DESIGNING AN EXPERT TOOL

FOR SUPPORTING (RE)LOCATION DECISION MAKING IN LARGE MULTINATIONAL COMPANIES

TU Delft 06/ 07 / 2018

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FOR SUPPORTING (RE)LOCATION DECISION MAKING
IN LARGE MULTINATIONAL COMPANIES

WHY
THE PROBLEM

HOW
THE METHOD

WHAT
THE SOLUTION

EVALUATION

CONCLUSION

KAROLINA
KMIECIK

THE PROBLEM

CHALLENGES IN THE REAL ESTATE MANAGEMENT

COMPLEXITY

THE RESEARCH QUESTION

CHALLENGES IN THE REAL ESTATE MANAGEMENT

Corporate Real Estate alignment

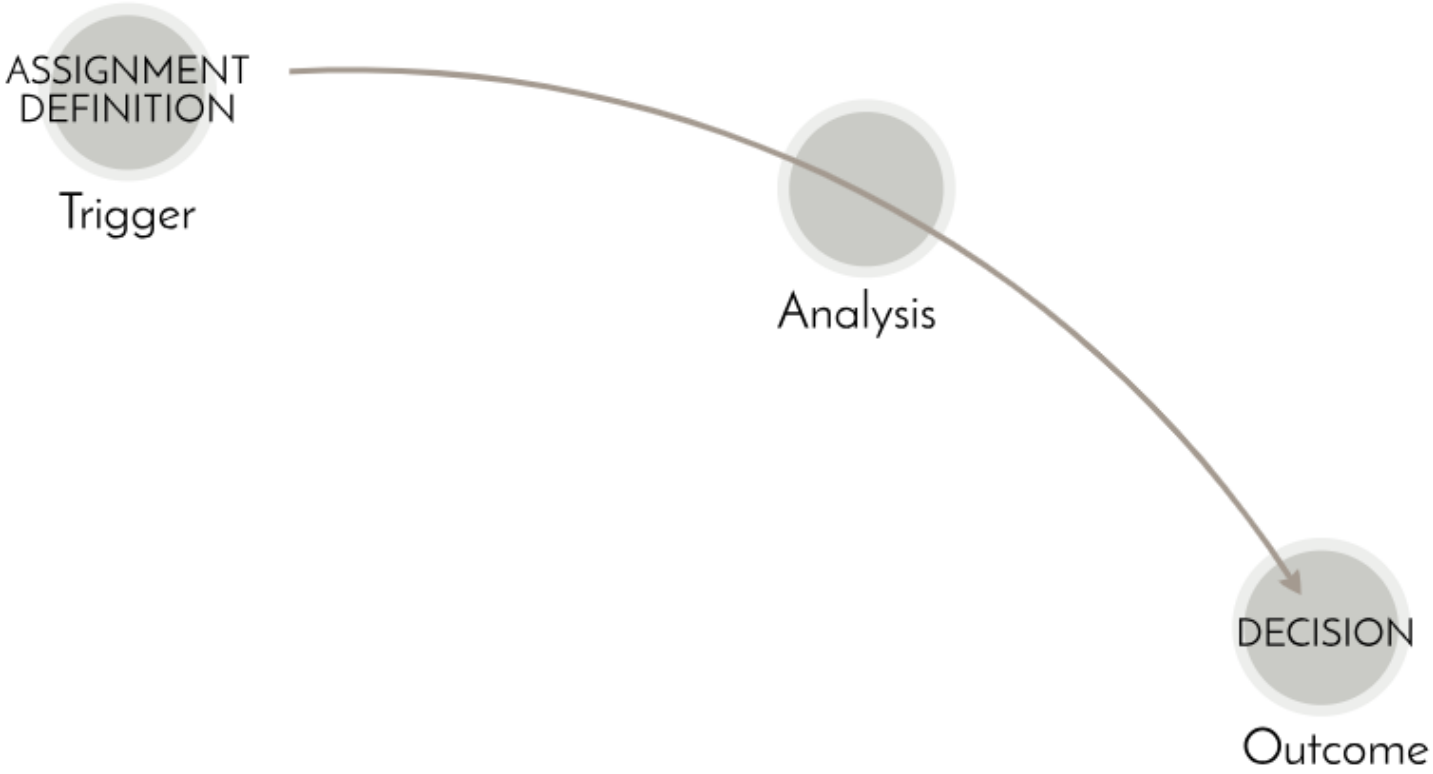
Location decision-making process

Changing needs of various stakeholders,
strategies and unforeseen alterations

Many models, inaccessible for CRE managers
Scarcity in expert tools

LOCATION DECISION MAKING PROBLEM

LOCATION DECISION MAKING COMPLEXITY



ASSIGNMENT DEFINITION

Market, internal and external factors

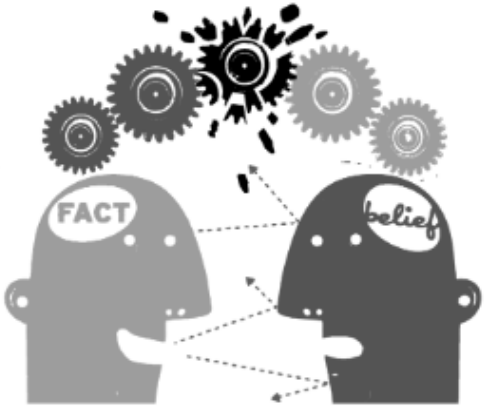
Characteristics of company

Stakeholder engagement

Driving forces and strategies

LOCATION CRITERIA

LOCATION DECISION MAKING PROBLEM



The awareness of criteria range and their ***relative importance*** is ***lacking*** in the majority of cases. High level of expertise and vast amount of knowledge is required, however, ***the proper supportive expert tools are in scarcity.***
The knowledge is available but disperse.

THE RESEARCH QUESTION

How can *an expert tool* improve *(re)location decision making* in large multinational companies?

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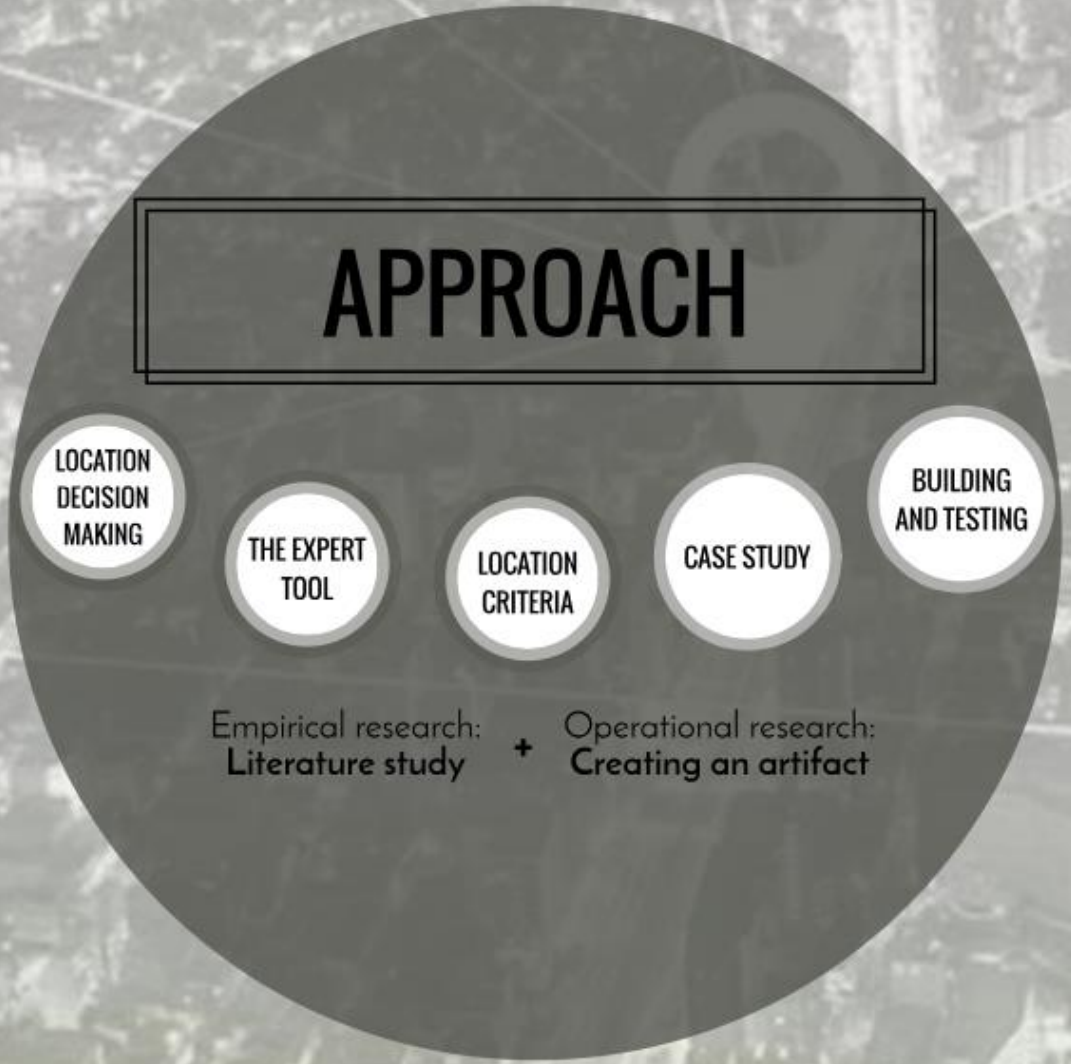

APPROACH
LOCATION DECISION MAKING
THE EXPERT TOOL
LOCATION CRITERIA
CASE STUDY
BUILDING AND TESTING
Empirical research:
Literature study
+
Operational research:
Creating an artifact

THE EXPERT TOOL

Expert systems (ES) represent and reason with knowledge of some specialist subject

Aim at solving problems or giving advice

Can be critical for decision support

The ES tool is a software containing the basic components of an ES

Mainly stand-alone, independent systems

Can provide a support to DSS models

LOCATION CRITERIA

LOCATION CRITERIA

COMPANY FEATURES

(RE)LOCATION PROCESS CHARACTERISTICS

REASON
BEHIND LOCATION SEEKING

OBJECTIVES
TO BE ACHIEVED

CRITERIA

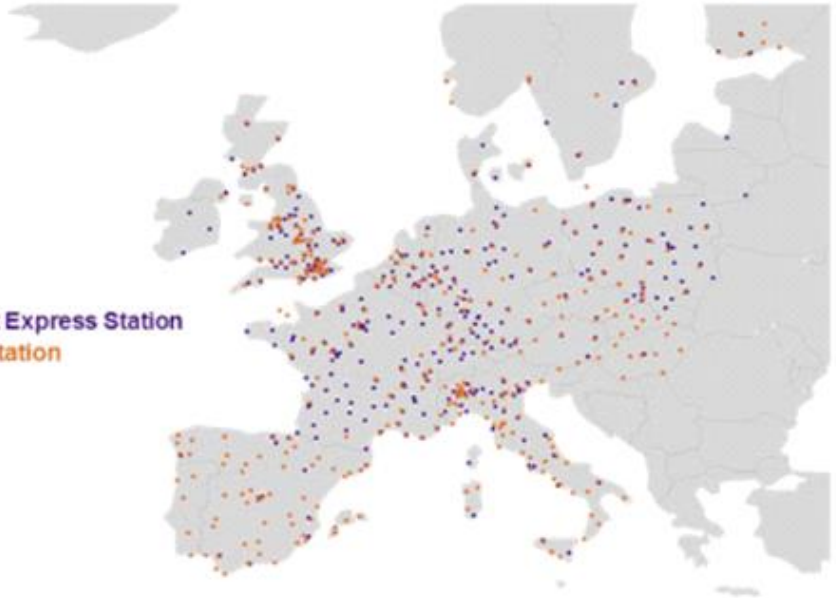
- 110 criteria
- 160 sub-criteria

14 CATEGORIES

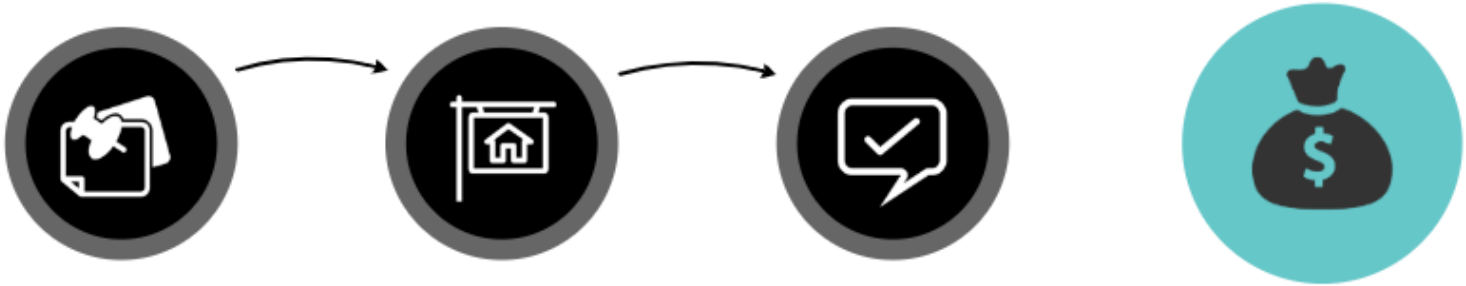
THE CASE

Optimising the real estate portfolio to support core business:

- Lower the real estate footprint
- Lower costs
- Limit the number of occupied buildings



THE CASE



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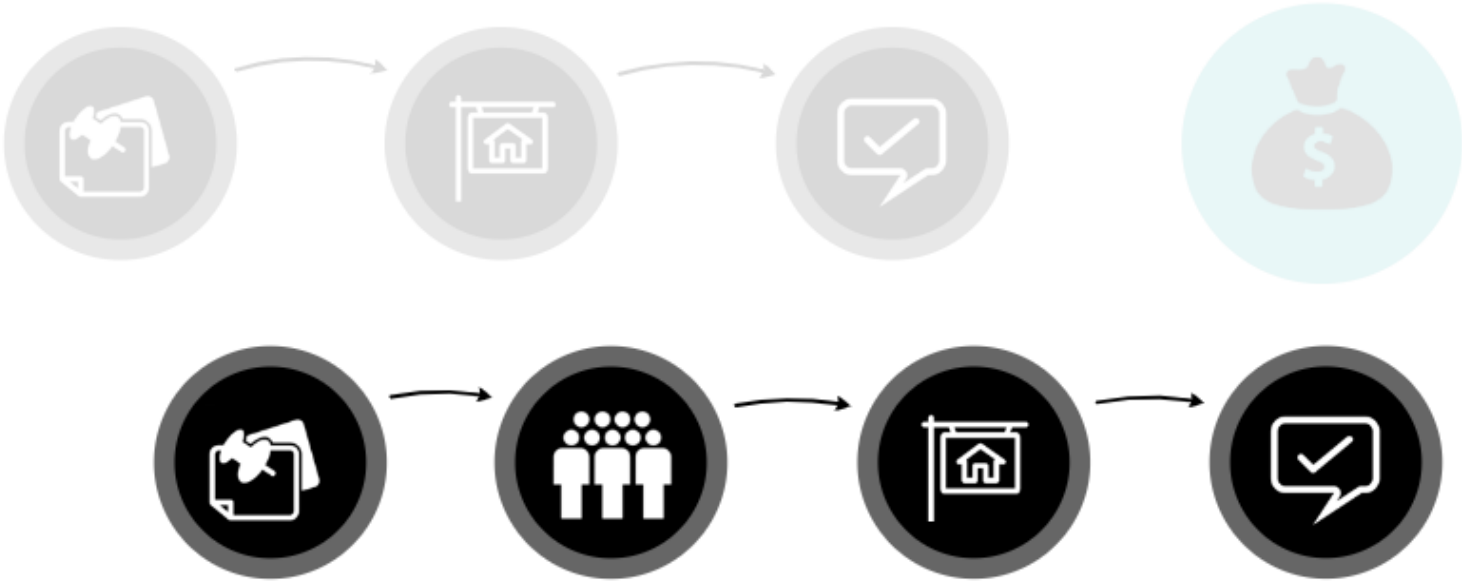

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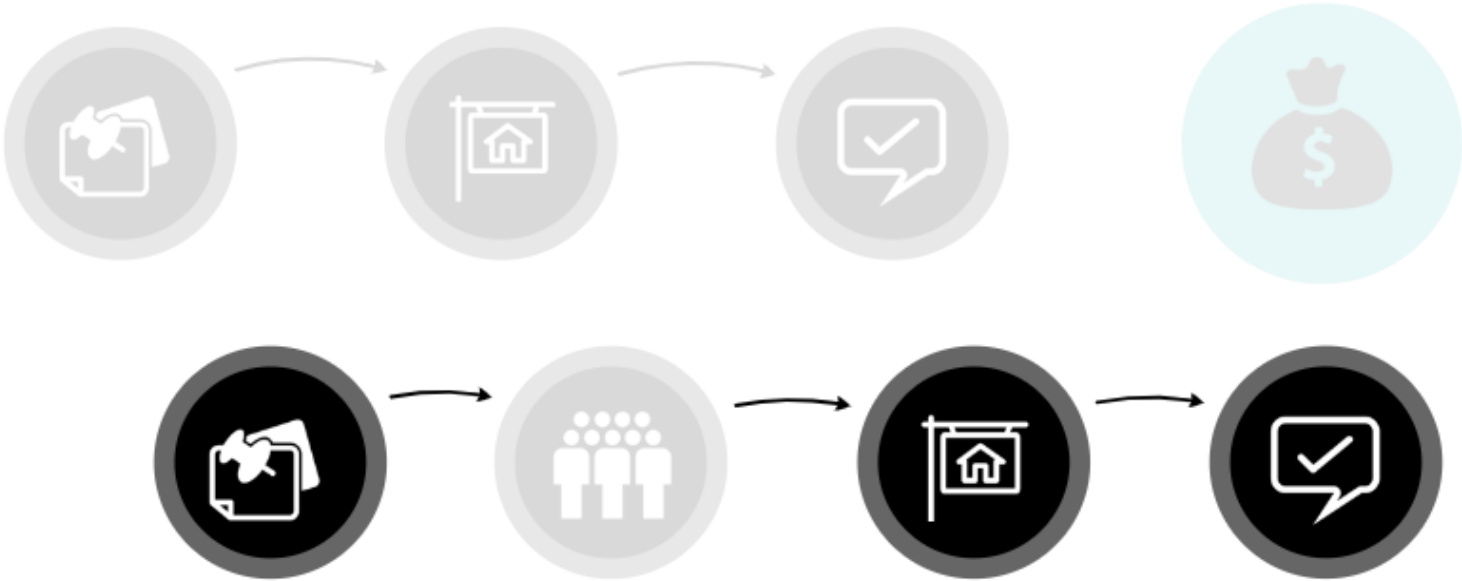
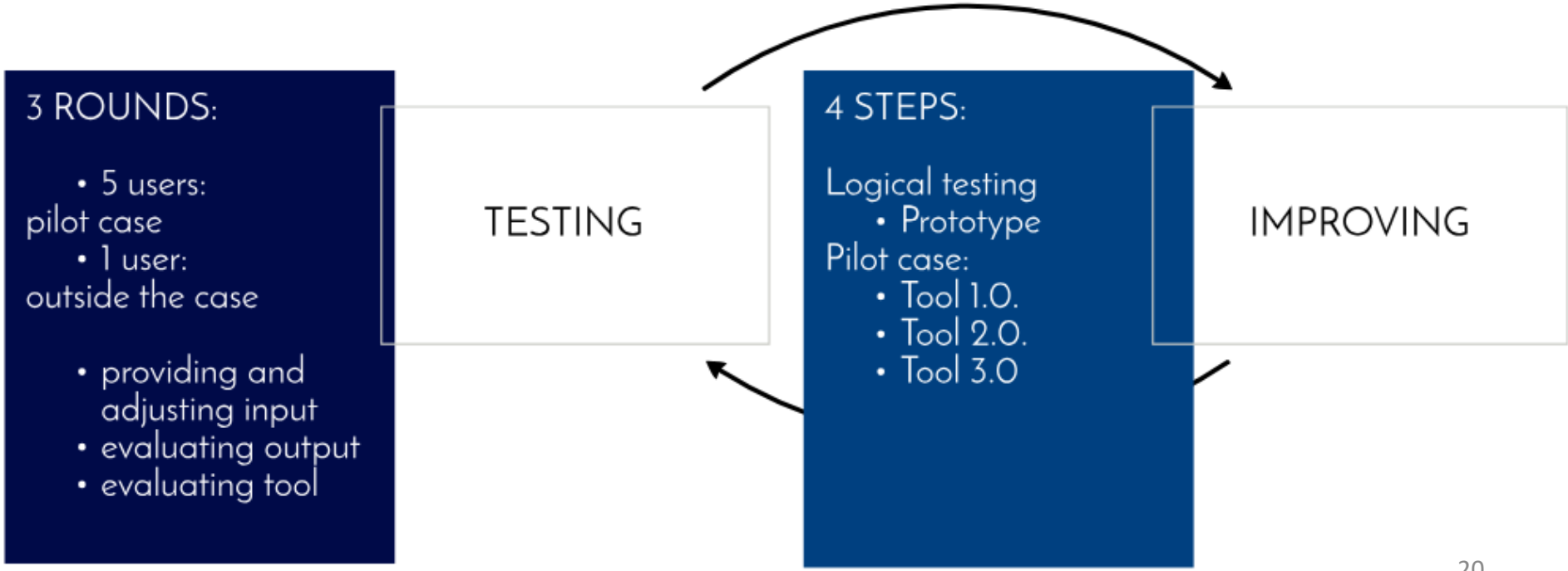


TOOL DEVELOPMENT



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THE EXPERT TOOL

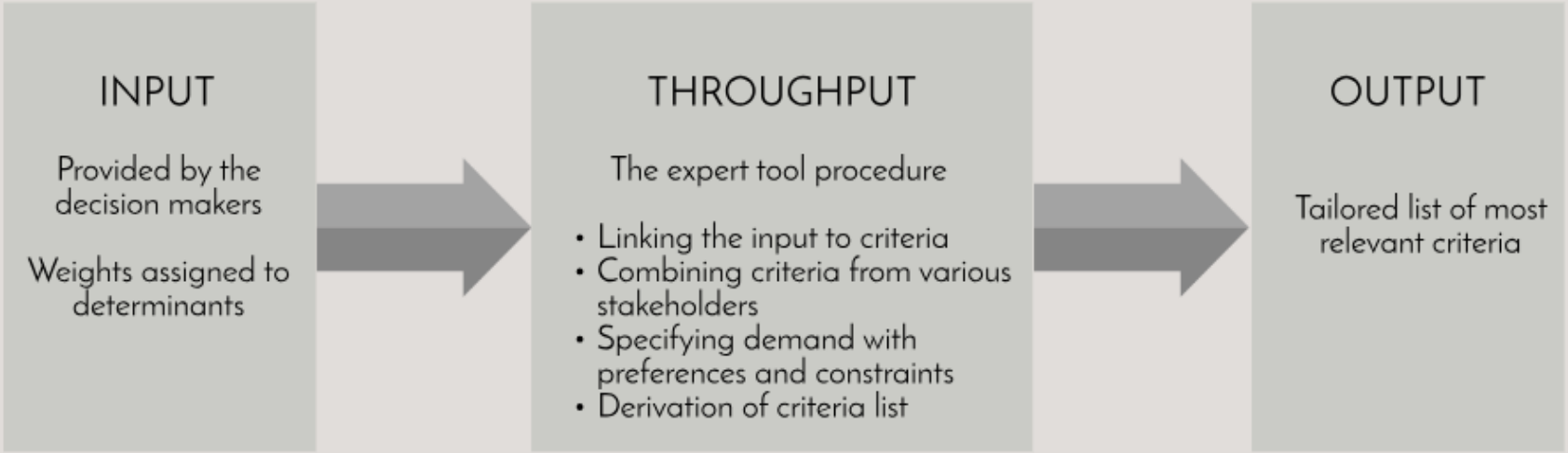
To bring the scientifically based
rationality, structure and knowledge
to the highly emotional process

STRUCTURE

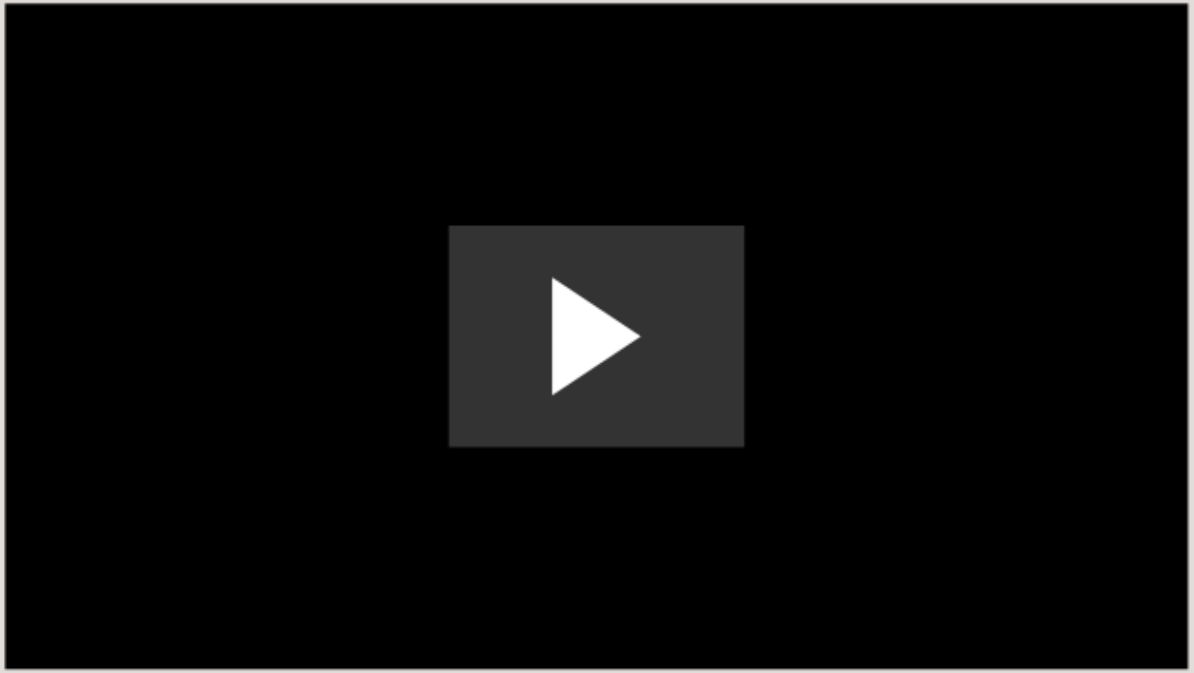
USING THE TOOL

CASE RESULTS

STRUCTURE


INPUT
Provided by the decision makers
Weights assigned to determinants
THROUGHPUT
The expert tool procedure
• Linking the input to criteria
• Combining criteria from various stakeholders
• Specifying demand with preferences and constraints
• Derivation of criteria list
OUTPUT
Tailored list of most relevant criteria

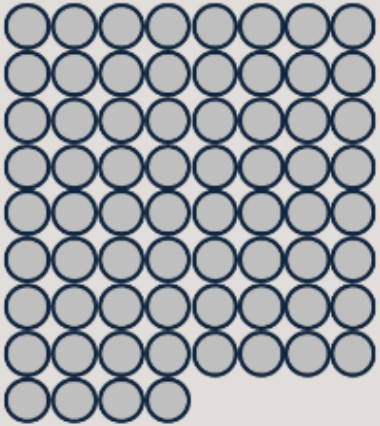
THE WALK-THROUGH



RESULTS

STATED CRITERIA

22



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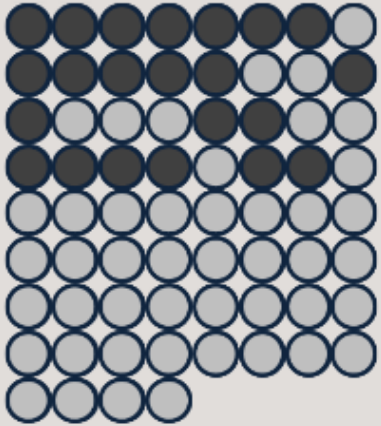
RESULTS

STATED CRITERIA

22



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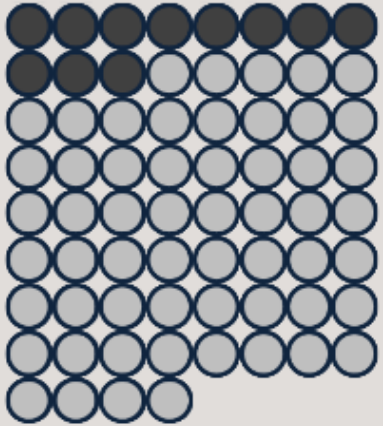
within 31

RESULTS

STATED CRITERIA

22



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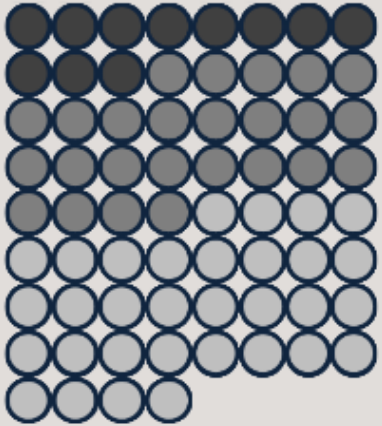
RESULTS

STATED CRITERIA

22



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1-3

RESULTS

STATED CRITERIA

- Costs
- Proximity to parent company's facilities
- Company specific (spatial) needs
- Infrastructure
- Social and cultural factors
- Characteristics of a specific location
- Characteristics of markets/customers
- Labour characteristics
- Quality of life

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TOOL ASSESSMENT

EFFECTIVENESS

*'A big advantage of the tool is that you can work with people from **various backgrounds** and **bring understanding** of the process for them.'*

*'My point of view was **reflected very well**, of course. But for me the **combination of outcome from all stakeholders** is most interesting.'*

EXPERIENCE

*'I would **absolutely recommend** using it in the decision making process. It could be **very beneficial.**'*

*'The tool **idea is very simple** and at the same time it surprisingly gives you **so much insight into the complexity** of the problem. That is what I really like.'*

ATTRACTIVENESS

'You have ability to express of what you find important and the tool incorporates it to this wider pool, where your idea, your voice is being heard. In a normal discussion it would not be possible for everyone. ***It is empowering.****'*

'With your tool you let the decision maker ***deep-dive in the problem****. For me this is not really making things easier. This might lead to* ***missing the objective of "supporting"****. On the other hand you provide* ***deeper understanding*** *and help to underpin the needs and 'the gut feel'*

SHORTCOMINGS

TIME CONSUMING
TO FILL IN

TOO SCIENTIFIC
APPROACH

POOR VISUAL
REPRESENTATION

ADDED VALUE

INCREASED TRANSPARENCY

ENRICHED THINKING PROCESS

MATCHING COMPANY'S PRIORITIES

EMPOWERMENT AND ENGAGEMENT

PROVIDING STRUCTURE TO THE PROCESS

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THE RESEARCH QUESTION

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HOW?

Increasing level of transparency among decision makers

Limiting the information inequalities and biases

Gathering and structuring the knowledge

Raising awareness of real demand coming from various parts of the company

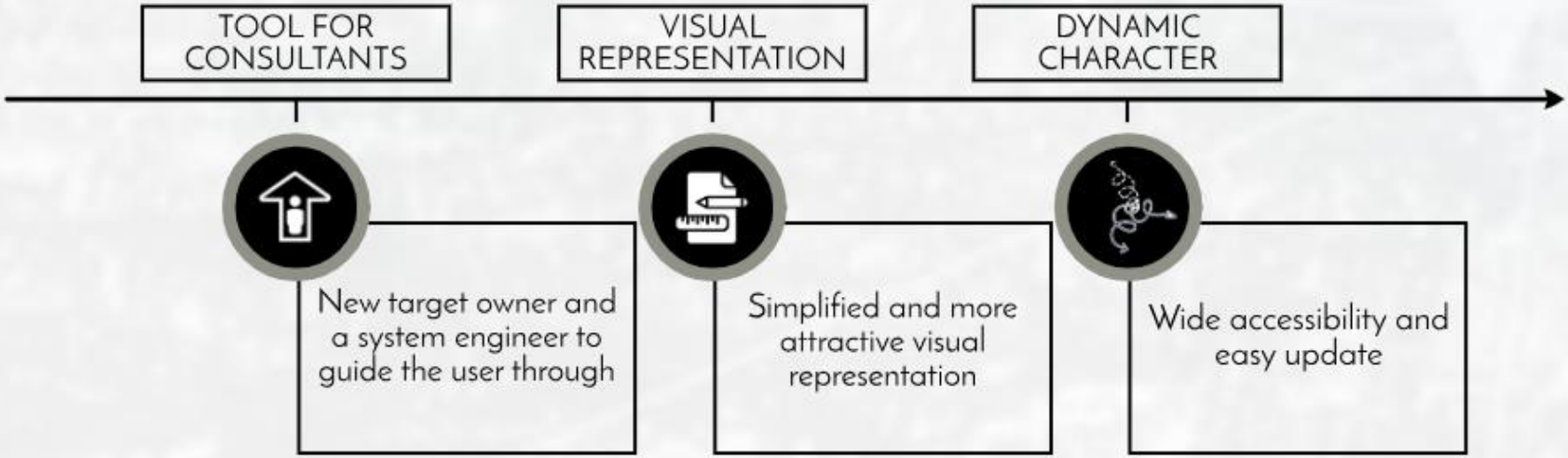
Underpinning priorities

Understanding 'WHY'

Raising knowledge level and the acceptance of decision

Providing a feeling of empowerment to the stakeholders

WHAT'S NEXT?


TOOL FOR CONSULTANTS
VISUAL REPRESENTATION
DYNAMIC CHARACTER
New target owner and a system engineer to guide the user through
Simplified and more attractive visual representation
Wide accessibility and easy update

THANK YOU