## PERFORMANCE EVALUATION OF ACADEMIC LIBRARIES IMPLEMENTATION MODEL



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# Summary

Introduction

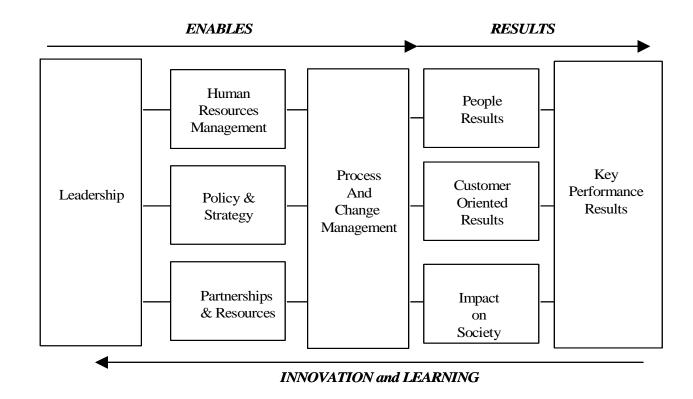
- Overview CAF, Balanced Scorecard (BSC) and Analytic Hierarchy Process (AHP)
- Proposed model and the implementation
- Results
- Conclusions



# Introduction

- Model to measure the performance of libraries
- Based in the CAF, Balanced Scorecard and Analytic Hierarchy Process (AHP)
- Performance indicators based in **ISO 11620** and **ISO 2789**
- Relative weights for each performance measure calculate using AHP. They are computed in two steps:
  - Comparing (pairwise) the performance measures under each criterion
  - Comparing (pairwise) the major criteria of the proposed model

## CAF – Common Assessment Framework



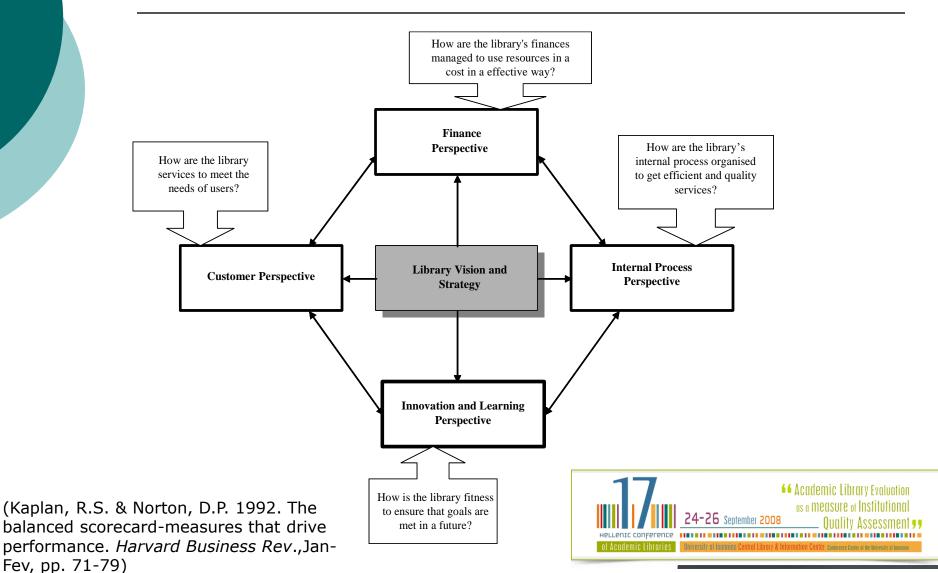
#### **European Foundation for Quality Management Excellence Model**

(EIPA. 2006 *CAF* - *Common Assessment Framework*. Maastrich: EIPA)

### Evaluation scale from 0 to 5



## Balanced Scorecard (BSC) an implementation in a library

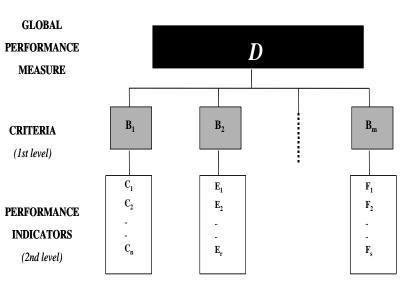


## Analytic Hierarchy Process (AHP)

#### 1. Design a hierarchy structure

- 2. Determine the weights at each hierarchy level
- 2.1 Construction of pairwise comparison matriz
- 2.2 Synthesis
- **2.3 Consistency ratio estimation.**
- Lower hierarchy level study determining the weight of each indicator in a given criterion
- Upper hierarchy level study determining the weight of each criterion in the global performance measure (D)

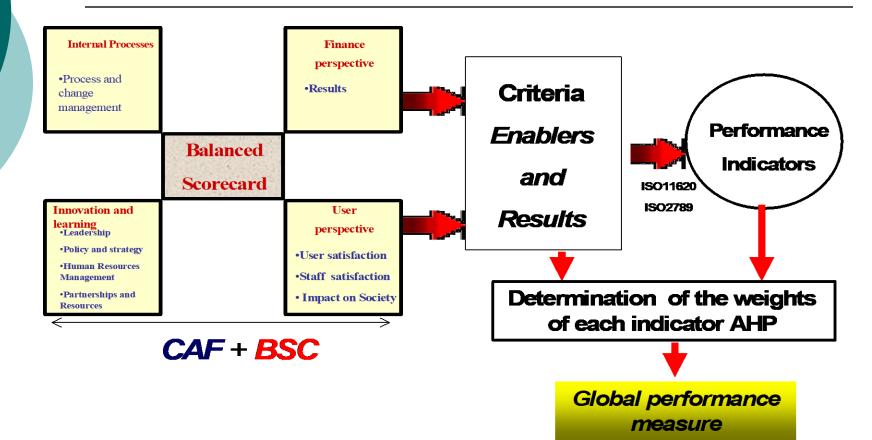
(Saaty, T.L. 1990 Decision making for leaders: the analytic hierarchy process for decisions in a complex world. Pittsburgh: Univ. of Pittsburgh.)



#### Hierarchy Analyse of the problem D



# Mixed model CAF-BSC- AHP model implementation



(Melo, L.B. 2005. *Avaliação de desempenho das bibliotecas da Universidade do Porto*. Évora. Inf. Sc. Ms. Dissertation – Univ. Évora)

(Melo, L.B., Pires, C. & Taveira, A. 2008 Recognizing best practice in Portuguese Higher Education Libraries. *IFLA Journal*, **34**(1), pp. 34-54.)



Proposed model and the implementation

To compute the *Global Performance Measure:* •*Choose the set of criteria* B<sub>i</sub>

(7 criteria)

•Choose the set of performance indicators C<sub>i</sub>

(23 performance indicators)

•Calculate their relative weights (AHP)

(using the opinion of 10 university librarians)



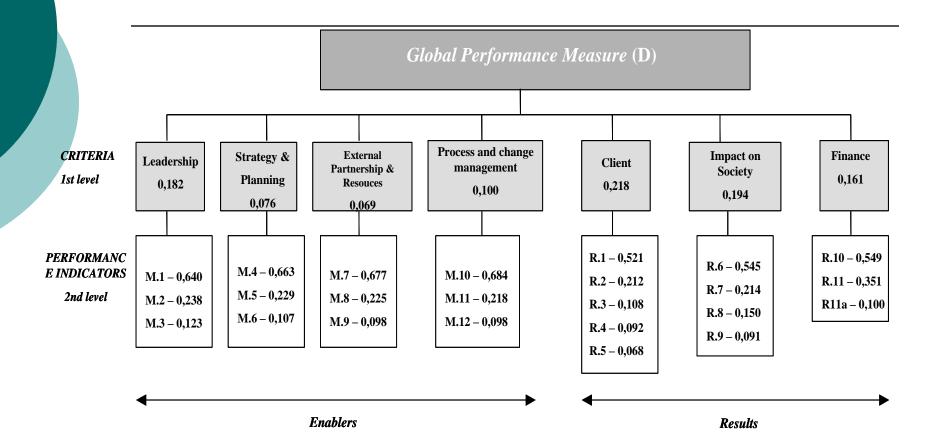
# Mixed model CAF-BSC- AHP model implementation

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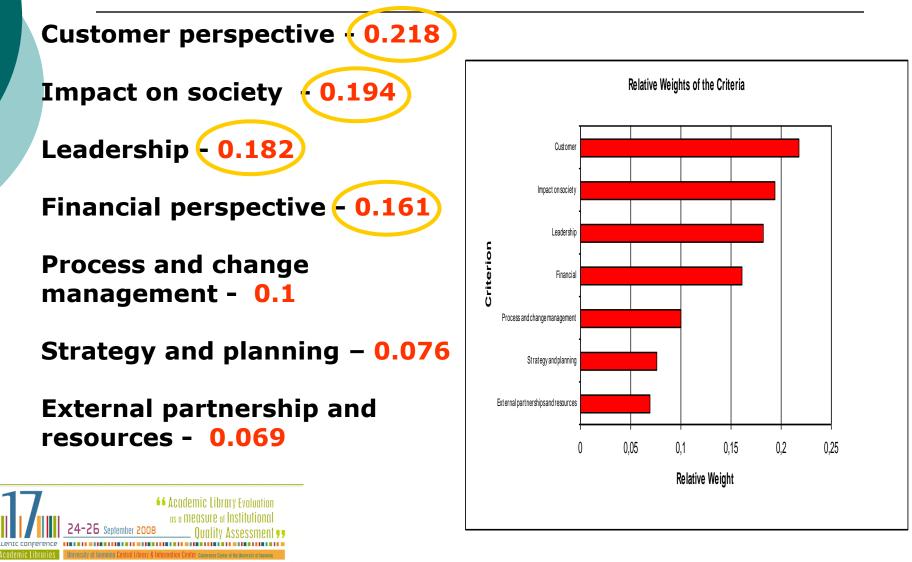






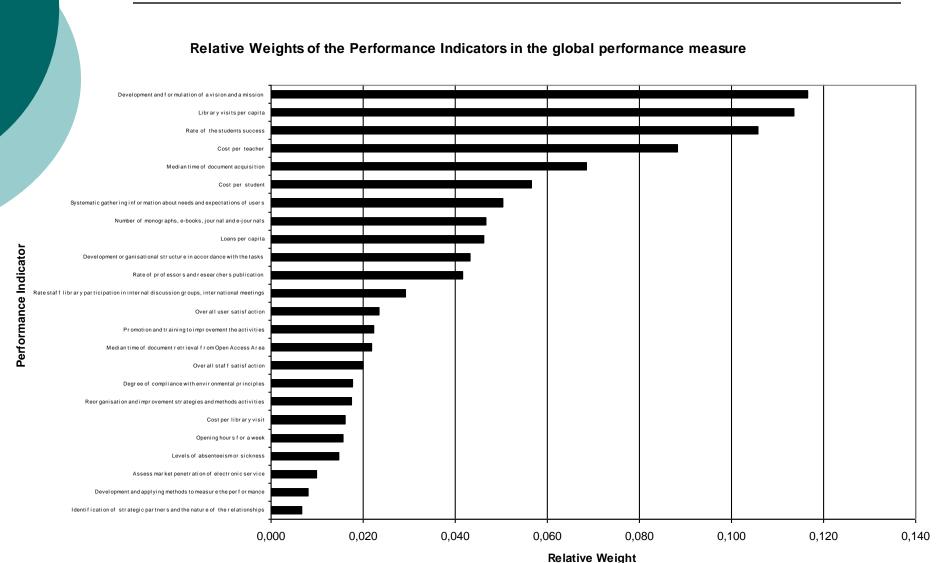
Hierarchic structure of the AHP and results how, the inquired librarian, weight the different criteria used to computed the **gobal performance measure (D)**, and how they weight the various performance indicators used to evaluate each criterion

## **RESULTS OF THE RELATIVE WEIGHT OF THE CRITERIA**





### 





# Conclusions

•The evaluation model proposed in this study is based on well-known instruments, CAF, BSC and AHP.

 Measuring academic libraries inputs, outputs, processes and outcomes is not an easy task and it is a great challenge.

 The discussion of these subjects among librarians is useful and allows us to obtain data for the evaluation of libraries and information services.

•It is possible to build part to share knowledge and evaluation results so as t university libraries.

Evaluation of quality is a process to be definitely incorporated in the activities of the information services

## ΤΗΑΝΚ ΥΟU! ευχαριστώ