Tourism mobility through personalized destination recommendation system.

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Overview

- Introduction
- Application
- Goals
- Data
- Results of the Analyses
- Planning
- Conclusions and recommendations

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Tourism mobility is a product of the match between location based services from the industry

and

the tourism demand from the tourists

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Introduction

Figure 1: Communication gap between tourism suppliers and tourists
Source: ESTIA-project

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Introduction

Internet is an on line bazaar. Websites with preferences
- expedia.com
- visiteurope.com
- asci.com

Example:
- little camping
- at seaside
- cosy

And you get …………

This. It could happen to you!!!

Introduction

Tourists take control: "Objective" information

Tourists informing tourists
- Weblogs
- Tripadvisor.com
- Zoover.nl
- Google Earth

Too much information, need for guidance
Destination recommendation systems (DRS) can help to make the match between demand and supply successful.

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Destination Recommendation System (DRS)

a software tool that make destination recommendations based on learned information about the user's preference function (Häubl and Trifts, 2000).

- Useful (the destination according to your preferences);
- Ease of use (or lack of effort);
- Fun to use (enjoyment)
- Reliable
- Quick
- Always a result but not too many

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Goals

Dutch Ministry of Agriculture, Nature and Food Quality

- Insights in preferences of landscapes
- Stimulate rural tourism
- Innovative use of geo-information

www.myplacetobe.eu
www.daarmoetikzijn.nl

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Application

The website www.myplacetobe.eu is an innovative digital infrastructure which is capable, with the assistance of a web-portal, to make geographical databases accessible and to connect geographical databases with individual preferences
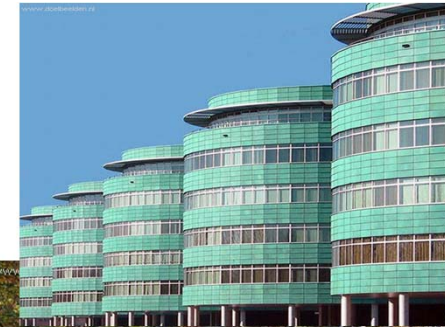
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Application
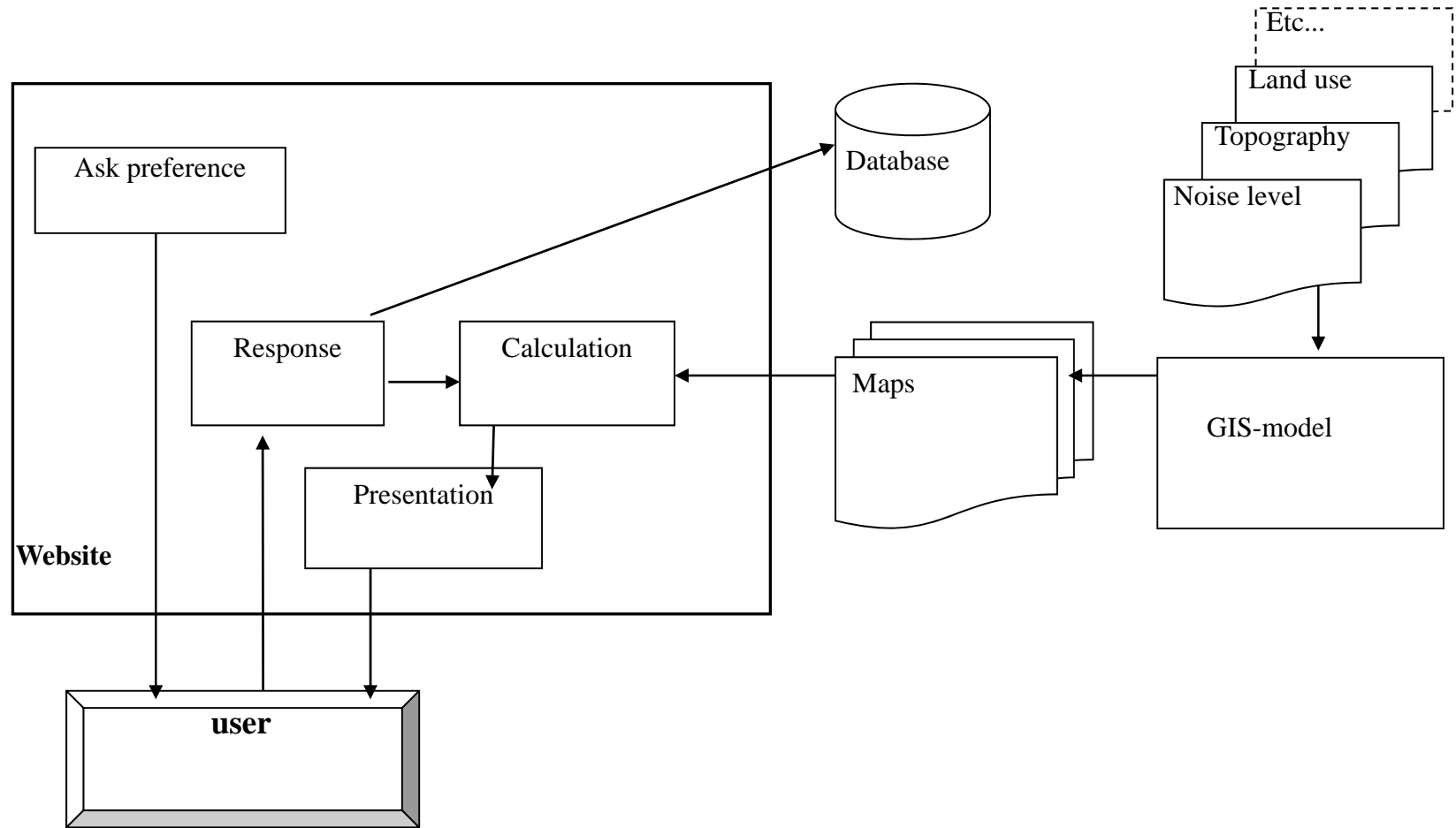
Data

separate spatial (15) databases:
- Connection with preferences (the good, the bad, the ugly)
- Complete (as possible)
- Up to date (as possible)
- Digital Topographical map; real existence

Landscape is a major topic in the destination choice

Preferences

- Radius of 5 km around central grid cell of 500 by 500 meter

- Type of Landscape
- Attractions (cultural heritage)
- Height differences
- Skyline disturbance
- Noise from highway, railroad or airport
- The amount of cycling people

- Comparison the actuality with the preferences
- www.myplacetobe.eu

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www.myplacetobe.eu

INTRO   **COMPOSE LANDSCAPE**   **PERSONAL MAP**   **HELP**   **CONTACT**   **TELL A FRIEND**

welcome

1, 2, 3

my place to be

Welcome

What is your favourite environment for a holiday?
What does the landscape there look like?

The Netherlands has many attractive landscapes and
some that are less appealing.
But what is attractive and what is ugly and who
decides that?

On this site, you decide for yourself.

In three steps you can discover which part of the
Netherlands will most appeal to you.
For a holiday, for example, or a day out or for moving to
your dream location. It might turn out to be somewhere
that's never crossed your mind.

Let yourself be surprised!

Go to step 1 >>

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INTRO   **COMPOSE LANDSCAPE**   **PERSONAL MAP**   **HELP**   **CONTACT**   **TELL A FRIEND**

1   **Your ideal landscape**

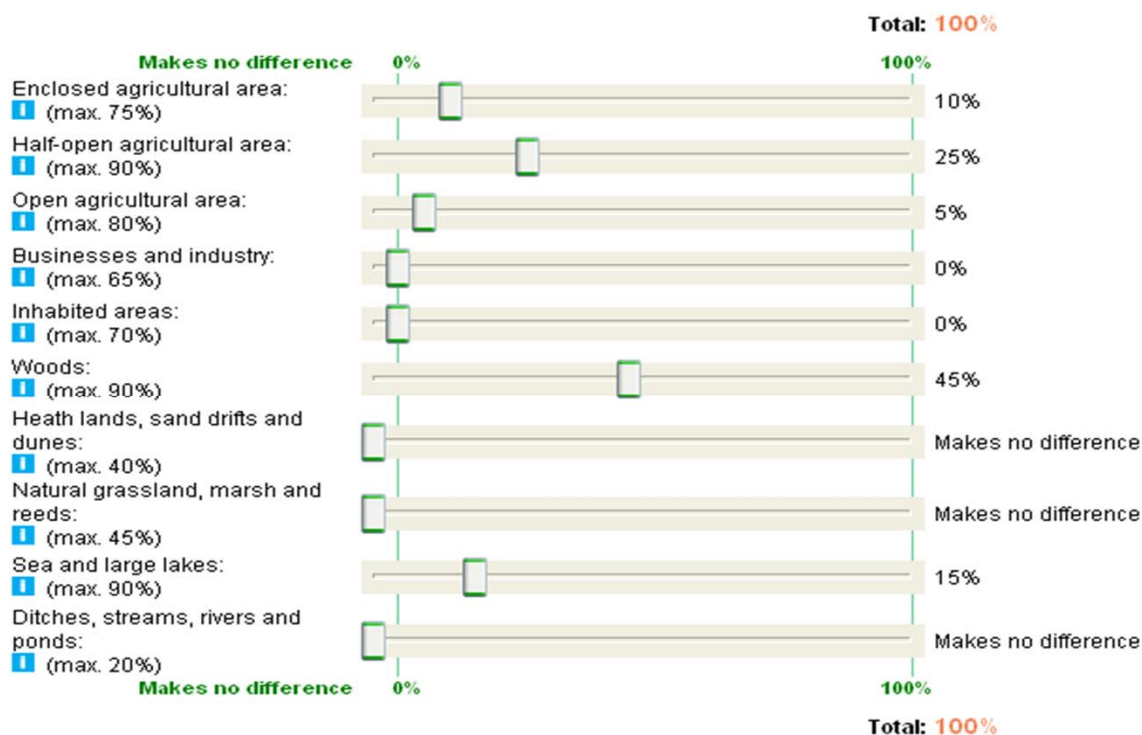# Step 1: Compose your favourite landscape

Imagine a landscape that you find very attractive.
Below, you can choose which features that landscape should have, and in what proportions.
You do this by moving the sliders.

- For an explanation of how the website and the calculation work, click on the help button.

In what proportions would you like to see the features listed below?

- *"Makes no difference"* means: I'm indifferent to how many times this feature occurs in the landscape.
- *"0%"* means: none. This feature may not be present in the landscape.
- The total of all features may not exceed 100%.

Total: **100%**

Makes no difference   **0%**   **100%**

Feature	Value
Enclosed agricultural area: (max. 75%)	10%
Half-open agricultural area: (max. 90%)	25%
Open agricultural area: (max. 80%)	5%
Businesses and industry: (max. 65%)	0%
Inhabited areas: (max. 70%)	0%
Woods: (max. 90%)	45%
Heath lands, sand drifts and dunes: (max. 40%)	Makes no difference
Natural grassland, marsh and reeds: (max. 45%)	Makes no difference
Sea and large lakes: (max. 90%)	15%
Ditches, streams, rivers and ponds: (max. 20%)	Makes no difference

Makes no difference   **0%**   **100%**

Total: **100%**

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INTRO | COMPOSE LANDSCAPE | PERSONAL MAP | HELP | CONTACT | TELL A FRIEND

How many of the features listed below would you like?

- The following features do not depend on one another. You can state how many of them you would like.
- "0" means: none.
- "100" means: as many as possible.

Makes no difference	None		As many as possible

Sights to visit: 0

Differences in altitude: 0

How annoying do you find the presence of the features listed below?

- "0" means: not at all annoying.
- "100" means: extremely annoying.

Makes no difference	Not at all annoying		Extremely annoying

Visual disturbances: 0

Noise from roads, railways, airports: 0

Crowds of recreational cyclists: 0

Clear everything   Go to step 2 >>

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www.myp

COMPOSE LANDSCAPE   PERSONAL MAP   HELP   CONTACT   TELL A FRIEND

Personal information

Step 3: Enter your details

This website has been compiled by Alterra, a scientific research institute based in Wageningen, the Netherlands. Alterra's concern is the green environment in which we live. We would like to use the landscape preferences you have entered for our research into the appreciation of the Dutch landscape. For this reason, we wish to ask you for a few more details.

Using a score of 1 (extremely unattractive) to 10 (extremely attractive), please state how attractive you find the landscape immediately surrounding your own town or city.

Your score: 7

Your country: XXX

Your age: 47

Your gender: ● male   ○ female

Would you be happy in the future to contribute to a follow-up study about landscape and recreation?
If so, please fill in your e-mail address below. Your address will not be used for other purposes.

Use the space below for any comments you wish to make.

xxx

INTRO   **COMPOSE LANDSCAPE**   **PERSONAL MAP**   **HELP**   **CONTACT**   **TELL A FRIEND**

My place to be!

On your personal map of the Netherlands below you can see to what extent the landscape meets your requirements.
The green areas are the ones where you will find the most of your favourite features, the red ones where you will find the least.

Topography
100%
80%
60%
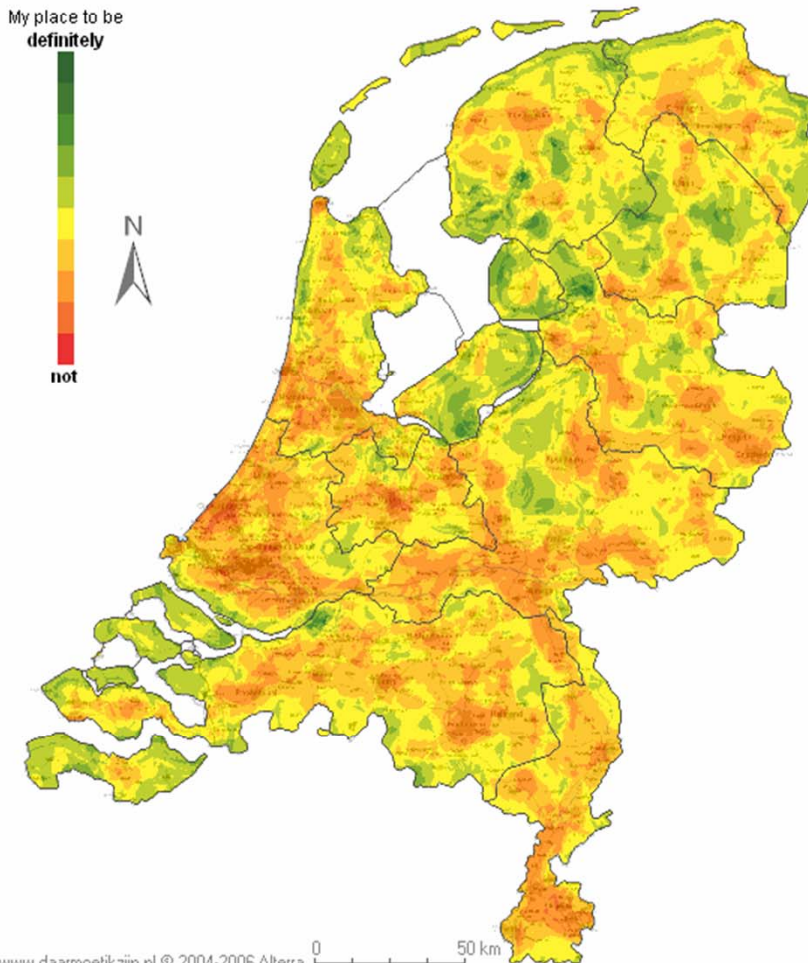40%
20%
0%

Zoom
＋
✈
－

Print
🖨

My place to be
definitely

N

not

www.daarmoetikzijn.nl © 2004-2006 Alterra   0   50 km

Summary of features of the landscape you have composed:

Woods:	45%
Heath lands, sand drifts and dunes:	Makes no difference
Natural grassland, marsh and reeds:	Makes no difference
Open agricultural area:	5%
Half-open agricultural area:	25%
Enclosed agricultural area:	10%
Sea and large lakes:	15%
Ditches, streams, rivers and ponds:	Makes no difference
Businesses and industry:	0%
Inhabited areas:	0%
Sights to visit:	0%
Differences in altitude:	0%
Visual disturbances:	40%
Noise from roads, railroads, airports:	70%
Crowds of recreational cyclists:	15%

Edit landscape features

- By clicking any particular site on the map while pressing the Shift button, a pop-up will appear with the **zip code** and the name of the municipality or national park. Adjust your browser settings to deblock pop-ups (consult the Help function of your browser).
- Under "Topography" you can change the visiblity of topographical features.
- Use "+" and "-" to zoom in or out.
- You can move the map or legend by clicking and holding the left mouse button while the pointer is on the map or the legend and then dragging the mouse.
- Click on the print button to the left of the map if you want to print out both the map and the summary.

Detailed explanation of map features

Analysis of the first 10,000 visitors (in dutch)

File   Edit   View   Favorites   Tools   Help

INTRO   COMPOSE LANDSCAPE   PERSONAL MAP   HELP   CONTACT   TELL A FRIEND

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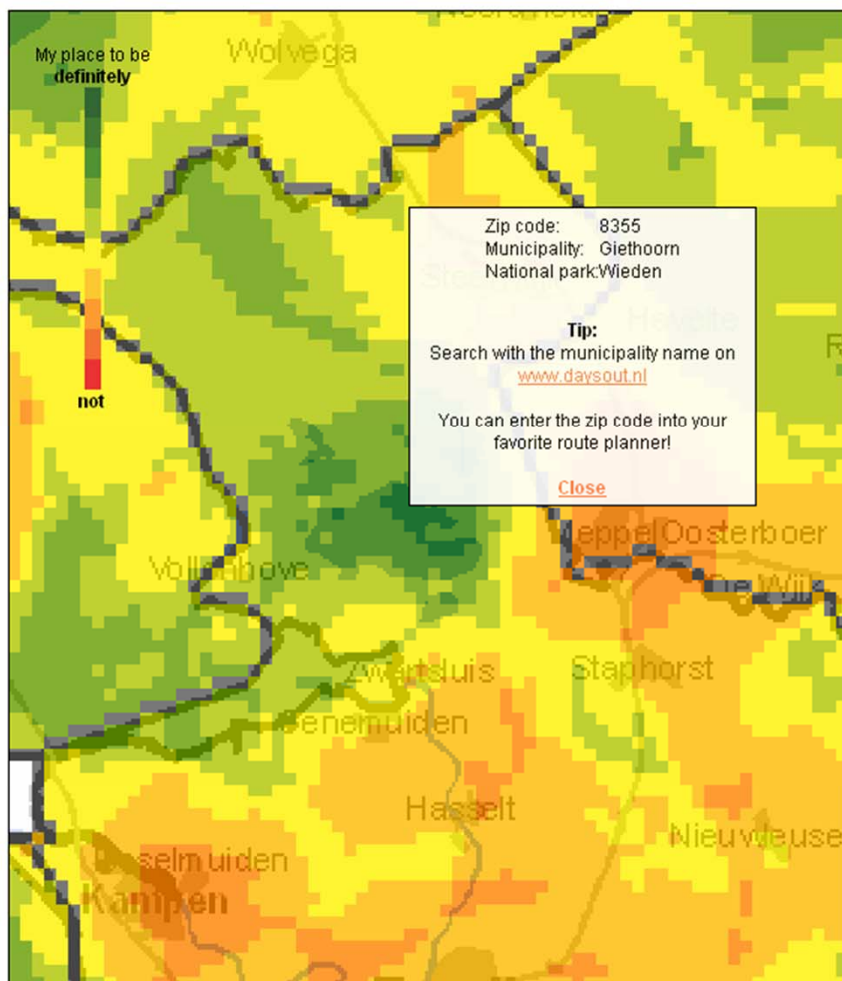
Topography

100%
80%
60%
40%
20%
0%

Zoom
+

−

Print

My place to be definitely

not

Zip code: 8355
Municipality: Giethoorn
National park: Wieden

Tip:
Search with the municipality name on
www.daysout.nl

You can enter the zip code into your
favorite route planner!

Close

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Detailed explanation of map features

Analysis of the first 10,000 visitors (in dutch)

Results

- 100.000 visitors from February 2006
- 20% is making 1 or more maps
(with 40% only 1 map and 60% 2 or more maps)

- 4% returning visitor
- 66% male
- Average age is 44 years

Knowledge about landscape (6,8) and quality preferences (20.000 data) and still growing (every week 200 persons without doing anything)

Results

Table 2: The amount (%) of people with preference for landscape feature (Netherlands and people living in two cities)

Feature	The Netherlands			City Ede			City Leeuwarden		
	some	non	neutral	some	non	neutral	some	non	neutral
Woods	74	4	22	73	3	24	81	4	15
Heath lands, sand drifts and dune	64	5	31	67	7	26	59	5	36
Ditches, streams, rivers and ponds	60	7	33	65	10	25	55	10	35
Natural grassland marsh and reeds	51	8	41	58	6	36	52	6	42
Sea and large lakes	42	9	49	40	8	52	51	6	43
Half-open agricultural area	36	9	55	49	1	50	32	11	57
Inhabited areas	35	12	53	29	11	60	37	11	52
Enclosed agricultural area	30	11	59	35	4	61	23	10	67
Open agricultural area	30	12	58	27	4	69	26	10	64
Businesses and industry	10	23	67	11	24	65	12	16	72

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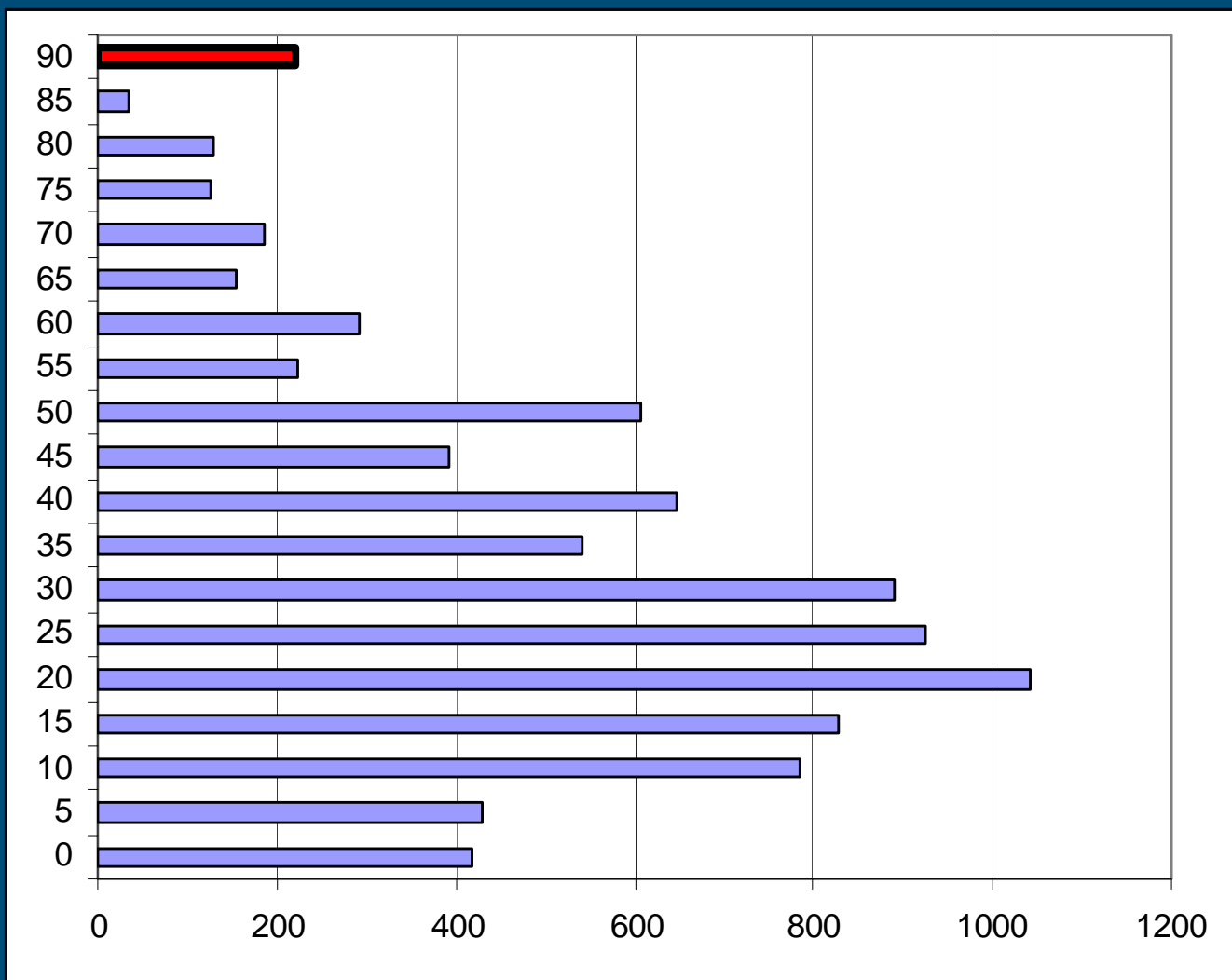
Open Agricultural areas
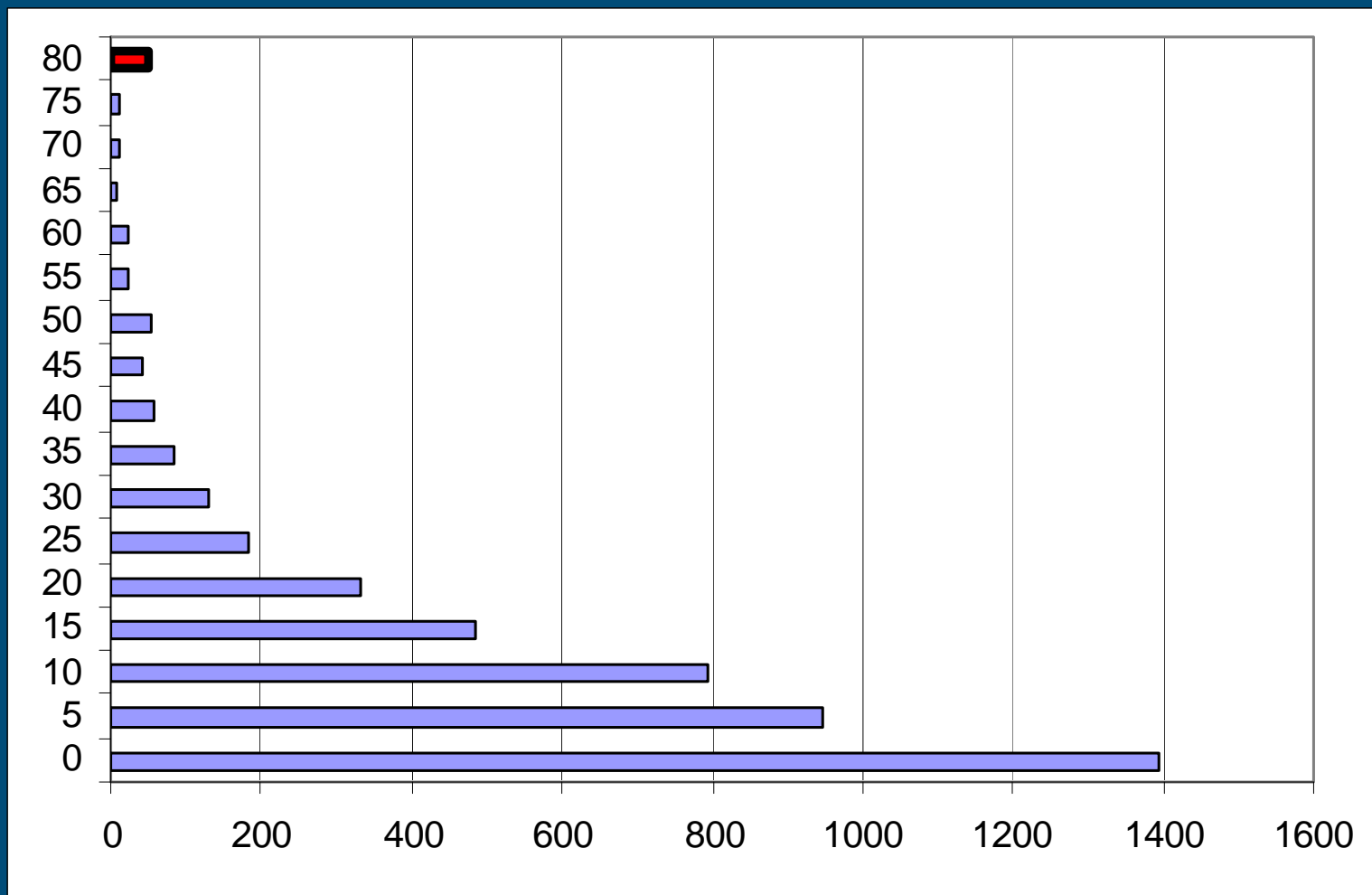
Results of 625 website visitors

- 30% visited one or more destinations (11% first time)
- 54% made an overnight stay in their destination
- 95% fulfilled their expectation

- 55% did not visit their destination
- 75% planning to do in the future
- 20% search for more information about their destination

(A. Kooiman, C. Nolet, D. Roodhuyzen, S. Schuurman).

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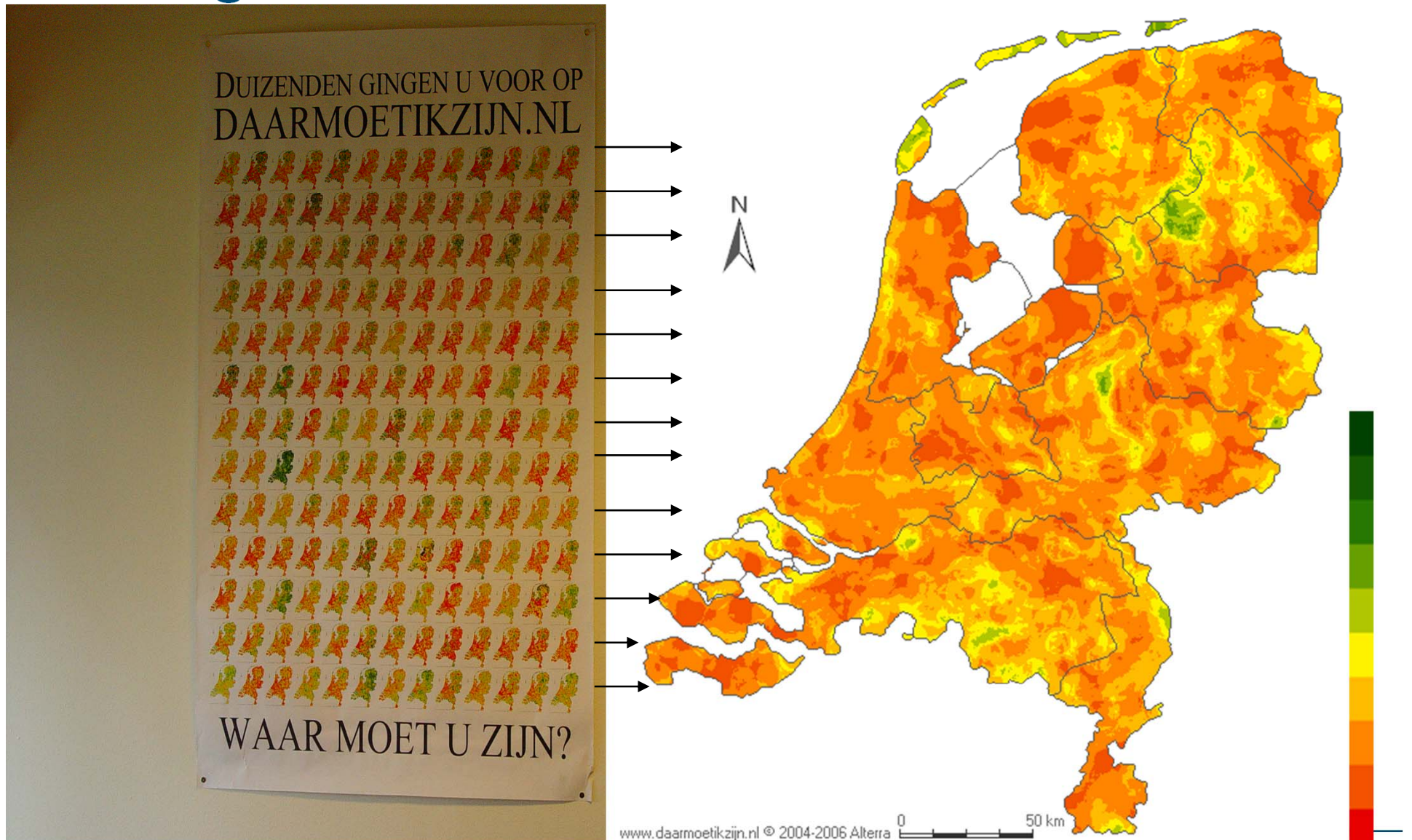
Outcomes of the personalized maps compare with the real existence of tourism mobility.

low ⟶ promote tourism
high ⟶ sustainable tourism
protection of other functions

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Conclusions

- Do more with GIS-data in tourism
- Stimulate tourism
- More knowledge about landscape preferences
- Opportunity to make landscape recommendations
at any geographical scale

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Recommendations

The myplacetobe-technique can also be used to compile your own most beautiful route to a destination using a navigation system. The technique is used in a project called Digital Dowsing Rod.
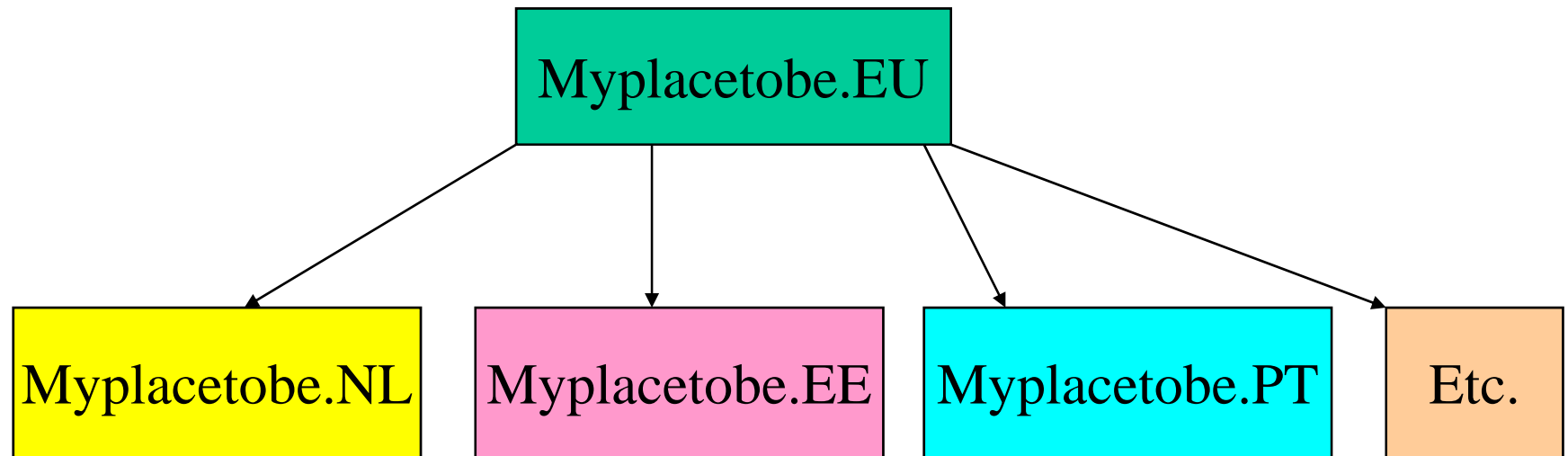
Possible to make this website for every European country or Complete Europe

- Ideal for stimulate tourism in Europe
- Get to know eastern and western parts of Europe
- European tourism database with preferences
- Tool in monitoring, regional development, protection

European project

contact me to be a partner in an European proposal

Thanks for listening

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