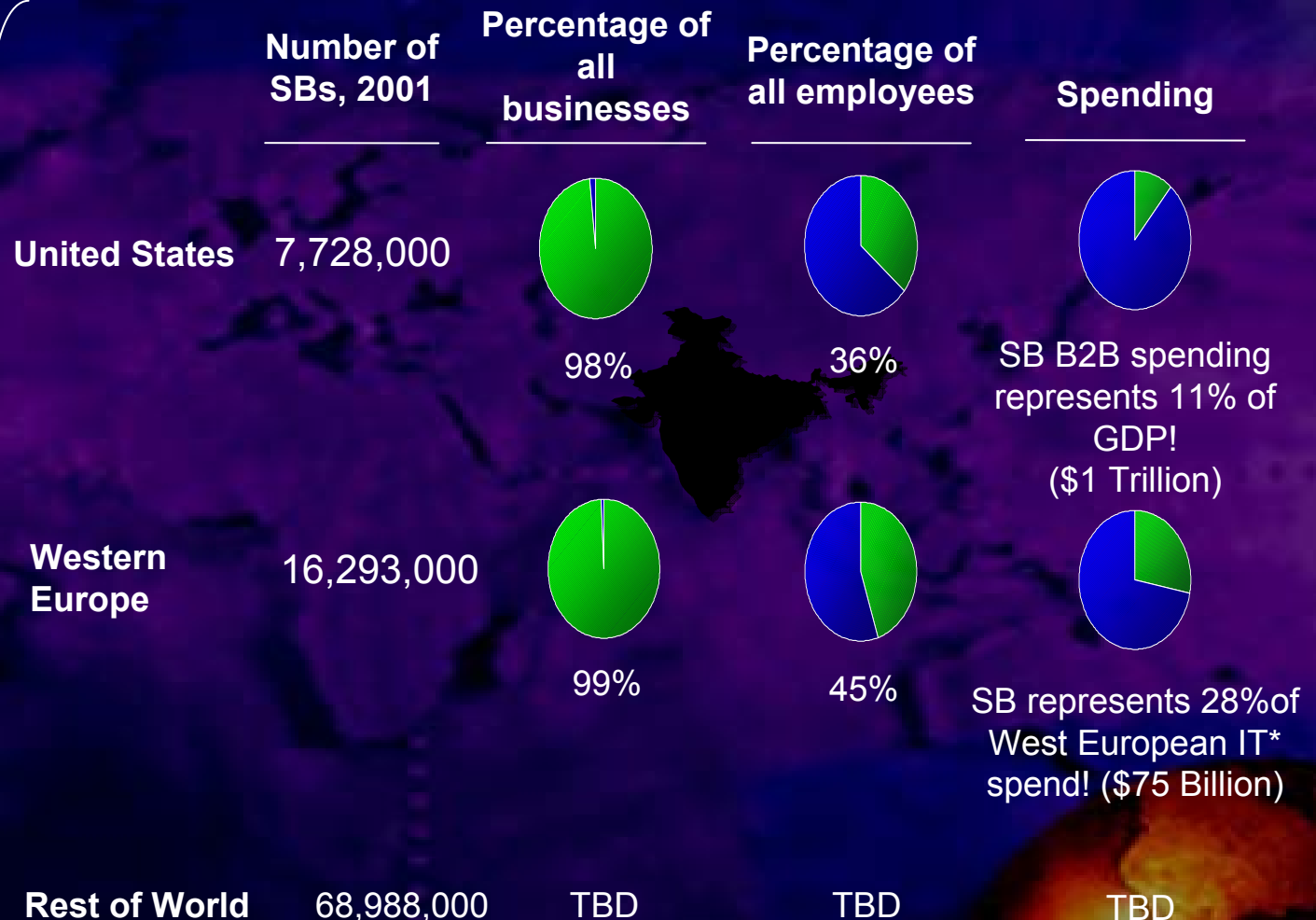
**The Opportunity**



# SME's – Foundation of an Economy



**Small Business (SB), defined as companies with 1-100 employees, represents:**



\* IT spending include hardware (PC, servers, storage, peripherals, LAN/WAN equipment), software and services (consulting, implementation, operation management)

Source: U.S. Census Statistics of U.S. Businesses (1999, most recent available), TechConsult GmbH, IDC European SME statistical update, McKinsey analysis, AMI Partners, Inc.

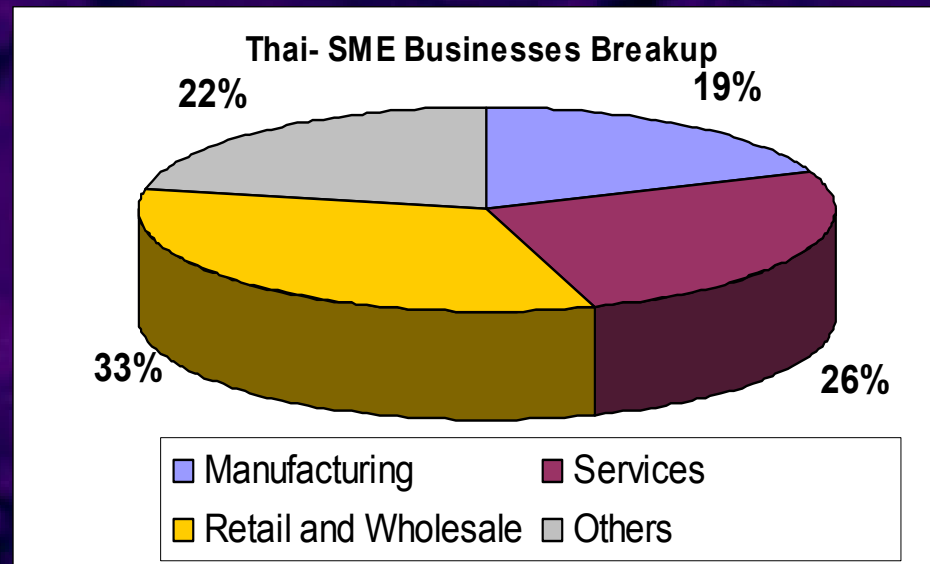
# SME's – Foundation of an Economy

- ❖ Enhance competition and entrepreneurship
- ❖ Provide employment
- ❖ Produce essential goods and services for end customers
- ❖ Source of innovation
- ❖ Large contribution to the GDP
- ❖ Act as "Seed-Beds" from which large companies can grow.
- ❖ Critical suppliers to large companies
- ❖ Positive contribution towards
  - Social inclusion
  - Poverty alleviation

**SME's foster economic growth and overall competitiveness**

# The SME Segment in Thailand

- ❖ Over **850,000** SMEs represent nearly **90%** of the country's total enterprise
- ❖ **Employment:** 1.33 million of 7.33 million industrial force in 1996



## Key Government Initiatives

- ❖ Rural industrialization promotion project
- ❖ Incentives to promote investment and infrastructure development
- ❖ SME incubation program
- ❖ Promoting subcontracting from larger businesses to SMEs in the rural areas

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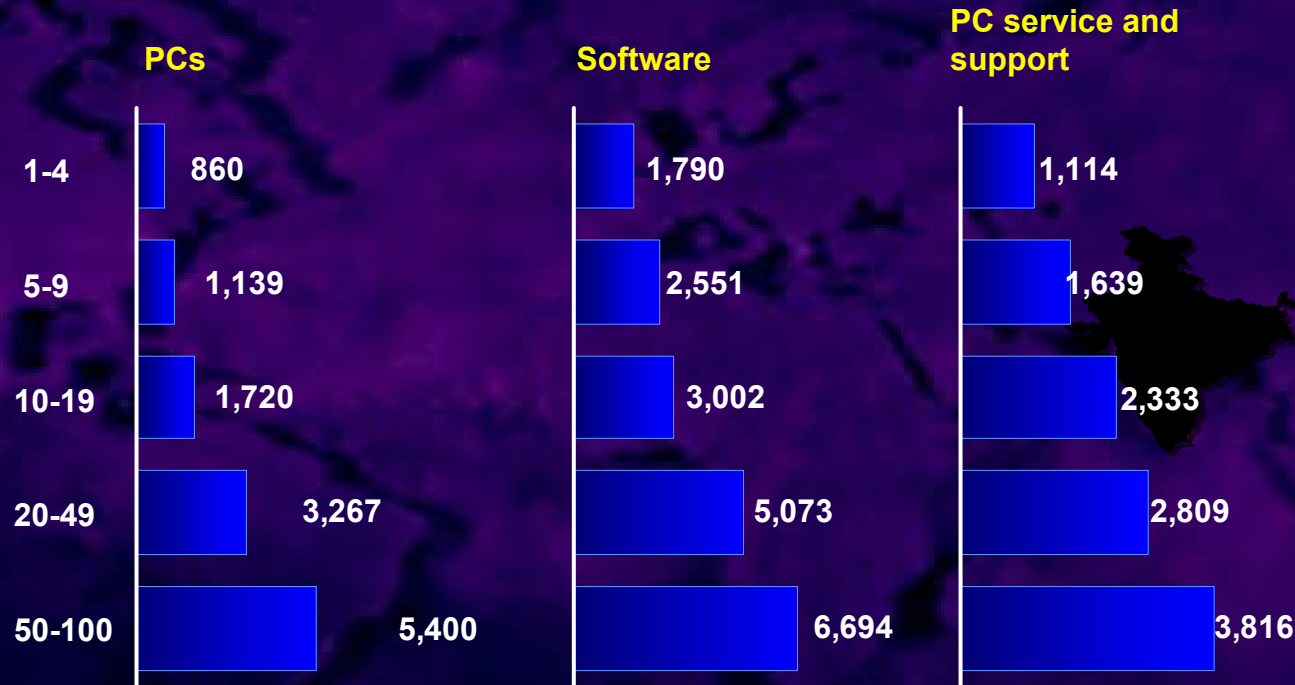
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# ALTHOUGH OVERALL SMALL BUSINESS IT SPEND IS LARGE, THE SPEND PER ENTITY IS ACTUALLY QUITE LOW

Average annual spend per small business by product  
\$, Dollars



How can vendors profitably sell to customers with such low annual spend?

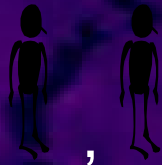


# IT AND TELECOM NEEDS VARY WIDELY ...

ILLUSTRATIVE

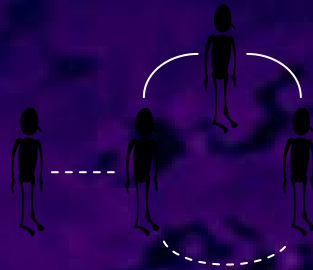
SoHo / microcompany

Midsize company



- Basic hardware
- Generic software
- Basic connectivity
- Self-installation

**Basic IT + Internet**



- Basic connectivity and processing needs
- Small differences by activity sector
- Little customization
- Simple installation (< 1 day)
- Advising
- Sole supplier

**Basic connectivity and processing needs + installation**



- Medium-range hardware
- Applications geared toward process automation
- Significant differences by activity sector
- Simple customization
- Installation requiring more than 2-3 hours of expert work (one location)
- Basic training (< 1month) for users and IT personnel

**Vertical applications for process automation + maintenance service**



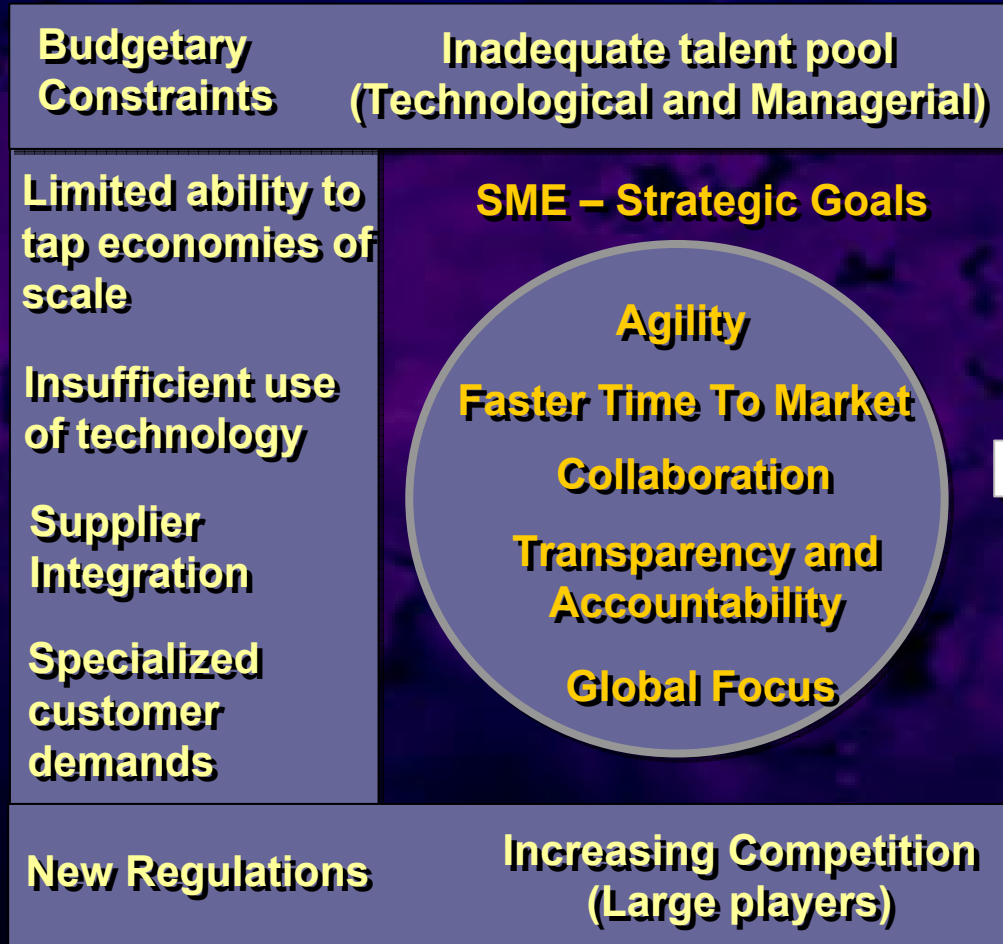
- Advanced hardware compatible with legacy systems
- Integration of solutions in the business process involving several suppliers
- Complex and customized software
- Complex and sophisticated installation requirements in several locations
- Information over technological advances relevant for the business

**Integration of advanced solutions + high service level**



# SME's – I.T from enterprise necessity to enterprise differentiation

## Business Context



## SME – I.T Imperatives

### ❖ Infrastructure Characteristics

- Inexpensive
- Easy to maintain

### ❖ Solutions Characteristics : -

- Simple & Modular
- Global Impact
- Easily adaptable
- Easily Implementable
- Easily integrateable
- Quick & direct biz. Impact

### ❖ Training & support

- ❖ Reduced costs
- ❖ Relevant skill training

# SME – Differentiation Solution Space

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## Solution Space

- ❖ Enterprise Incubators
- ❖ Shared Sites and services

### Customized solutions

- ❖ Enterprise application suite (EAS)
- ❖ Model Driven development
- ❖ B2B Solutions
- ❖ Integrated Solutions
- ❖ ASP Solutions

- ❖ Shared Services
- ❖ Market focused skill impartation

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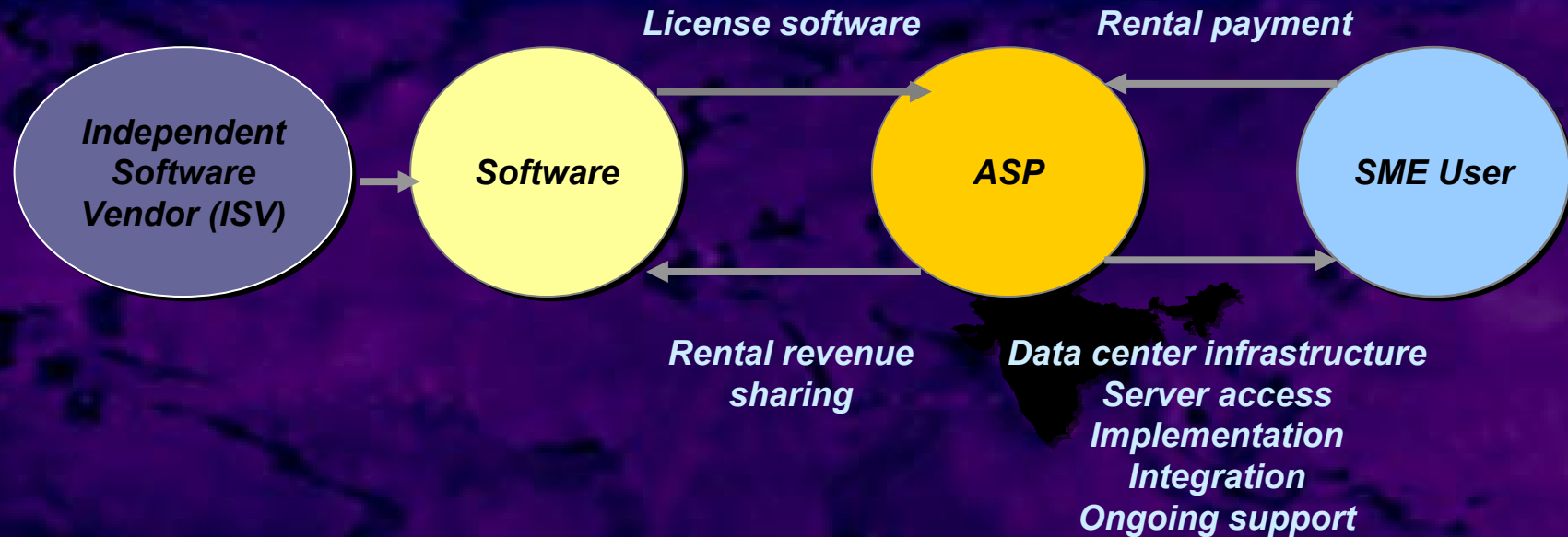
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# SME: Customized Solutions - The ASP Business Model



- **The ASP “pay as you use” model is a viable option for SMEs**
- **Many ISVs are launching SME versions of enterprise apps**
- **Service providers will deploy the ASP solution and will ensure availability of information and access**

# **SME - Customized I.T Solutions**

## **❖ EAS Solutions : Efficiency by covering core business processes**

- Ex:- Supply Chain Management
  - Inventory management
  - Demand forecasting

## **❖ Workflow management & Process Integration**

## **❖ End-to-end 'model driven development'**

- Large parts of the software are automatically generated from specifications

## **❖ B2B Solutions**

- '**Publish-Subscribe Web**': Paradigm shift from the current 'one-way' search

## **❖ Integrated appliance**

- Remotely managed pre-packaged software functionality by integrators
- Can exploit thin-client alternatives to the traditional desktop

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# Importance of SME's: The Thai Automotive Sector

## The Industry

- ❖ **The Detroit of Asia** – largest manufacturing segment in the country
- ❖ Mitsubishi to designate Thailand as ASEAN hub
- ❖ Honda to invest 6.6 BN Baht. Audi to set up production base in Thailand
- ❖ National production target of 1 MM automobiles production in 2004
- ❖ FTAs with India and Australia, and pending ones with China and the US

## SME Operations

### ❖ Typical operations

- Heat-treatment shops
- Surface finishing shops
- Mould and die manufacturers

### ❖ Challenges

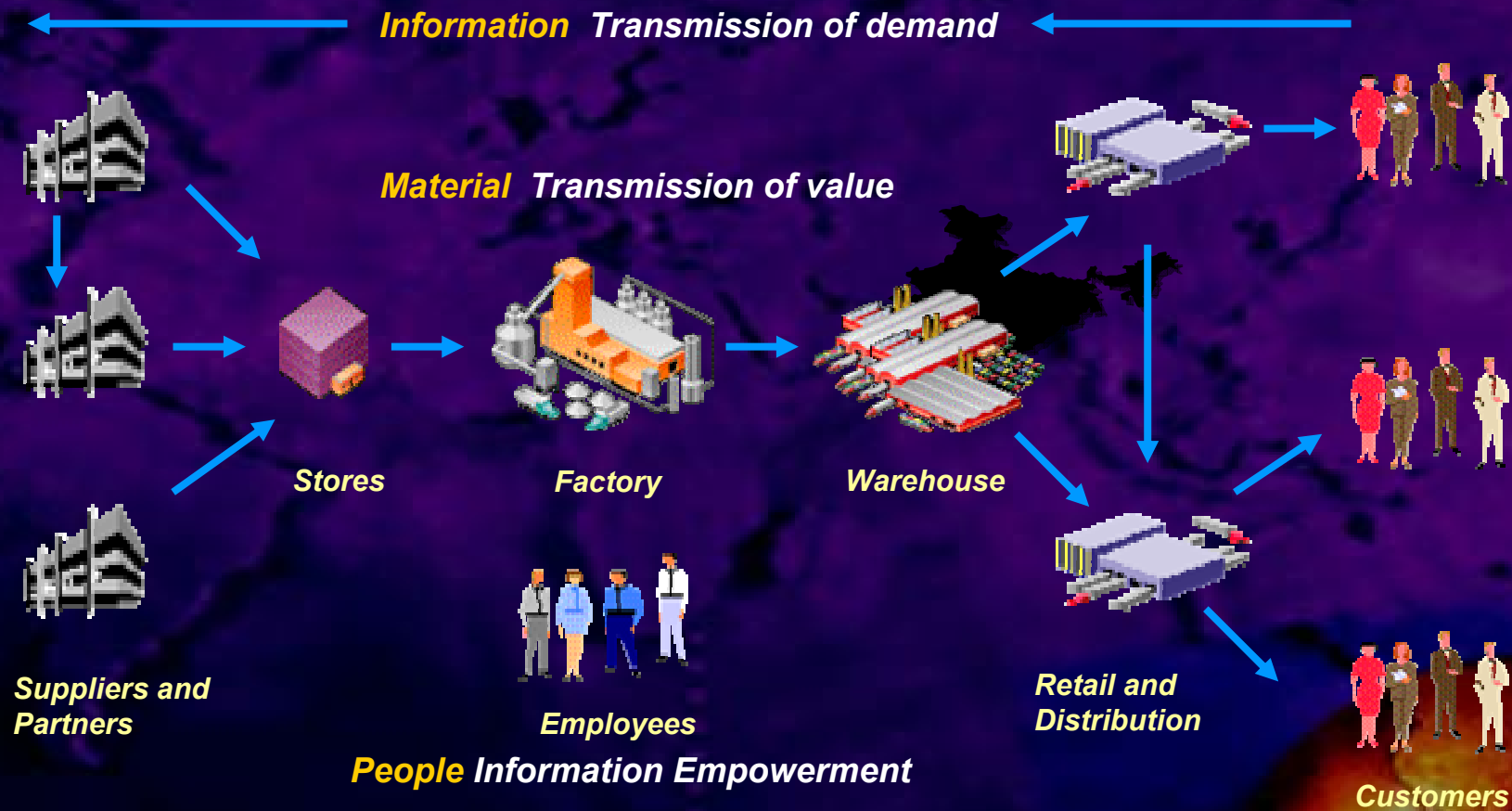
- Furthest removed from the OEM – maximum exposure to effect of demand fluctuations (the Bull-Whip effect)
- Electronic connectivity with customer decreases down the supply chain  
(OEM & Tier 1: 80%. Tier 1 and Tier 2: 30%. Tier 2 and Tier 3: 2%)

### ❖ Critical needs

- Currency and accuracy of information
- Processes and technology to facilitate agility in response



# Value Enablers



# Generating Value

## Elimination of waste

- Optimization of inventories across the extended supply chain
- Elimination of process bottlenecks
- Reduction in non-value adding expenses

## Creating a customer-centric organization

- Improve response in time and quality
- Customer centric performance metrics and measurement

## Deploying information and process transparency

- Streamlined information exchange between tiers
- Availability of information to right people at right time

***Technology plays an important role in value creation***

***Technology delivers value only when aligned with business drivers***

# Technology Trends

## Business Imperatives

- Reduce time to market
- Improve product differentiation
- Focus on OpEx and CapEx efficiency improvement
- Leverage global economies of scale through increased integration across the value chain



*Embedded software – intelligent products and smart manufacturing*  
*Collaborative product development and engineering*  
*Paradigm shift from ERP to Enterprise Asset Management (EAM)*  
*Enterprise application integration*  
*Integration of shop-floor and enterprise applications – Manufacturing Execution Systems for lean manufacturing*

# SME's In The Thai Automotive Sector – Key Solutions

## Solutions

- ❖ Enterprise applications developed by large software vendors
  - Product Lifecycle Management **(PLM)**: Collaborative development of designs
  - Enterprise Application Integration **(EAI)**: Consolidation of multiple legacy applications
  - Enterprise Asset Management **(EAM)**: Shop-floor equipment availability and maintenance with reduced MRO costs
- ❖ Niche applications or custom software, typically industry focused
  - Manufacturing Execution Systems **(MES)**: Automation of the management of production schedules

## Benefits

- ❖ **Cost savings**
  - Inventory levels reduced by **10%-50%**
  - Price concessions and rework reduced by **40%-50%**
  - Resource utilization **10%-20%** more efficient
- ❖ **Impact on customer service**
  - Delivery reliability improved to **95%-99.9%**
  - Product outages reduced to **0%-5%**
- ❖ **Business performance**
  - Increased market share & customer retention resulting in a **3%-7%** increase in sales
  - Accelerated speed to market



# Case Study: Supply Chain Optimization

## Customer Needs

- Rapidly growing car market
- OEM customers demand proactive measures from suppliers
- Demand fluctuation of 33%– peak of 200%
- Supply chain response problems – cycle time and stock-outs

***Asian Tier 1 components supplier***

***Automotive electricals business catering to all major OEMs***

***Handling volumes of 600,000 units/year***

## Solution Elements

### Consulting

- Business process improvements and real-time integration architecture

### Technology

- EAI solution based on third party application suite
- TCS' real-time optimization algorithms for automated scheduling

## Business

## Results

## Delivered

- |  |   |
|--|---|
| ✓ Inventory turns  | From 3 to 33 (Industry benchmark is 35) |
| ✓ Stock-outs / month   | From 4 to 0                             |
| ✓ Reaction cycle time (days)   | From 7 to 1                             |
| ✓ Direct savings from inventory reduction  | USD 500,000 / year                      |
| ✓ Customer was able to offer 5% YoY cost reduction to customer as a result of improved supply chain response |   |

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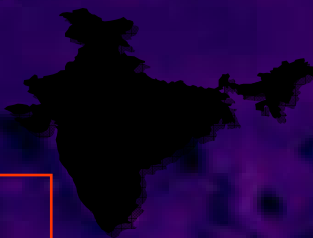
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# THE HUGE AND GROWING AGGREGATE MARKET IS TOUGH TO IGNORE FOR LEADING VENDORS

U.S. MARKET

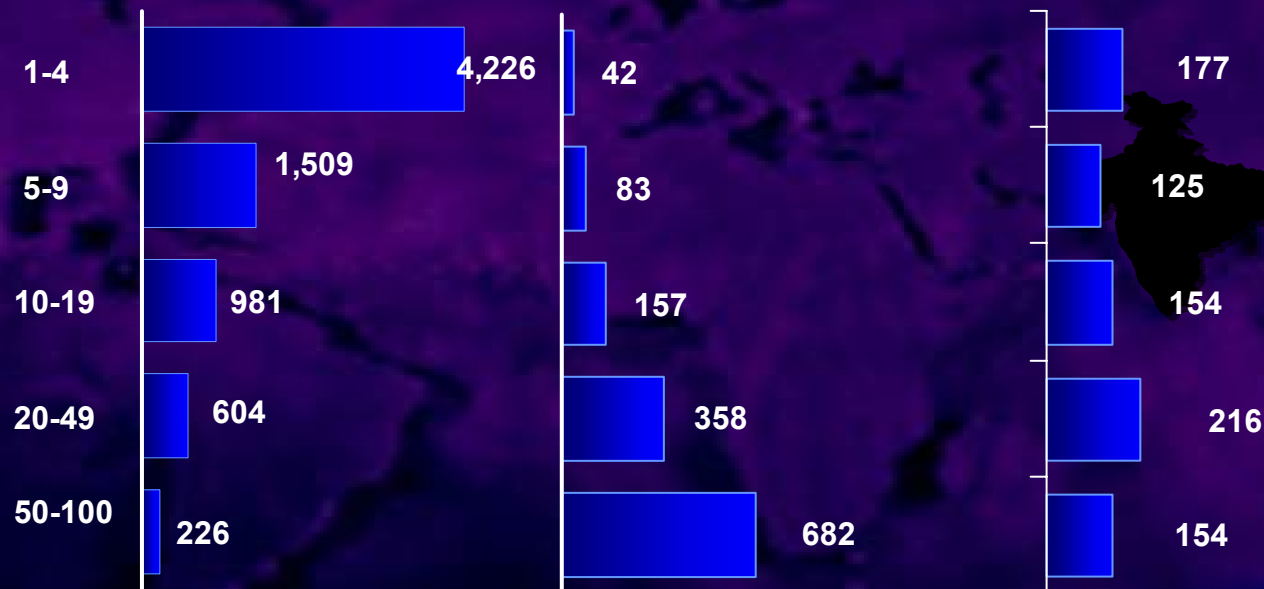
Small business firms by  
number of employees  
Thousands

X

Average annual IT spend\*  
per small business  
\$ Thousands

=

Total SB IT Spend  
\$, Billions



- \$800 billion U.S. opportunity
- Over \$1.5 trillion global opportunity\*\*
- Could be larger as SBs increase IT adoption

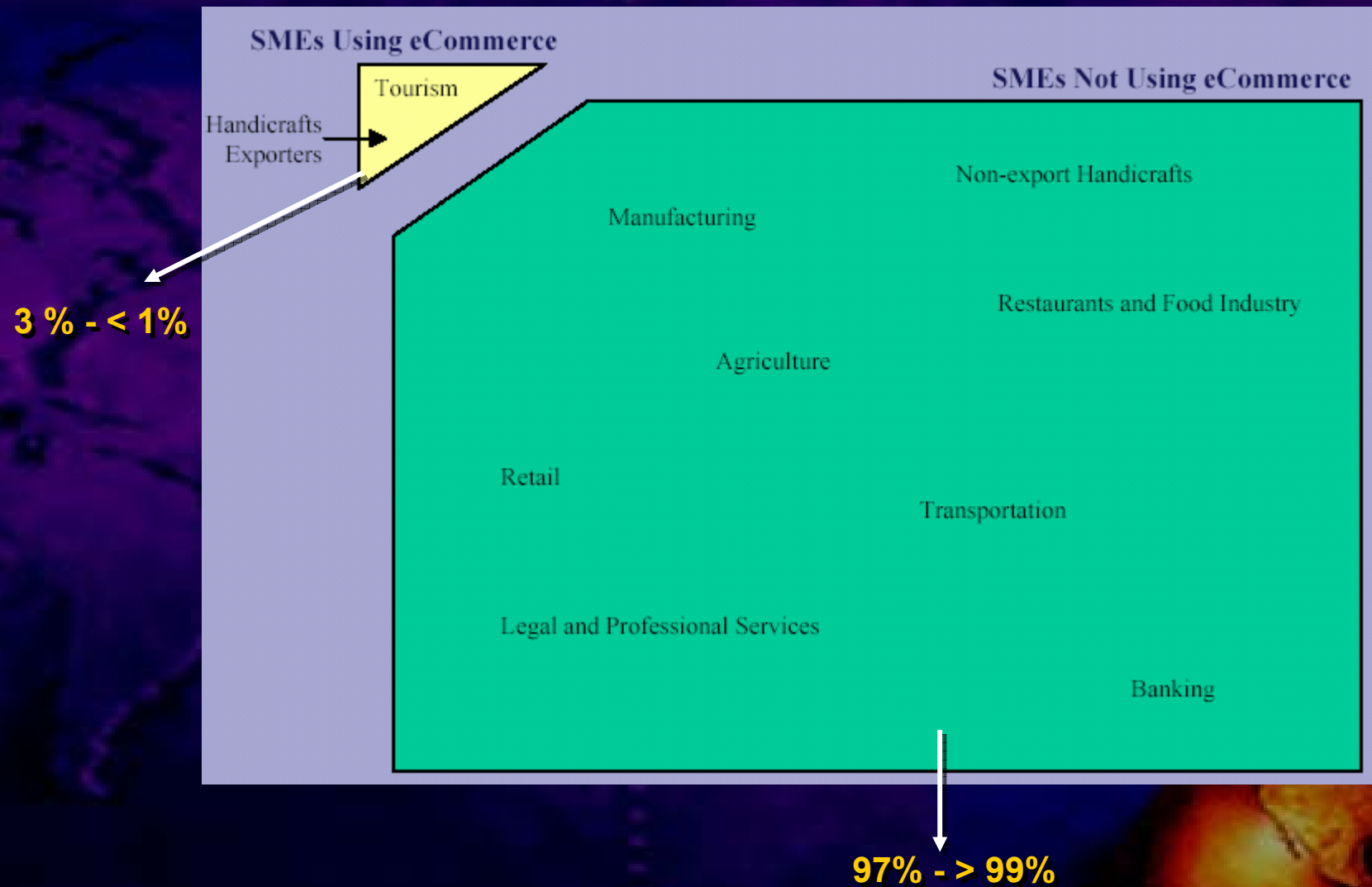
\* Based on IT spending at 7% of revenues; includes hardware, software, telecom, services

\*\* Assumes U.S. accounts for 50% of global SB IT spend

Source: U.S. Census; AMI Partners



# SME: E-Commerce Adoption in SE Asia



# MAJOR PLAYERS ARE INTENSIFYING THEIR FOCUS ON SMALL BUSINESSES



"It's very clear that the SMB market is a crucial part of what we're doing. It's a very important segment because of its growth and our presence, and it is where we are moving our focus as a company to drive and deliver solutions"

**Mike Weir (GM SMB org), 2001**



"Our goal is to make 15 to 20 percent of our revenue in the small and medium businesses segment in about three to five years"

**Leo Apothekar (President SAP EMEA), 2001**



"In the coming year, you'll see us place new emphasis on supporting small business. . . Small business drives most of the nation's jobs, and Intuit will be the engine that drives America's small business success"

**Annual report, 2001**



"[SMB] is the fastest-growing segment of the information technology market. It is an underserved and an underloved market, so it is important to us to invest and grow it"

**John Thompson (GM), 1998**



"The SME sector will be a key ingredient for sustaining future growth of the Indian software and services industry"

**S Ramadorai (CEO), 2004**



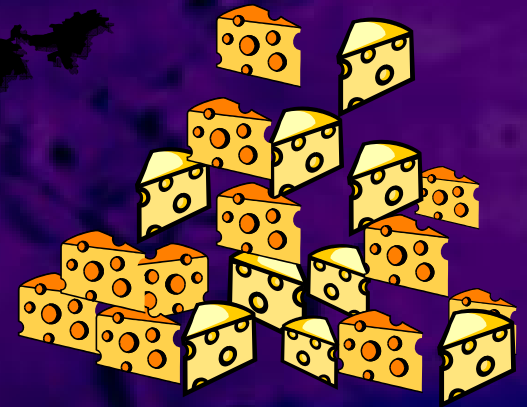
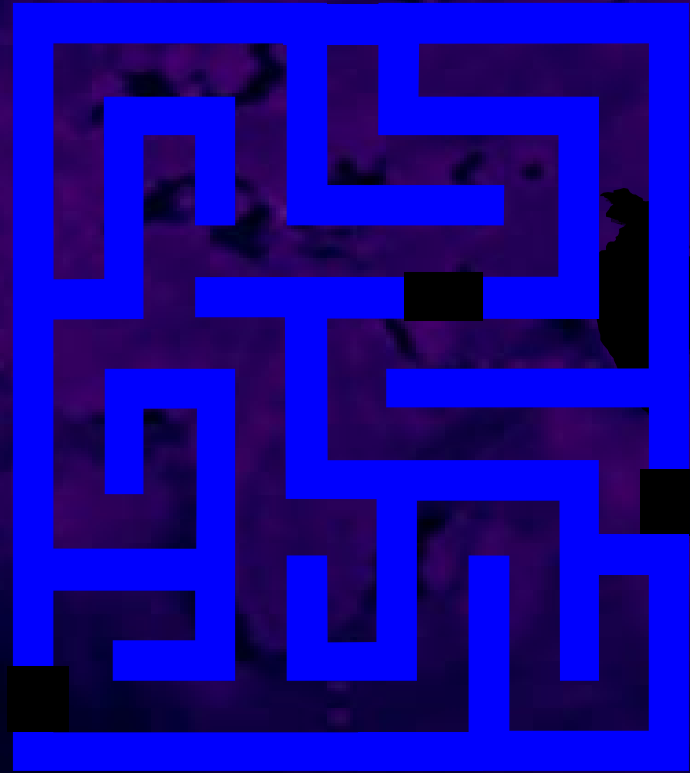
"If you would ask me what I think the most underserved part, the market most underserved by technology companies today, I'd tell you it's small and medium sized business. . . and so I think it's a very, very big bet"

**Steve Ballmer (CEO), 2001**

# SUMMARY PERSPECTIVES

- The race has intensified to claim a piece of the large, and often untapped, demand for high-tech products and services in the small-business segment
- However, creating value from small businesses has proven elusive for many companies as they struggle against the daunting reality of the small business market – large total opportunity but challenging per-customer economics

**THE OPPORTUNITY IS LARGE, BUT THE PATH IS  
DIFFICULT**



The background of the slide is a dark blue world map with glowing yellow lines representing latitude and longitude. In the bottom right corner, there is a small, glowing orange and yellow globe showing the Americas. The text "Thank You" is centered in a bold, yellow, sans-serif font.

**Thank You**