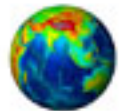


A NEW MODEL FOR CUSTOMIZED PLANT LOCATION DECISIONS

Sedef Uncu

REAL CHALLENGE FOR COMPANIES



Comparative Advantages of Countries

SHIFT



Competitive Advantages of Company



RESEARCH OBJECTIVES

This research aims to:

- Develop a customized model for international plant location analysis, which considers both:
 - o the internal environment of the company by questioning the strategic approach of the company, and
 - o the external environment of the company.

&

- Develop a decision support tool for effective plant location decisions considering both the quantitative factors and the qualitative factors (such as the strategic concerns, the operational concerns, and the environmental concerns of the company)

LITERATURE REVIEW

THE NEED

1 DIFFERENT APPROACHES

- Economics
- Industrial Geography
- Political Science
- Management
- Engineering/OR

An **all-inclusive model** that considers both the internal and the external environment

2 DIFFERENT METHODOLOGIES

- Scaling, Scoring, and Ranking
- Analytic Hierarchy Process
- Mathematical Programming
- Heuristic Algorithms
- Simulation

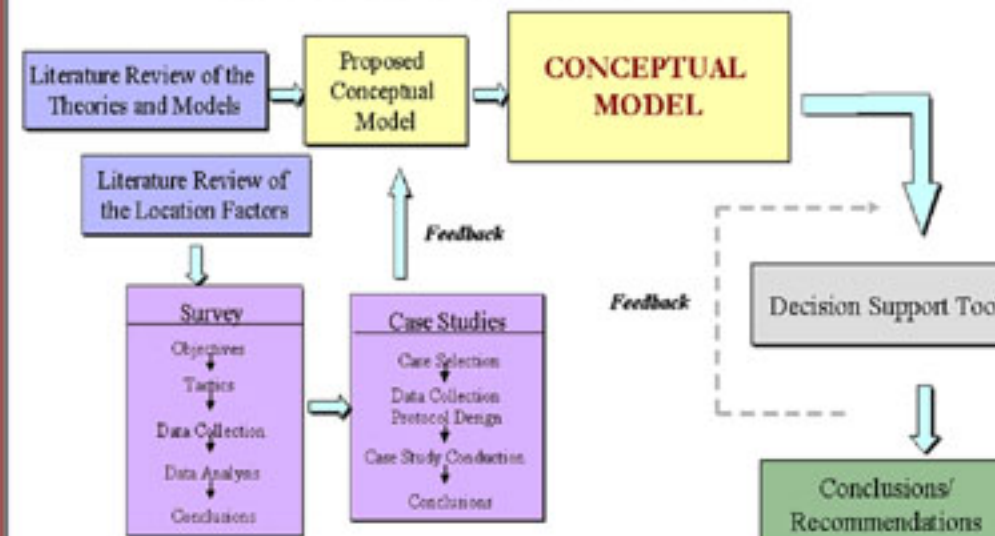
An **efficient decision support tool** that can incorporate both qualitative and quantitative factors with reasonable assumptions that do not hinder realistic solutions

3 DIFFERENT LOCATION FACTORS

- Theoretical Studies
- Empirical Studies

A **comprehensive categorization** of the location factors according to the business strategy of the company

RESEARCH METHODOLOGY



SURVEY & CASE STUDIES

OBJECTIVES

- RO1: To determine the effect of organizational culture on location factors
 RO2: To determine the effect of strategy on location factors:
 * Generic business strategy
 * Specific operational strategy
 * Product strategy
 * Growth strategy
 RO3: To determine the effect of the sector type on location factors

SURVEY

<http://www4.ncsu.edu/~suncu/survey/>

- ✓ 10 Fiber
- ✓ 37 Textiles
- ✓ 16 Apparel
- ✓ 9 Nonwoven

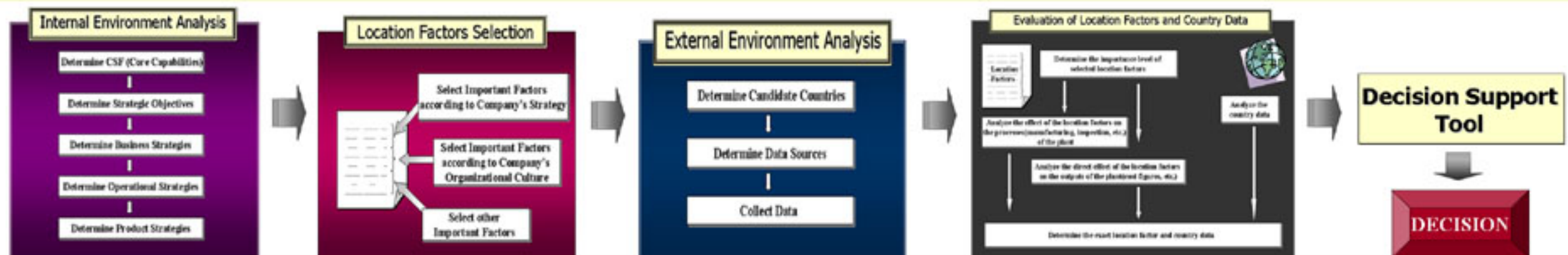
Sample Selection Criteria

- Top companies in their field
- Number of employees
- Total sales data (2011)
- Companies' international location experience

CASE STUDIES

The purpose of case studies is to elaborate the results of the survey
Select cases (2 Companies from each sector)
 ↓
Conduct field visits
 ↓
Prepare case study report

CUSTOMIZED PLANT LOCATION DECISIONS



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