

## Benchmarking Conference

Stuttgart, 6<sup>th</sup> June 2002

Benchmarking is a management tool aimed at improving the results, processes and products of a given company. This method is based on the comparison of a given company to an external parent or to a sample of companies selected by specific criteria such as size, location or type of activity.

Bechmarking requires 'measuring' processes, the products and/or the services.

At a basic level, bechmarking means measuring, that is, learning the situation of the company in different business key areas. The criteria used to decide on the improving efforts are based on the comparison of the company's own indicators against the Best in Class indicators, and thus to shorten the 'distances' by improving those areas with the greatest needs. The highest level of performance is achieved when targeting some concrete processes and when finding the best practice, 'Top Class', within or not the own sector.

In this basic level of benchmarking appears the HOBELI programme, funded by the SPRI (*Sociedad para la Promoción y Reconversión Industrial* - Society for Industrial Promotion and Modernization), which is an organism within the Department of Industry of Basque Government.

The HOBELI programme has the main target of encouraging improvement and innovation in business management.

Thus, SPRI is developing the *Benchmark-Index* programme within the Basque Country region. Throughout the Bechmark-Index programme, SPRI is re-using the experience of UKBI and tries to improve it.

UKBI is the Centre for Business Incubation Policy in the UK and it acts as a catalyst to support and develop business incubation practices in the UK.

The *Benchmark-Index* programme has set up the following targets:

- To re-use and to improve the UKBI's experience.
- To create a European node net.
- To validate the consultancy tools (DPC - *Diagnóstico de Perfil Competitivo*, Diagnostic of Competitive Profile).
- To reach up to 1500 european companies.

To achieve these aims, the *Benchmark-Index* is using a tool called *Perfil Competitivo* (Competitive Profile).

*Perfil Competitivo* (Competitive Profile) ensures the objective and measurable comparison among companies at a European level thanks to 10 European partners in the Benchmark-Index project in different countries such as United Kingdom, Italy, Ireland, Portugal, Germany, Austria, Spain, Netherlands and Greece, that are in fact the nodes of the net.

The comparison is made by a database with up to 3,000 entries of management, production and quality indicators (EFQM) and up to 40,000 entries of financial indicators.

The company brings a filled in questionnaire and it receives the report with some improvement recommendations. A specialised consultant will guide you and help to you in each moment of the process: from the filling out of the data until the drafting of the final report.

The steps involved in the process are the following:

- The company is contacted and the questionnaire is sent
- The questionnaire is filled out by the company
- Data from the questionnaire is validated
- The data is logged into the database and the report of the DPC (Diagnóstico de Perfil Competitivo- Diagnostic of Competitive Profile) is produced.
- The report is analysed and a set of recommendations are put forward to the company
- To do the planning of the opportunities for improvement (final conclusions).

In the contact stage, the contact with the company could be made for several reasons:

- SPRI itself could contact specific companies
- The target companies are usual collaborators of the clearing houses (as in LEIA's case, that companies would be members of the Foundation)
- The company itself could contact LEIA directly for some people from the company attended to a presentation or visited a place where the Benchmark-Index project was already tested.

Once the contact is made, a specific consultant is assigned to the company to help it in each stage of the process. The second step is to make the questionnaire available to the company in order to collect the data for the benchmarking process.

The questionnaire has been designed to help the company to improve its competitive position. It's based on a number of indicators covering all the areas of the company: from the financial areas to some indicators to measure the excellence: leadership, policy and strategy, Human Resources Management, Resources Management, Processes, impact onto the society, business results.

The data collecting process gathers both qualitative and quantitative measures, providing a complete first analysis of the company situation.

Once the questionnaire is completed you get:

- To help your company to identify its present position and to fit the best future directions and priorities.
- To let it be compared against other companies' successes.
- To encourage your company to monitorize its own progress on a scientific basis.

Before filling in the questionnaire, the consultant gives the company some advice such as to be honest in filling in (the main purpose is not to make the company appear better than really it is but to get an objective situation) or that some parts of the questionnaire could be filled in separately by different agents in order to get the most reliable opinion.

The whole questionnaire is divided into four sections preceded by some definitions and instructions.

The first section is Financial data: costs and benefits, capital.

The second one is the related to management data: customer satisfaction, product/service innovation, suppliers, Human Resources Management, staff satisfaction.

The third section is the industrial data.

And the last one is the Excellence Model: leadership, policy and strategy, Human Resources Management, Resources Management, Processes, impact onto the society, business results.

When finishing the questionnaire, the next step involves the selection of the sample of comparison. You have to select the companies you want to be compared to:

- by number of employees
- by sales
- by type/sector of activity and
- by main products

Here you are an example of the final part of the questionnaire (when you've to choose the companies you want to be compared to):

## Selecting the sample of comparison

Please fill in the criteria to select the sample of companies you want to be compared .

Identify in which categories you want to be included. Choose one option in each category.

### Number of employees

- More than     0             10             20             50             100             250             500
- Less than     10             20             50             100             250             500
- 

### Sales (thousand euros)

- More than     0             250             1.250             2.500             12.500
- Less than     250             1.250             2.500             12.500
- 

### Type/sector of activity

- |  |  |  |
|--|--|--|
| <input type="checkbox"/> Agriculture, Timber & Fishing | <input type="checkbox"/> Mining & mineral extraction | <input type="checkbox"/> Feeding, Beverages & Tobacco  |
| <input type="checkbox"/> Textile & Clothing            | <input type="checkbox"/> Wood & Paper                | <input type="checkbox"/> Chemicals, Plastics & Pottery |
| <input type="checkbox"/> Metal products                | <input type="checkbox"/> Machinery                   | <input type="checkbox"/> Electrics & Electronics       |
| <input type="checkbox"/> Transport                     | <input type="checkbox"/> Energy, Telecom. & Posting  | <input type="checkbox"/> Trade & distribution          |
| <input type="checkbox"/> Tourism                       | <input type="checkbox"/> Transport Services          | <input type="checkbox"/> Estate/financial services     |
| <input type="checkbox"/> Public/social services        | <input type="checkbox"/> Other services              | <input type="checkbox"/> Construction & Fitter         |
| <input type="checkbox"/> Other manufactures            | <input type="checkbox"/> Education                   |  |
- 

### Main Products

1°

2°

3°

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During the whole process of filling, you can consult your assistant/consultant for help if needed.

The next step, when the questionnaire is brought back to the consultant of the clearing house, is to validate the data, not the financial data but the answer to questions about excellence, which are more subjective and therefore, more difficult. It's usual to gather both the consultant and the company in order to agree on the answer.

When everything is checked, the consultant logs the data into the database and gets the report which contains:

- Synthesis of the company's situation compared to the sample
- Results of the comparative analysis of the comparison results
- Recommended areas for improvement

The report shows in a graphic way, the strengths and weaknesses of the company in the different management fields.

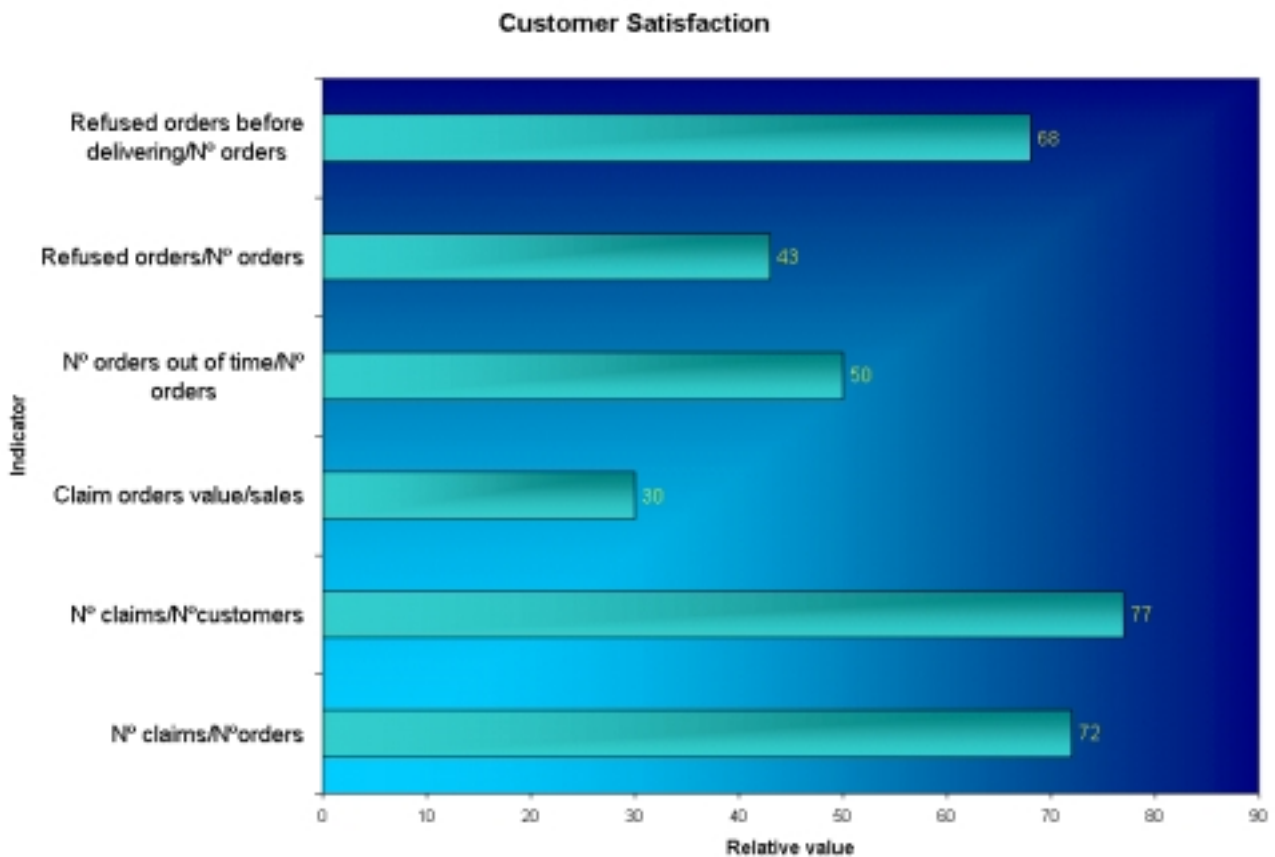
You can also see quantitative information of the companies from the sample: in the table you can see the position in the ranking and the 'distance' from our company to the best ones.

Thus, you have the following information:

- position in the ranking (100 companies)
- indicator value
- the 'distance' from our company to the best ones

When the data is logged into the database we can get the DCP to analyse. The DCP is divided into the same issues than the questionnaire, so we get as graphics as sections and subsections as the questionnaire.

As an example we can see the graphic dealing with the customer satisfaction:



Indicator	Position		Data of the reference group					
	Relative	Value	Least (P <sub>0</sub> )	1 <sup>st</sup> Quartile	Mean	3 <sup>rd</sup> Quartile	Highest (P <sub>95</sub> )	Sample
N°complaints/N°orders	72	0,8	0,1	0,6	1,9	4,2	44,1	26
N°complaints/N°customers	77	0,2	0	0,2	0,4	1,6	10	23
Complaint orders value/sales	30	1,7	0	0,1	0,8	2,3	9,4	24
N° orders out of time/N° orders	50	19,9	2,1	8,4	19,9	30,9	59,8	23
Refused orders/N° orders	43	0,8	0	0,1	0,7	1,7	16,2	22
Refused orders before delivering/N° orders	68	0,7	0	0,5	1,8	4,6	32,4	23

By watching the table we began the analysis:

- in the sample column we see different numbers representing the number of companies been compared to. This number changes for in some indicators, companies bring back blank data (not the same 'zero' values), maybe for this indicator does not exist in this company.
- The relative column shows the relative position (from 0 to 100)
- The real value shows the real value achieved in a concrete indicator.
- The column of the least value is in fact the fifth percentile which indicates that 5% of the companies are below this value (the least value does not appear). Thus, the company could have a value less than the fifth percentile but a relative position greater than 0.
- The first quartile or the 25<sup>th</sup> percentile makes a division into 4 parts to the sample and below this value appear the 25% percent of the companies.
- Then the mean: is the average or the second quartile (the 50<sup>th</sup> percentile) which divides into two equal parts to the sample.
- The third quartile is exactly the opposite of the 1<sup>st</sup> quartile.
- Finally the highest value is the 95<sup>th</sup> percentile which indicates that 5% of the companies are above this value (the highest value does not appear). So a company could have a higher value than this one but, nevertheless, it could have a relative position less than 100.
- The higher the score, the better your position.

The whole report is analysed by the consultant who has to read each graph with the indicators in order to prepare the final conclusions. In this final report, the consultant elaborates a text where it indicates the areas of improvement

Also the company has the chance to 'evaluate' the questionnaire and its effectiveness.

As a conclusion of the general process, i wish to remark some goals of this methodology and some handicaps as well.

Goals:

- The Benchmarking method described in this paper has shown to be highly successful in the setting of business objectives and targets (difficult but reachable targets).
- It allows the companies to see potential areas of improvement and higher standards.
- It helps the companies to understand their processes more precisely for they have to analyse deeply the suitable indicators and actions to improve.
- To establish nodes and nets: SMEs exchange information and experiences taking advantage of working in a net, so they encourage their presence in the market.
- Control: to find suitable methods for the SMEs own processes (when finding solutions).

#### Weaknesses:

- When comparing two companies it could be that some indicators are completely different but nevertheless we are comparing these companies by this indicators. Take for example two companies belonging to transport sector but one is a train company and the other is a bus company. If we compare the products we are obviously mistaking.
- When filling the questionnaire you have've to be honest and you've to fill in all you can. You do not have to hide any information if you think it's wrong.
- This process is not sufficient to understand the differences between our company and the Best in Class companies.
- To spend time and effort in analysing trivial aspects of the company and not the key ones.

Trying to avoid these weaknesses, LEIA TDC is involved in a very similar project called *AGRO-BIG (Base de datos de Indicadores de Gestión enfocada al Sector Agroalimentario - Database of Management Indicators focused on the Food and Agriculture Sector)*.

The main aim of this project is aimed at creating a database of companies within the Food and Agriculture Sector in order to compare a concrete company to the Best in Class companies of this sector, trying to improve its competitive position by improving their areas with more needs.

The project, as the *Benchmark-Index* project, has the following aims:

- To allow companies to be compared to companies of the same sector
- To do a complete analysis of the company
- To identify 'weak' areas where it is necessary to improve the processes/products/services.
- To create an 'improvement plan'
- To do periodical checkings of this plan to watch the improvement of the company.

The comparison process would be very similar to the Benchmark-Index process: first the company should fill in the questionnaire and bring it back to the clearing house (LEIA TDC) for its analysis which would be made by a consultant who would not only do this analysis and set some recommendations for improvement but attend to any request from the company as well.

Several tasks have been planned for this project:

1. State of art on databases of business management indicators.
2. To select those indicators that suit the companies of the Food and Agriculture sector.
3. To design an specific questionnaire for such kind of companies.
4. To design an specific database.
5. To design the interface for the consultant, that is, the way of logging the data from the questionnaire to the database.
6. To design the way of analysing the data: which statistical indicators should be used.
7. To design the 'report model' or the way to communicate to the company the conclusions.

In the present, only tasks from 1 to 4 have been developed and we are still in the stage of definition the most suitable statistical indicators.

The main difference consists on the chance of comparison to companies of the same sector. Thus, the statistical analysis could be deeper and the conclusions more real. You could get:

- The sample described
- The position of your company in that sample
- Inference for future: regression techniques allow to describe how it could be in a better position.

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