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# **Developing world class manufacturing companies in Central and Eastern Europe**

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# Approaches for the development of SMEs

- ❑ Direct: provision of improvement tools and services
- ❑ Semi-direct: involvement in supplier development projects
- ❑ Indirect: involvement in benchmarking studies

# Intermezzo

## The 3 level model of productivity



social productivity	quality of life, sustainable competitiveness	achieving stakeholder satisfaction	redistribution of value added
economic productivity	effectiveness, competitiveness	financial and customer related processes	market recognition of value added
physical productivity	efficiency	material processes	production of value added

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# Provision of improvement tools and services

- ❑ Works only when the SME is already fairly developed (e.g. supplier in a demanding industry or foreign owned)
- ❑ Stage one: continuous improvement
- ❑ Stage two: lean manufacturing

# The promises of lean manufacturing

- ❑ decrease of lead time (60-90%)
- ❑ decrease of work-in-process (WIP) (40-80%)
- ❑ reduction of manufacturing area requirement (75-80%)
- ❑ increase of quality (50-80%)
- ❑ decrease of workforce requirements
- ❑ improvement of productivity (50%)
- ❑ decrease of maintenance costs through the introduction of TPM (10-50%)
- ❑ decrease of the cost of quality

# Benchmarking results from all over the world

What can we learn about?

- ❑ the methods used
- ❑ effectiveness of methods
- ❑ satisfaction with the methods
- ❑ difficulty of introduction
- ❑ application by size of company, ownership  
(nationality and local / multinational)

# Bain & Company surveys

- Yearly survey of management tools used (primarily: percentage of users, level of satisfaction)
- Several thousand interviews (mainly: USA, Brazil, United Kingdom, France, Hong Kong, Singapore)

<i>method</i>	1998		2000		2002	
	<i>usage</i>	<i>satisfaction</i>	<i>usage</i>	<i>satisfaction</i>	<i>usage</i>	<i>satisfaction</i>
strategic planning	81	4,02	76	4,06	89	4,04
benchmarking	77	3,89	69	3,89	84	3,96
TQM	49	3,95	41	3,91	57	3,80
BSC			36	3,96	62	3,88
reengineering			38	3,86	54	3,75
supply chain integration	31	3,88	32	3,85	52	3,08

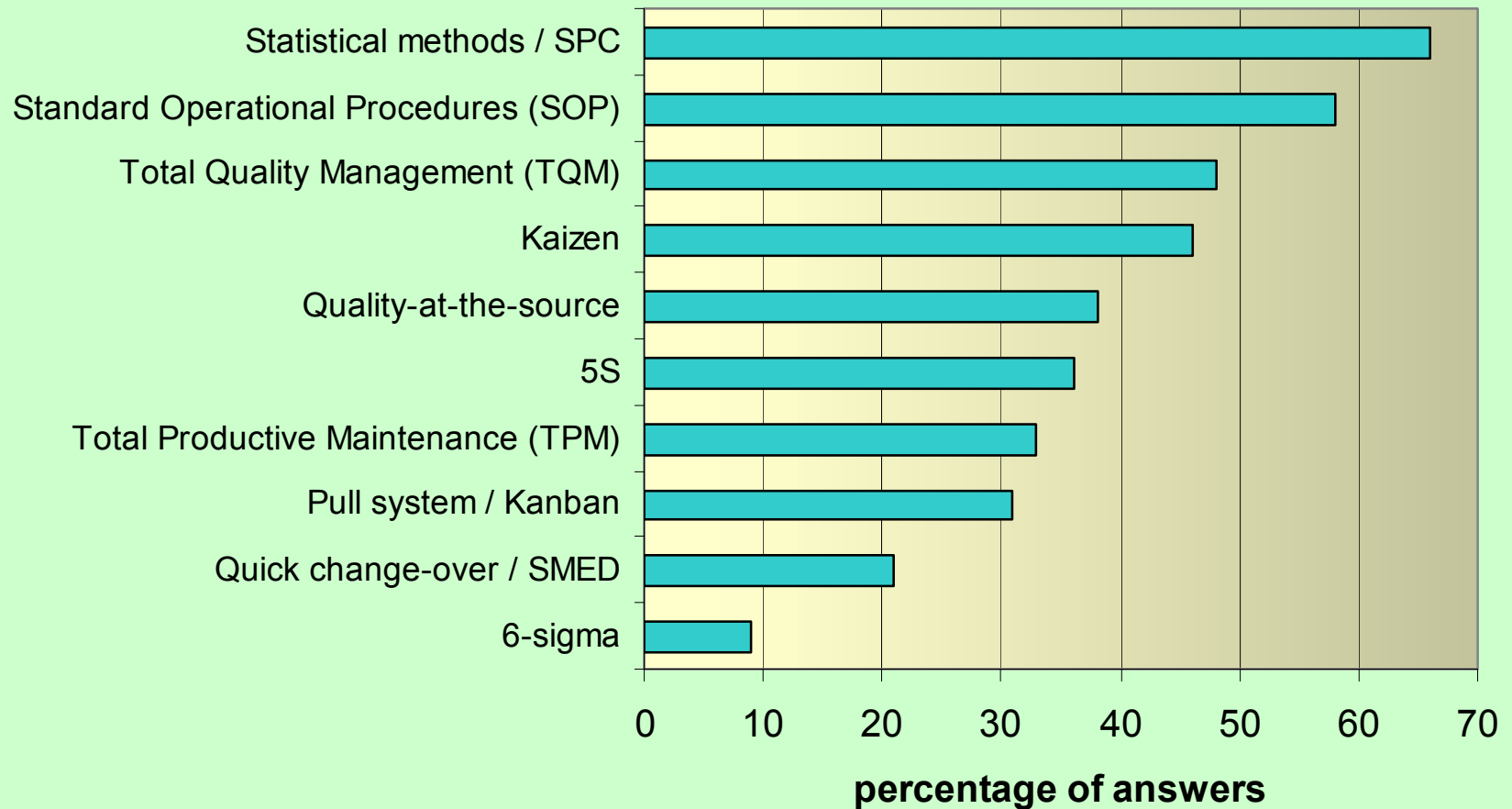
# Maintaining Competitive Edge

- ❑ Lean manufacturing survey, Deloitte & Touche, 2001-2002
- ❑ Report published: 2002
- ❑ Performance and practices used in the following areas:: strategy, IT, customers, suppliers, production, HRM/HRD, management / improvement tools
- ❑ Participating companies
  - 2001: more than 100 (59% Hungarian + Czech, Polish, Slovakian and Slovenian) companies
  - 2002: another 300 (mainly Estonian, Latvian and Lithuanian) companies
- ❑ Source: [www.deloitte.com](http://www.deloitte.com)



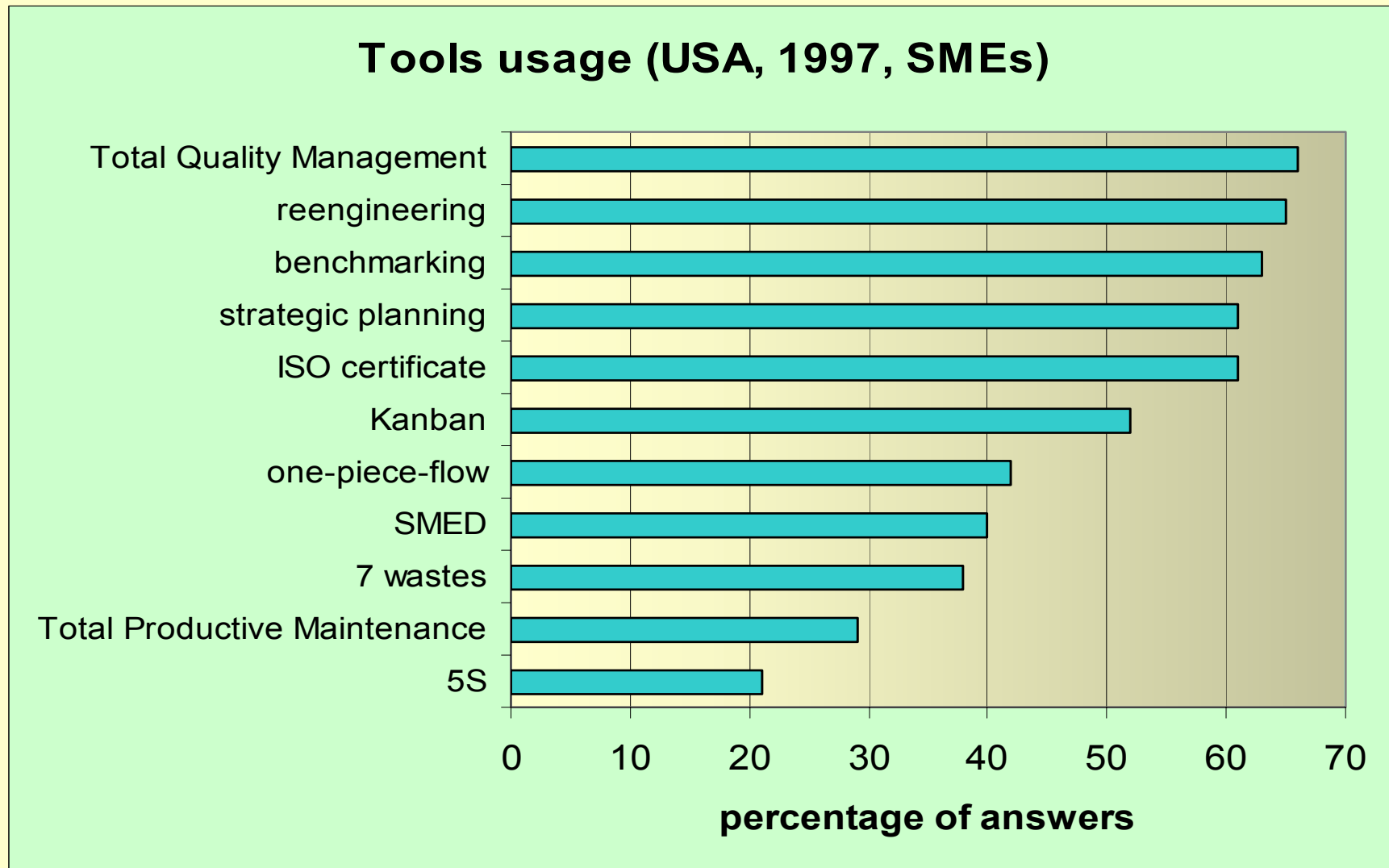
# Particular methods in production

## Tools usage (D&T, 2002)



source: Maintaining Competitive Edge, 2002 Deloitte & Touche

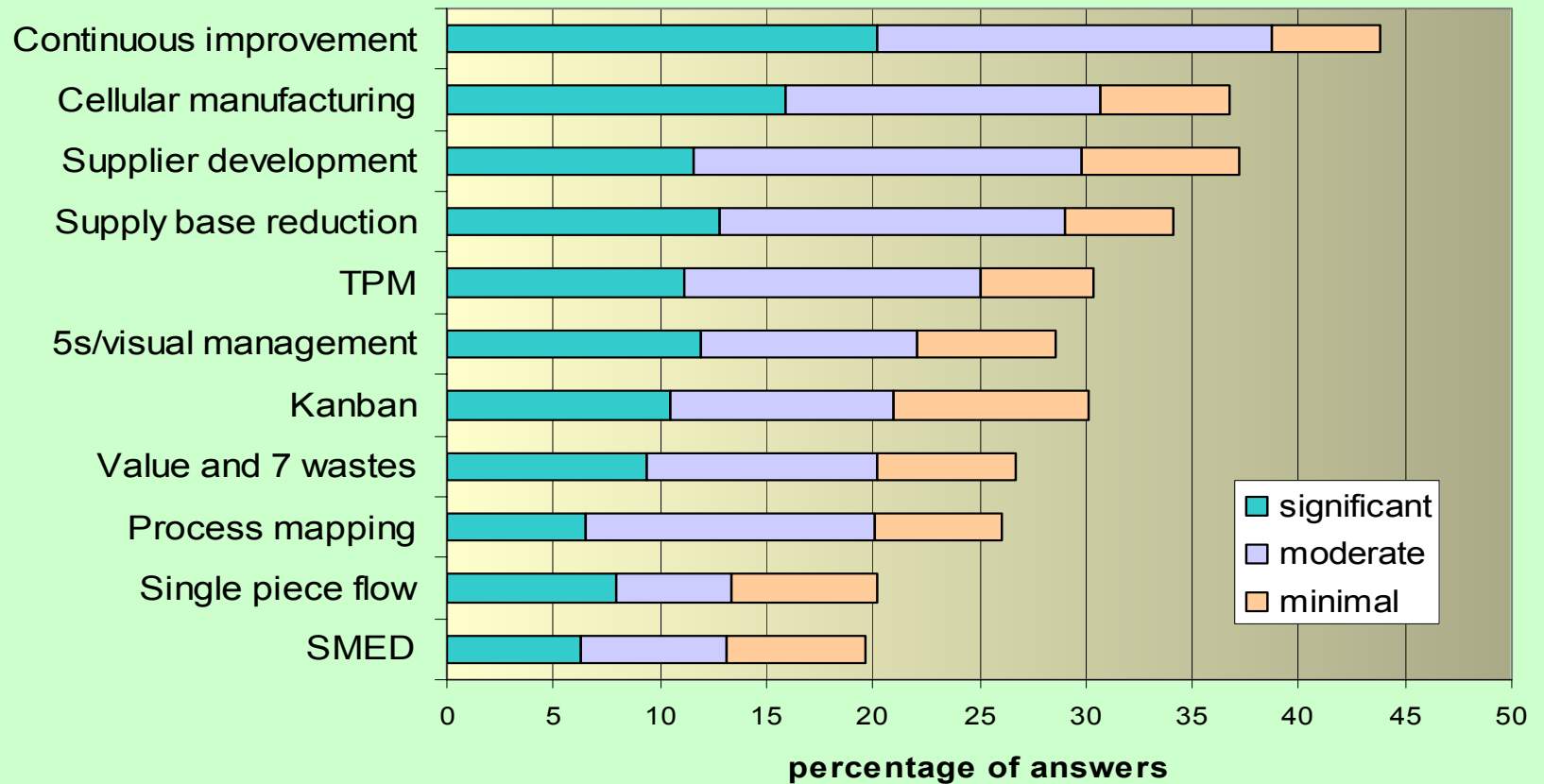
# Lean manufacturing for SMEs (1997)



source: Transferring Lean Manufacturing to Small Manufacturers, Mary S. Spann, University of Alabama in Huntsville

# The productivity of British enterprises

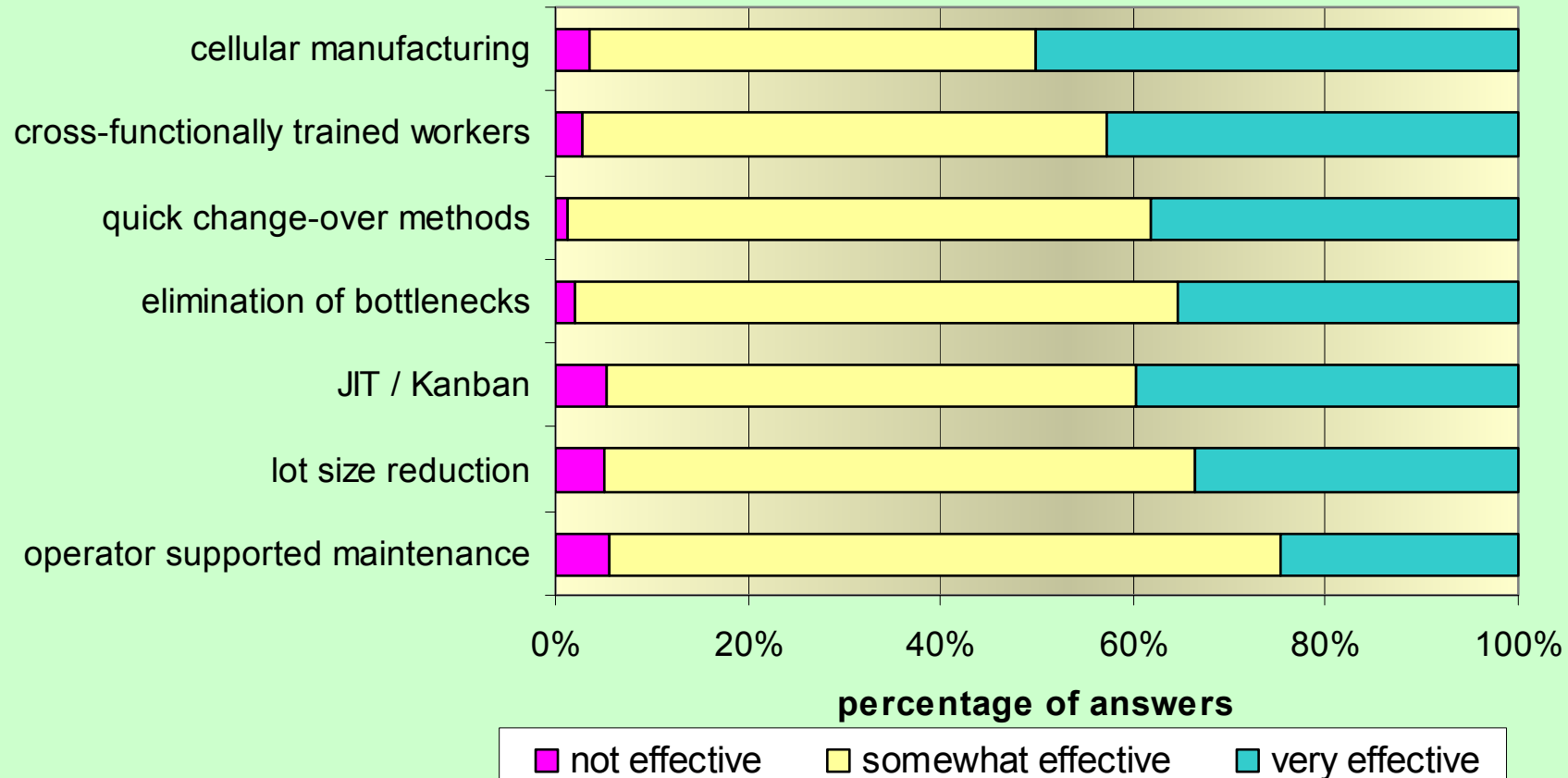
## Tools usage (UK, 2002)



source: EEF/NOP Productivity Survey, 2002

# The effectiveness of lean methods

## Effectiveness of methods (USA, 2001)



source: Industry Week, 11.1.2001

# Getting lean and growing – is it possible?

## Recipe:

- ❑ increase productivity, get lean
- ❑ consequently increase competitiveness (improve quality and flexibility, lower prices – optional)
- ❑ eliminate bottlenecks of production and growth
- ❑ even better: focus lean initially at bottleneck areas (F-LEAN)
- ❑ get more business and grow!

# Involvement in supplier development projects

- JICA / MEA Match-making Pilot Project, 2000
- JICA / ITD-H Supplier Enterprise Promotion Pilot Project, 2002
- PANAC Supplier Capability Survey Project, 2004

# JICA / MEA Match-making Pilot Project

## Goals:

- ❑ helping buyers to find sub-suppliers (SMEs) /640 companies approached, 12 provided a „shopping-list” of altogether 45 parts/
- ❑ helping suppliers to get orders from buyers /266 e-mails sent, 8 companies showed specific interest to supply altogether 35 parts/
- ❑ getting acquainted SMEs with the requirements of buyers
- ❑ building a database of prospective buyers and suppliers

# JICA / ITD-H Supplier Enterprise Promotion Pilot Project

## Goals:

- ❑ building capabilities to find and evaluate prospective sub-suppliers
- ❑ developing the managerial, technological and financial capabilities of sub-suppliers
- ❑ pilot project buyer: Diamond Electric Hungary (12 parts required)
- ❑ companies approached: 120, showed interest: 53, visited: 10



# PANAC Supplier Capability Survey Project

Organizer: Pannon Motor Industry Cluster

Goals:

- ❑ developing and testing a detailed supplier capability questioner (pieces of data required: app. 100, questions asked: app. 100)
- ❑ building a database of high capability sub-suppliers
- ❑ company visits: 15 so far (two auditors, half day visit)

# Benchmarking for SMEs in Europe

- ❑ Developed / started in the UK: UKBI
- ❑ Extension to the EU: REACTE project
- ❑ Possibilities of revitalisation for the benefit of new member states and other countries seeking accession
- ❑ Suggestion for the involvement of EPN

# UK Benchmarking Index / REACTE

- ❑ 46 questions on performance and 34 on business excellence
- ❑ ~6500 British and other European companies (Austria, Germany, Greece, Ireland, Italy, Netherlands, Portugal and Spain) from mainly the manufacturing sector in the database
- ❑ 2-3 days / company

# Delivery of the service to companies

- ❑ 1st visit: adviser explains the principles of benchmarking and UKBI, and how to fill in the questionnaire
- ❑ 2nd visit: adviser validates data
- ❑ Adviser enters data into a PC and sends to the central database through a modem
- ❑ Data is processed and the results are returned to the adviser
- ❑ Benchmarking report is prepared
- ❑ 3rd visit: adviser presents the reports with interpretation to MD or the board

# Calculated indicators (UKBI)

Profitability (7)

Financial Management (10)

Productivity (4)

Investment (7)

Growth (5)

Customer Satisfaction (6)

Innovation (5)

Suppliers (4)

People Management (6)

People Satisfaction (5)

# REACTE – European results

<b>Benchmarking indicator</b>	<b>unit</b>	<b>lower quartile</b>	<b>median</b>	<b>upper quartile</b>
Pre-tax profit per turnover	%	1,8	5,2	10,5
Order not delivered on-time	%	10,5	3,5	0,8
Complaints per order	%	4,3	1,4	0,4
Complaints per customers	%	0,45	0,12	0,05
Sub standard supplies	%	3,0	0,7	0,2
Graduates per employees	%	3	13	45
Days lost to absenteeism per employee	days	7,5	3,5	1
Total leavers / total employees	%	18	8	3
Accident per employee	No.	0,14	0,05	0,01
Training expenditure per turnover	%	0,1	0,2	0,6

# What is REACTE anyway?

- ❑ „REACTE is a major European programme co-financed by the DG Regional Policy of the European Commission under the Community Initiative Programme SME.”
- ❑ „REACTE has been run by CERRM (Centre Européen de Ressources sur les Reconversions et les Mutations), based in Longwy, France; it officially started on March 1998 and lasted until November 2001.”
- ❑ Number of companies surveyed till November 2001:  
1390

# Plans and current status

- ❑ „CERRM is coordinating the design of a new REACTE (2002-2004) project. A proposal will be introduced within the framework of the INTERREG III.”
- ❑ „The main objective is to develop an EU Network that could be representative of SMEs-supporting Regional Intermediary Organisations in the Regions of European Union and in Regions of the **candidate countries to European Enlargement.**”
- ❑ Information discontinued (last update of REACTE Web site <http://www.reactecerrm.com> : April, 2002)



# ... and what about us?

- ❑ My personal opinion: for SMEs in CEE participation in a well designed, already very popular Pan-European benchmarking survey can be the single most important step on the way to WCM and becoming highly competitive.

**Suggestion: let's work together on  
revitalising REACTE!**