

An aerial photograph of a beach. The top half shows the ocean with white-capped waves washing onto a sandy shore. The bottom half shows a large number of colorful beach umbrellas, mostly in shades of blue, purple, green, and yellow, arranged in a somewhat grid-like pattern on the sand.

The Targeted Use of Movement Data Obtained from Mobile Phones in Geomarketing

An Experiential Report from the Media Agency Sector

Agenda

- » About mobalo and brandlocal
- » Targeted Use of Movement Data
- » Processing Mobile Traffic within a Geofence
- » Results
- » Future works
- » Some statistics

About mobalo

mobalo is a mobile marketing solutions provider, and helps companies to **easily identify, segment & target** customers by **analyzing real user behaviour** via **geographic location** and **movement information**



Types of Customers

Large Media Agencies

- Target Real People with considerable reach
- Increase reach despite targeting
- Innovation pressure

Geomarketing Agencies

- Increase reach through mobile
- Increase possible audience
- Reach out to „unreachable audience“
- Differentiator to competitors

Marketing Providers

(SEO, Print, Yellow-Pages,...)

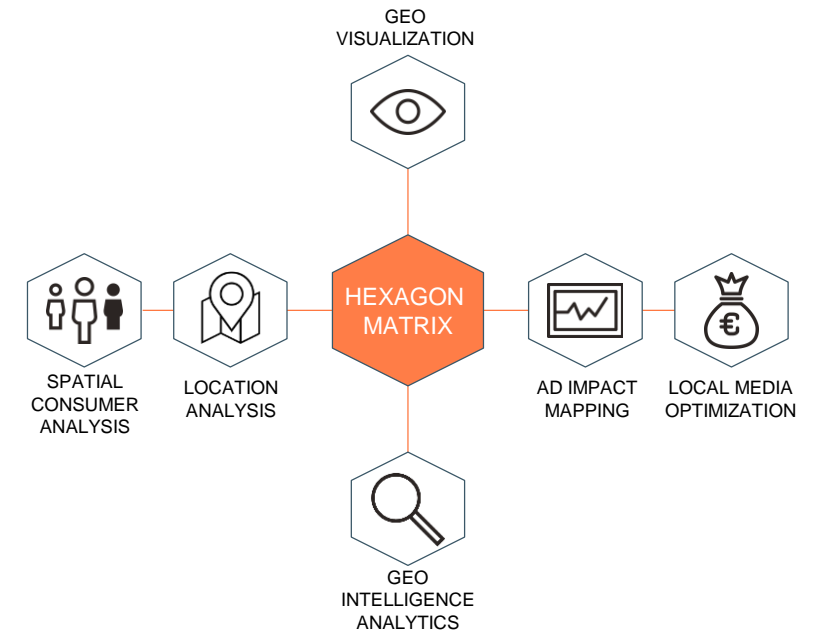
- Broaden product portfolio
- Upselling
- Differentiator to competition

Geomarketing Agency

KEY FACTS

- » Founded in 2008 as the **LOCAL MEDIA UNIT** of CROSSMEDIA
- » **INDEPENDENT** agency since 2016
- » Position: leading **GEO INTELLIGENCE** agency
- » Target: from big data to **LOCAL SUCCESS**
- » Team: **25 GEO ANALYSTS**, local communication experts & planner/buyer

OUR GEO INTELLIGENCE SOLUTIONS



Targeted Use of Movement Data

Looking for unique Users at a Shopping Mall

What ?

To find the homebase* of a unique user to better plan a media campaign

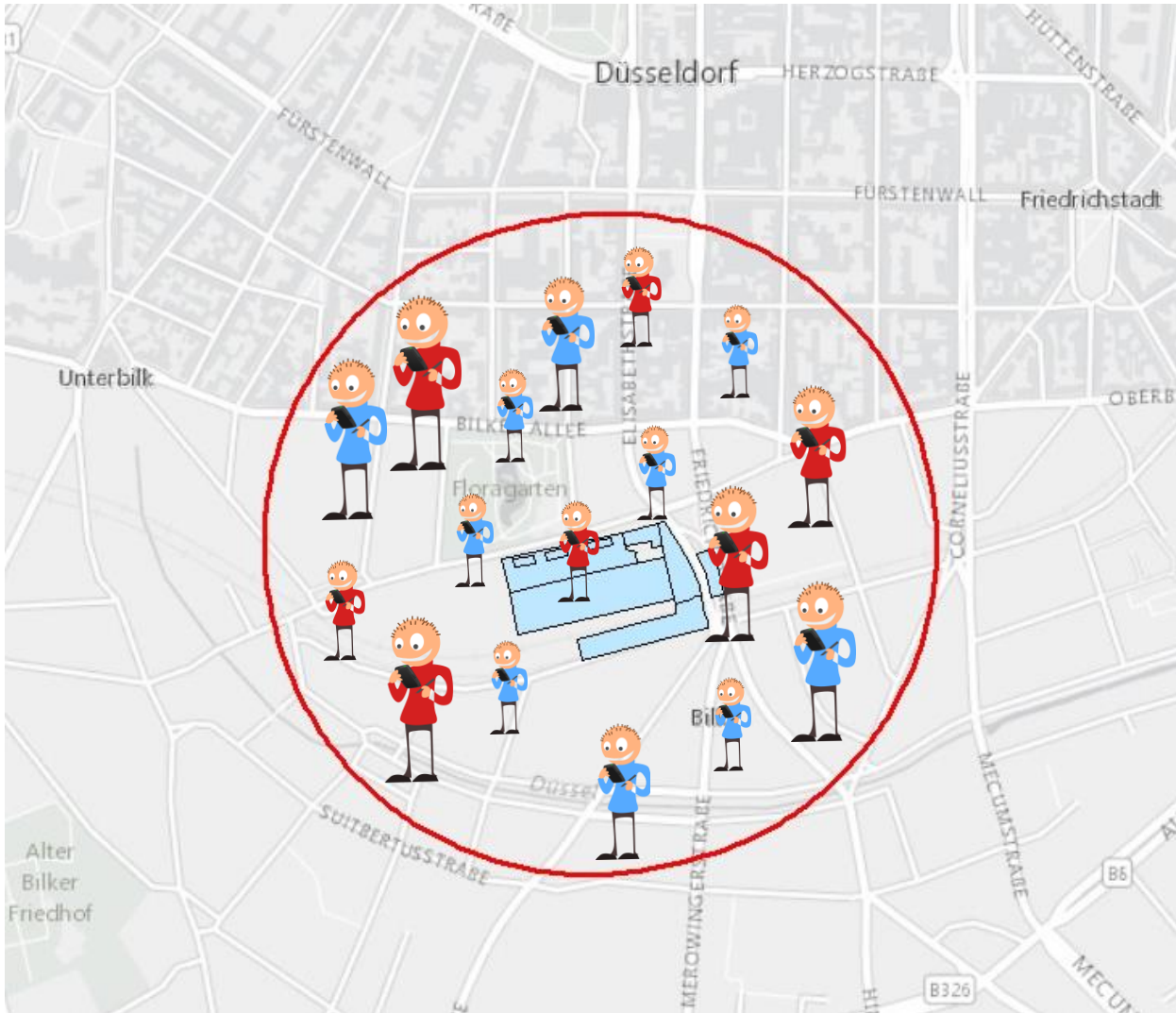
- » eg. newsletters

How ?

- » The brainchild of mobalo and brandlocal
- » A large german shopping mall in Düsseldorf was targeted as Pol
- » Advertising traffic over the period of two weeks (End of January / Begin of February) was observed
 - » Data to calculate mobalo Clusters

» *homebase: The location where a user has been spotted the most times.

Processing Mobile Traffic within a Geofence



- » Create Geofence
- » Count Smartphone users via GPS
 - » Only the ones who were spotted more than once
- » Calculate mobalo Big Data Clusters (Hadoop)
 - » Mobalo-UserID, Coordinates, Timestamp
- » Visualize as Maps

Arcaden Düsseldorf – The Unique Users found within the Mall



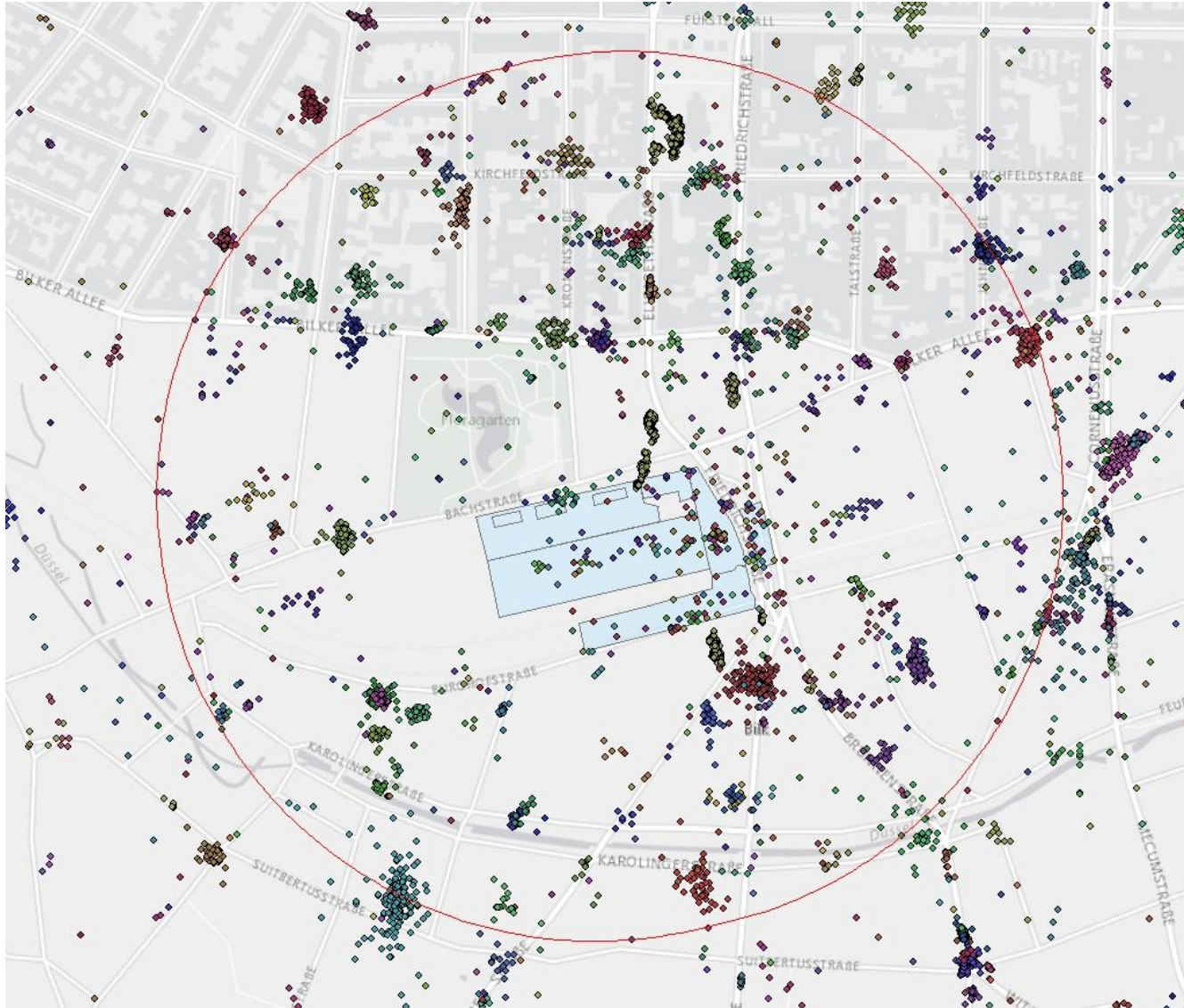
- » The Unique Users are represented by different colors
- » 871 Points – 161 unique users (only App Traffic)

Arcaden Düsseldorf – Where else had the Unique Users been ?



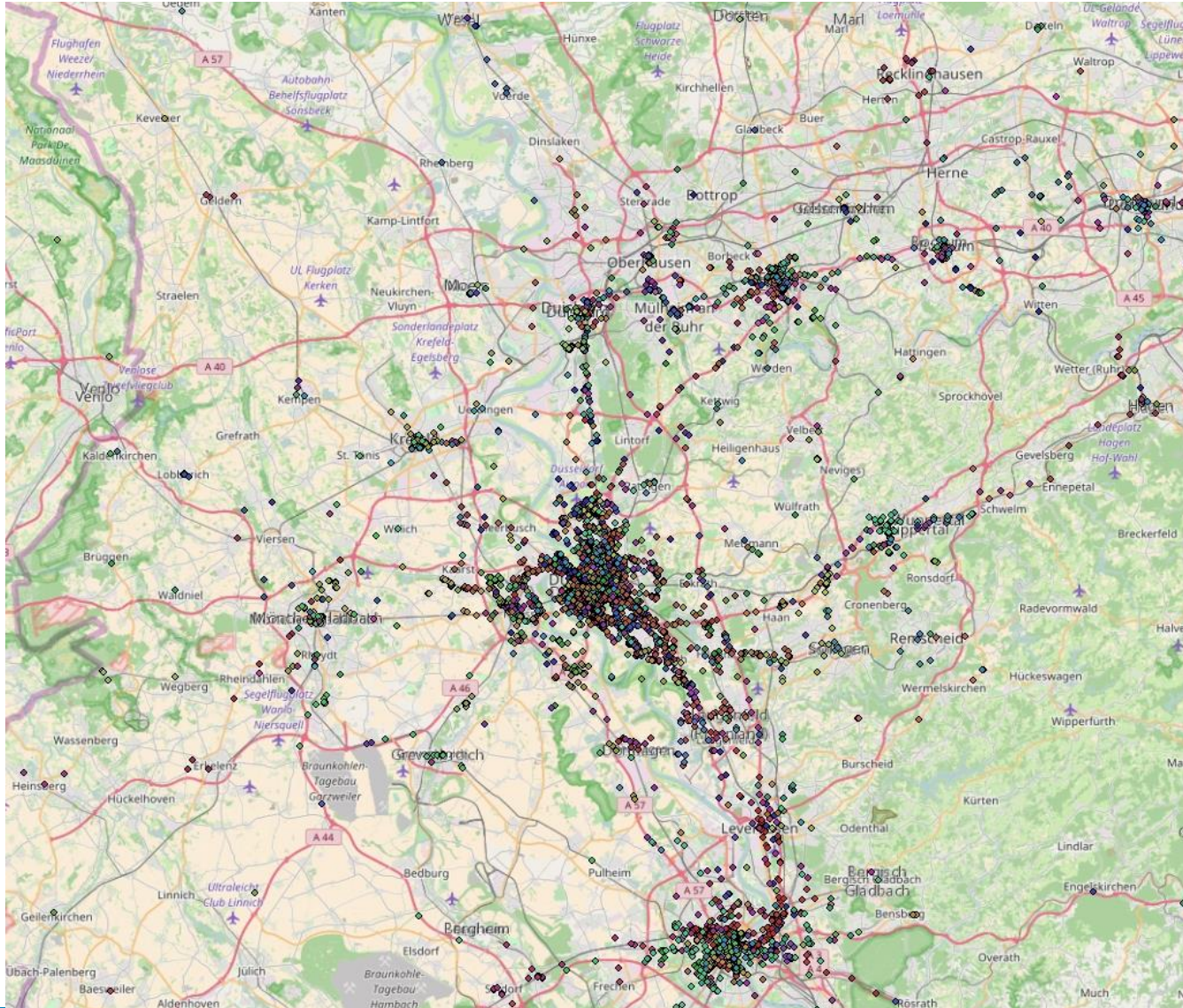
- » The Unique Users who were found inside the Arcaden could be located outside
- » Specific clusters or hotspots could be identified

Arcaden Düsseldorf – Geofence 500 meter



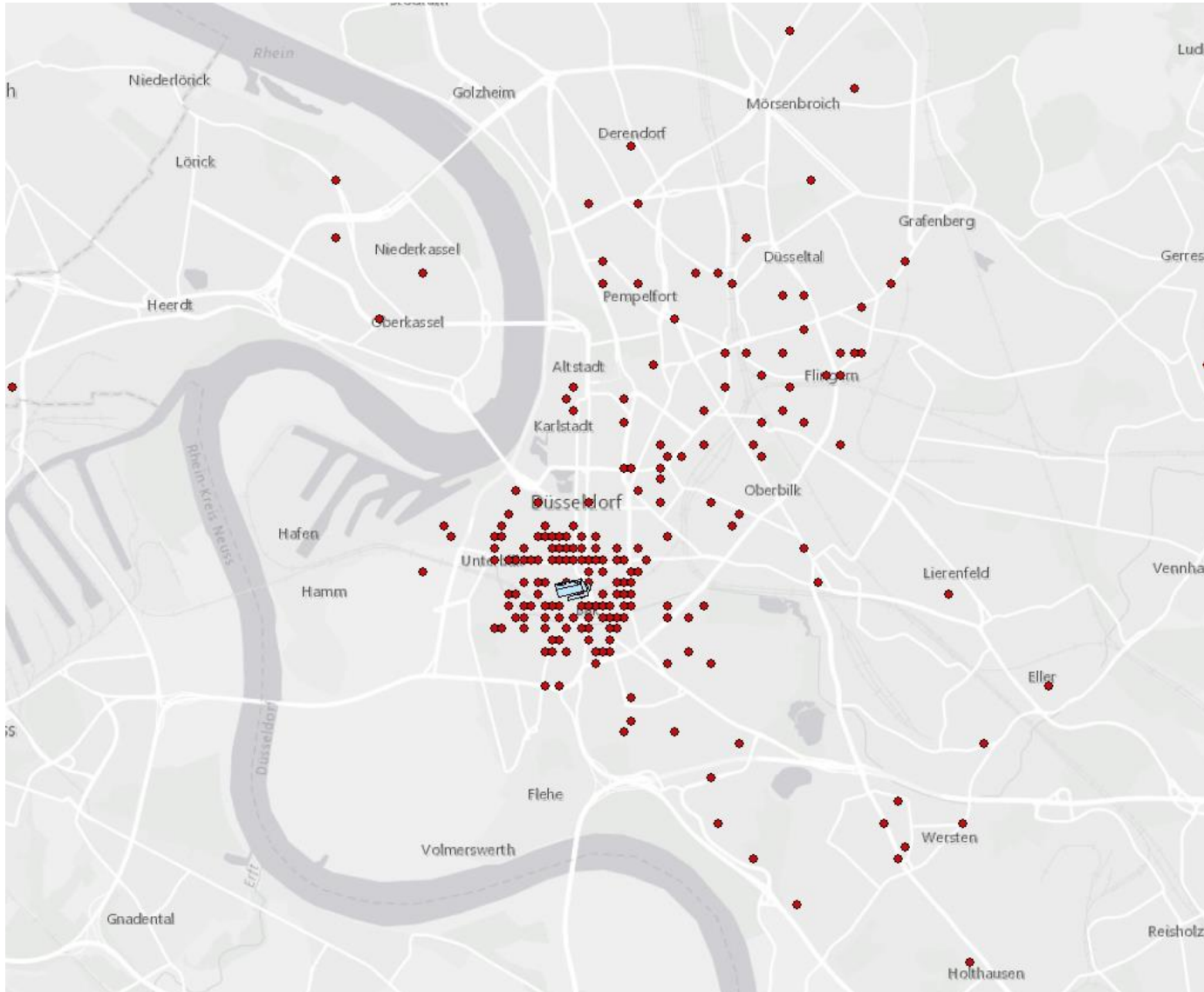
- » A geofence is important, to identify potential visitors of Arcaden
- » Unique Users who were not spotted inside Arcaden but within the geofence may not have used their mobile device inside
- » 368574 Data Points – 1000 unique Users (only App Traffic)

Arcaden Düsseldorf – All Users found within a 500 m Geofence



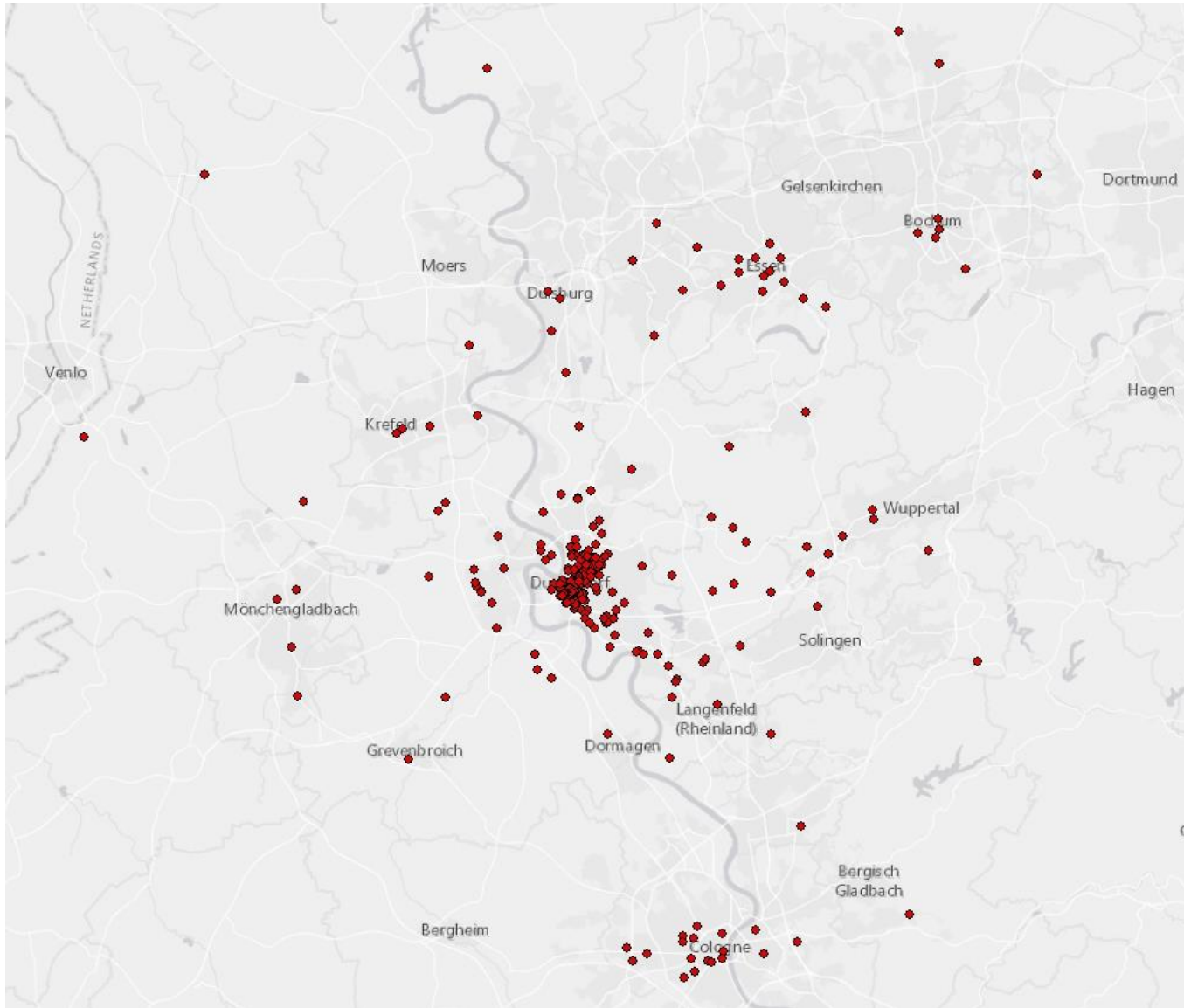
- » Here we can identify the different cities from where Unique Users were spotted within the 500 m geofence
- » Users can be located along with roads/highways, but they are considered noise in the data set and can be cleaned out.

RESULT: Homebases of approx. 1000 Unique Users



» Homebases in and around Düsseldorf

RESULT: Homebases outside Düsseldorf



» A pattern from the region

Future works

What else can we find out from this data?

» What is the movement pattern of a unique user?

» Is he coming from work?

» Is he going to homebase?

» Where else does he shop?

» Where does he go on a given day?



Correlation (Supermarket and Fitness Studio)



Transformed to a target group

» How long is a unique user in the Shopping Mall?

» How often is a unique user in the Shopping Mall?

» **Patterns are good, recurring patterns are even better!**

Some statistics

- » Max. views per user: 8827
- » Min. views per user: 2
- » Average views per user : 402

Distribution of 1000 unique users within 500 m geofence.

Weekday	Total Users
Monday	264
Tuesday	226
Wednesday	41
Thursday	144
Friday	64
Saturday	166
Sunday	94

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Some of our Clients





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