

PERFORMANCE EVALUATION OF ACADEMIC LIBRARIES IMPLEMENTATION MODEL



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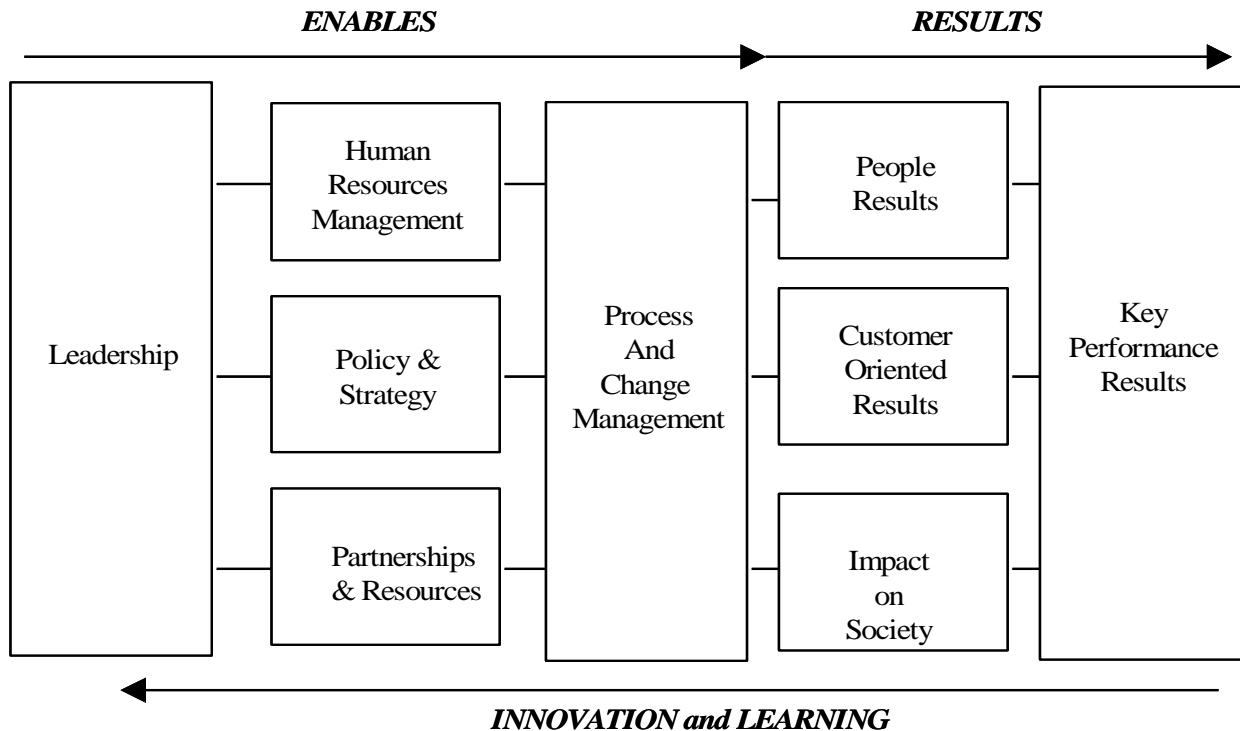
Summary

- 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



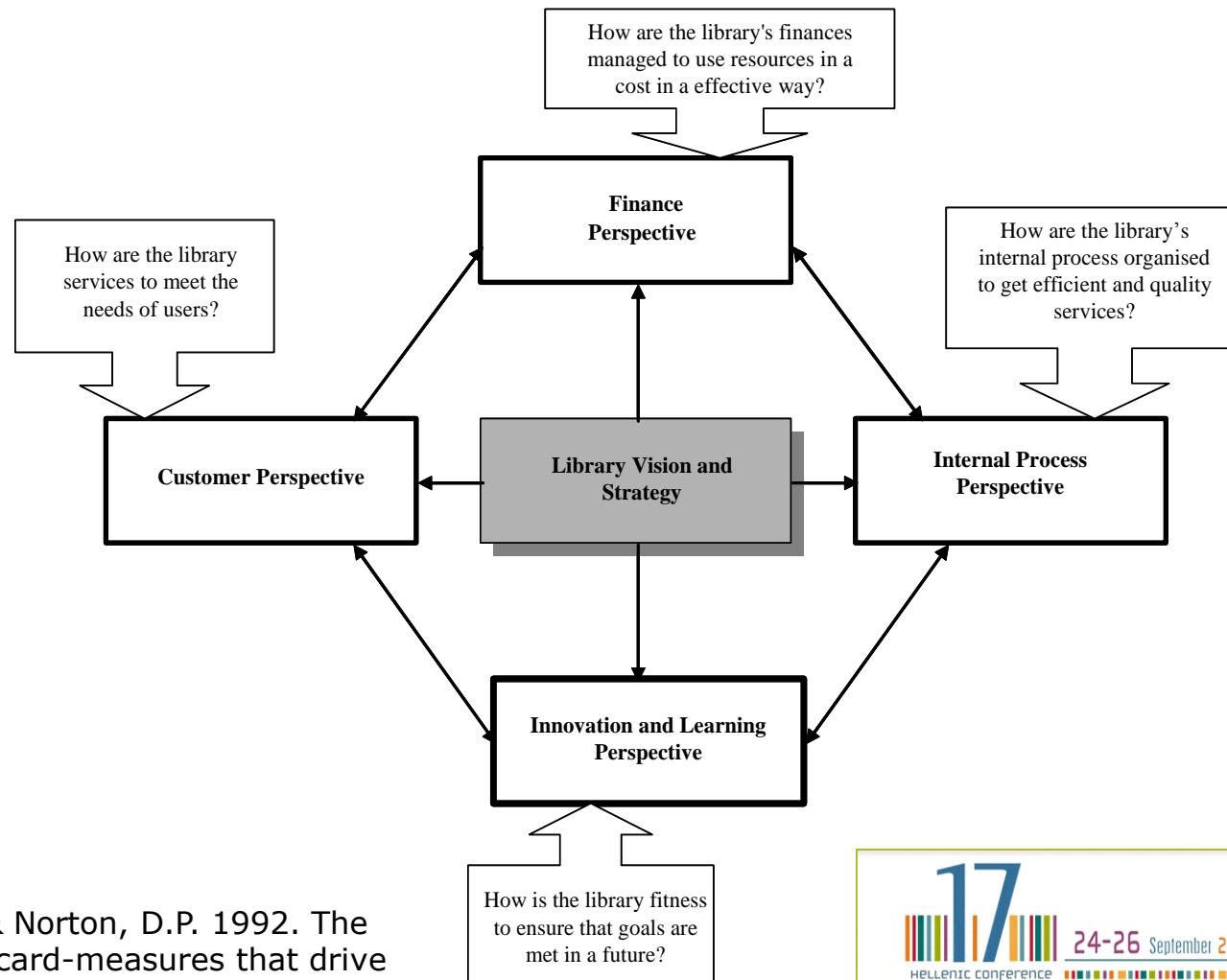
European Foundation for Quality Management Excellence Model

(EIPA. 2006 CAF - Common Assessment Framework.
Maastricht: EIPA)

Evaluation scale from 0 to 5



Balanced Scorecard (BSC) an implementation in a library

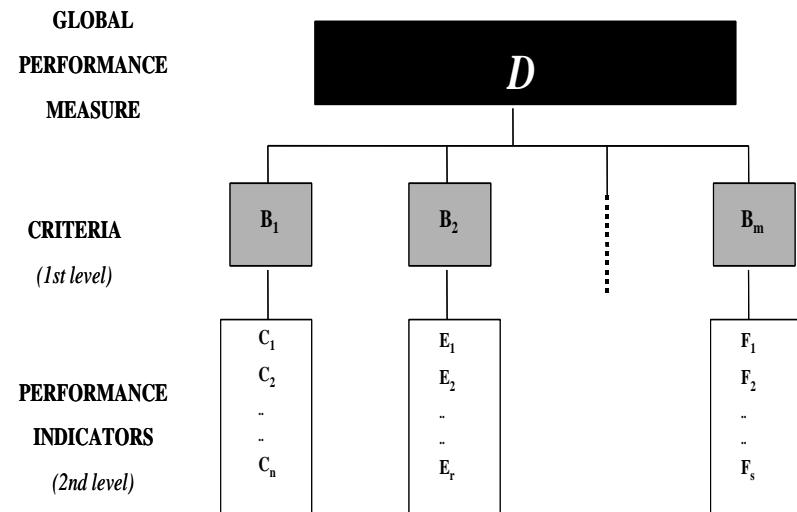


(Kaplan, R.S. & Norton, D.P. 1992. The balanced scorecard-measures that drive performance. *Harvard Business Rev.*, Jan-Feb, pp. 71-79)

Analytic Hierarchy Process (AHP)

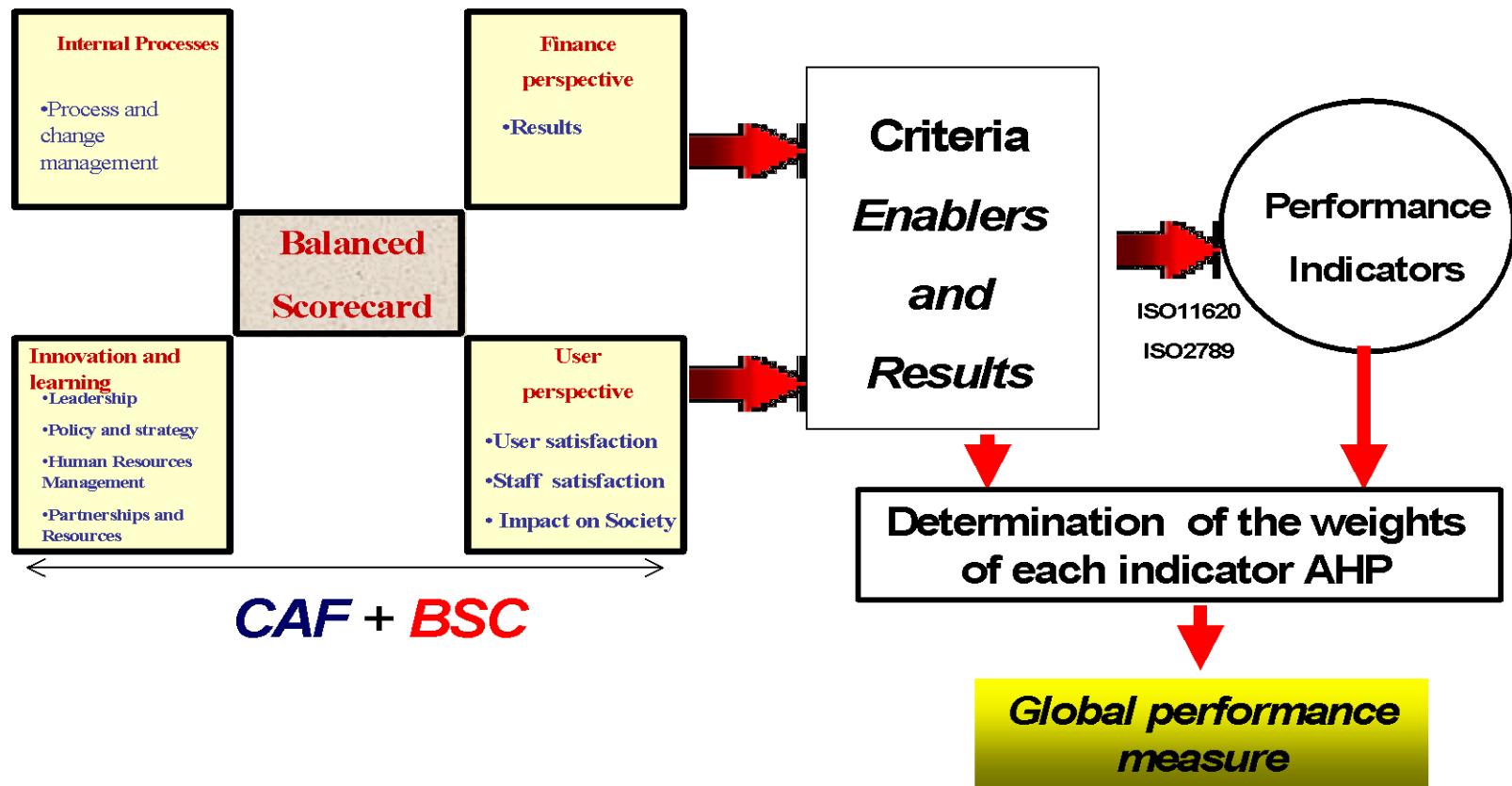
- 1. Design a hierarchy structure**
- 2. Determine the weights at each hierarchy level**
- 2.1 Construction of pairwise comparison matrix**
- 2.2 Synthesis**
- 2.3 Consistency ratio estimation.**

- **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)**



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,***
(7 criteria)
- ***Choose the set of performance indicators C,***
(23 performance indicators)
- ***Calculate their relative weights (AHP)***
(using the opinion of 10 university librarians)

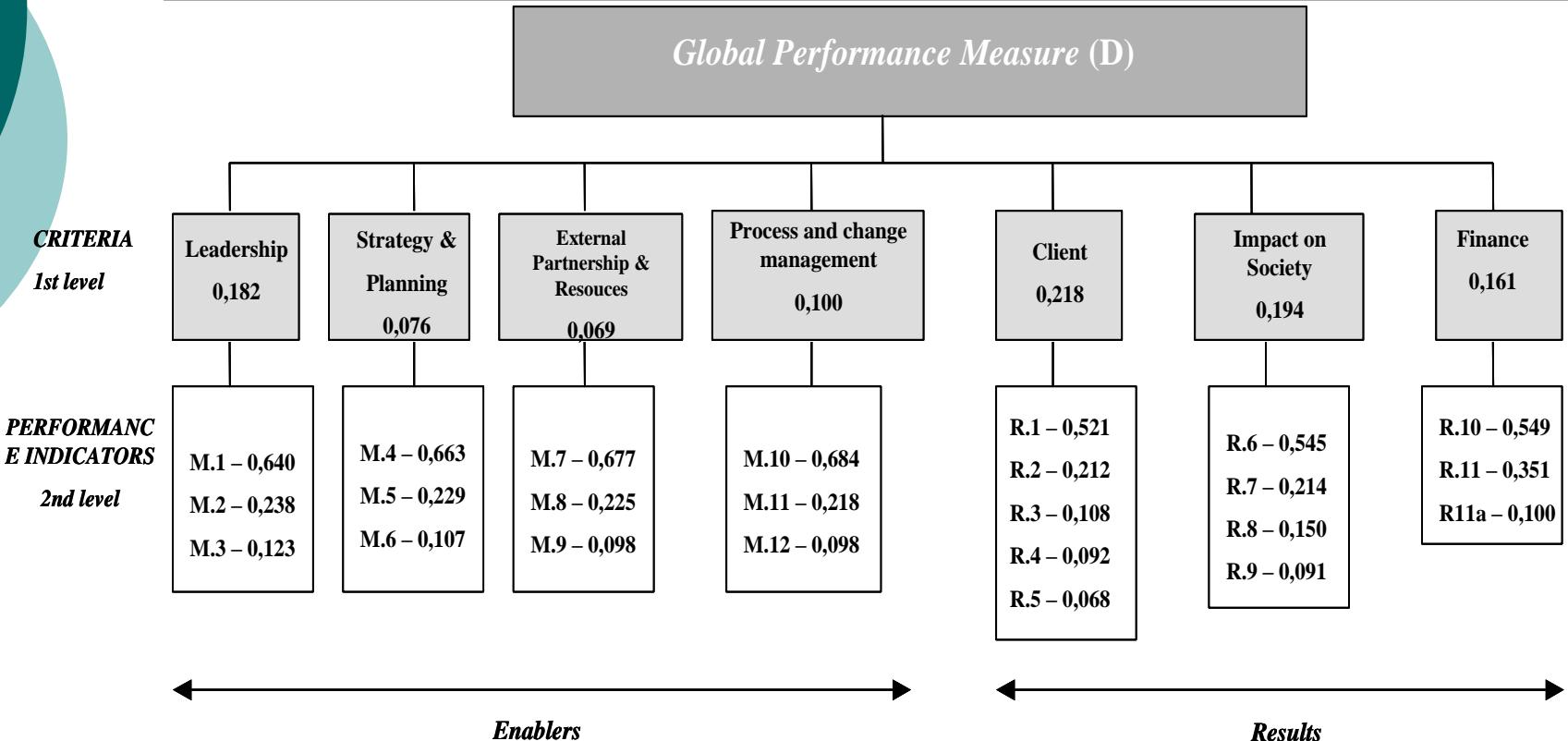
Mixed model CAF-BSC- AHP model implementation

- Calculations were estimated with the software Excel for Windows.

The screenshot shows a Microsoft Excel window titled "Microsoft Excel - madbup". The spreadsheet contains the following text in cells:

A2: 1. INTRODUÇÃO
A3: Este ficheiro Excel permite implementar uma metodologia de avaliação AHP para um conjunto bibliotecas
A4:
A5: O número de bibliotecas incluídas na avaliação pode variar entre 1 e 50.
A6:
A7: O número de critérios de avaliação pode variar entre 1 e 10.
A8:
A9: O número de indicadores associados a cada critério de avaliação pode variar entre 3 e 10.
A10:
A11: Para cada critério de avaliação, é nomeado um júri de especialistas que estabelece a ponderação relativa
A12: entre os respectivos indicadores. O número de elementos deste júri deve estar entre 1 e 10.
A13:
A14: O utilizador deverá inserir no quadro abaixo apresentado os dados gerais relativos à avaliação AHP.
A15:
A16: Instituição Universidade do Porto
A17: Nº de bibliotecas 25
A18: Nº de critérios de avaliação 7

Results



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

Customer perspective - 0.218

Impact on society - 0.194

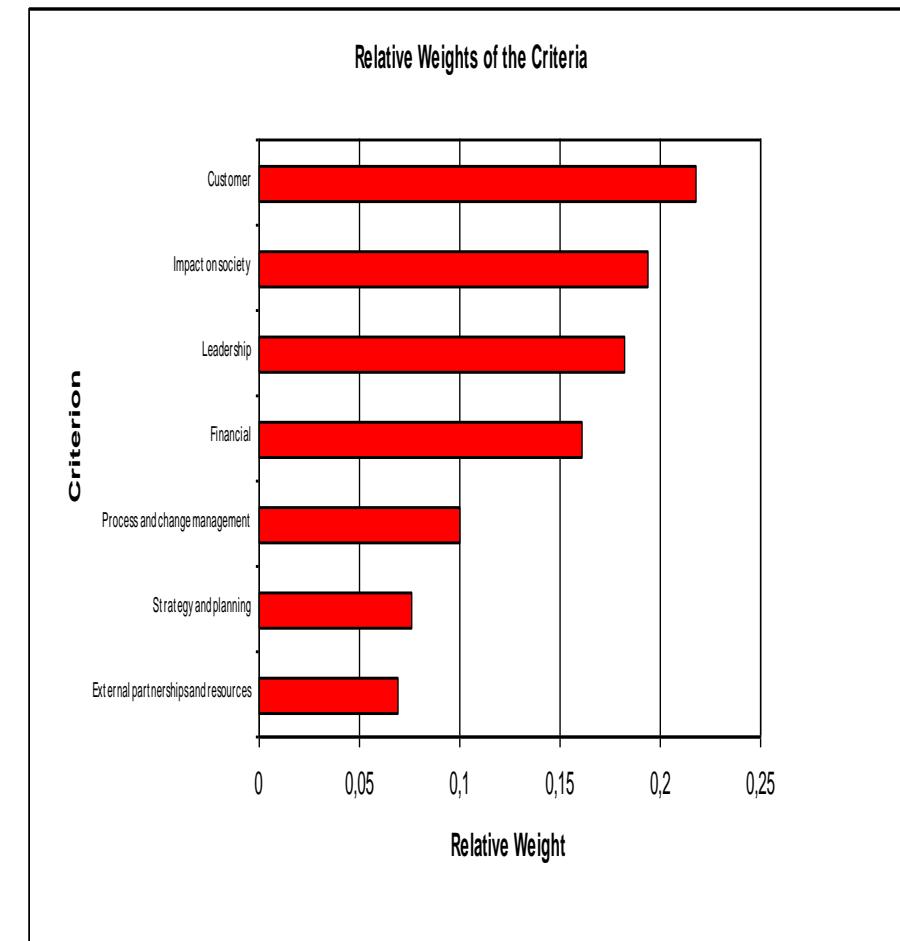
Leadership - 0.182

Financial perspective - 0.161

Process and change management - 0.1

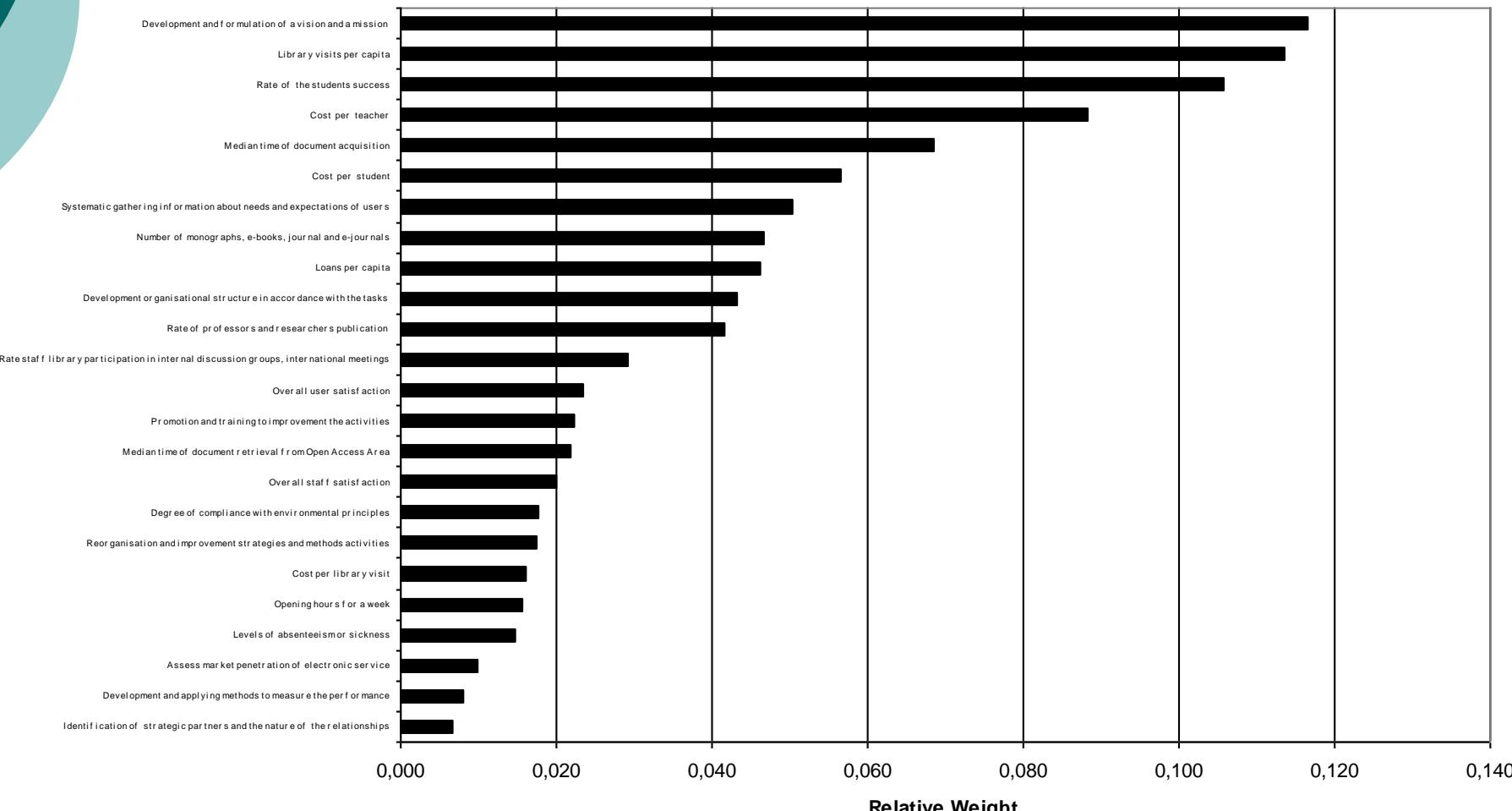
Strategy and planning - 0.076

External partnership and resources - 0.069



Results of the relative weights of the PI in the Global Performance Measure D

Relative Weights of the Performance Indicators in the global performance measure



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 partnerships to share knowledge and evaluation results so as to improve university libraries.

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

THANK YOU!
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