**EW-Shopp**: Supporting Event and Weather-based Data Analytics and Marketing along the Shopper Journey

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Starts on Jan 1\textsuperscript{st} 2017, ends on Dec 31\textsuperscript{st} 2019; **NOW: M27**

Total cost $\approx 3.6\text{M}\text{\euro}$ - Total funding $\approx 2.9\text{M}\text{\euro}$

This project has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement No 732003.
Business Cases & Pilots

- **Weather-aware widget**: enrichment of purchase information for customers of eCommerce platforms
- **Category and marketing optimisation software** ecosystem with weather and event-based sales predictions
- **API and decision-making system** for resource allocation in CRM contact centers with weather and event-based predictions
- **Scout+**: dashboard for location intelligence based on weather and seasonality trends
- **Weather-aware scheduler** for digital marketing campaigns in search engine platforms

Consortium: 7 companies + 3 research organizations
Business Cases & Pilots: Example

300K campaigns in 74 different countries bidding over 2B keywords, daily

Figure 12: Correlation between German national handball team matches and online digital indicators in the "SportFitness" category.

- Weather-aware scheduler for digital marketing campaigns in search engine platforms

Consortium: 7 companies + 3 research organizations
Approach Overview and Technologies

Corporate Data

Weather Data

Events APIs

Weather APIs

Linked Geo

Linked Products

shared systems of identifiers

enrichment

DATA INTEGRATION LAYER
Grafterizer + ASIA

ANALYTICS
QMiner

VISUALIZATION
Knowage

CONSUMER JOURNEY ANALYTICS

SEMANTIC PRODUCT DATA

LOCATION INTELLIGENCE

DIGITAL MARKETING CAMPAIGN OPTIMIZATION

SEMANTIC PRODUCT DATA
SW-related challenges…

Event-based predictive analytics combining structured and unstructured data

- Data harmonization
- Volume and variety of data (300K campaigns in 74 different countries bidding over 2B keywords, daily)
- Dealing with large-scale event data

…and Contributions

Grafterizer+ASIA: tabular/semantic data transformation tools with human-in-the-loop table annotation

- End-to-end scalable semantic data transformation and enrichment tool
- Layers of intelligent components (entity reconciliation, schema alignment)

Weather and event-based predictive models for Commerce, IoT, Digital Marketing, CRM

Check our ESWC 2019 tutorial online: https://ew-shopp.github.io/eswc2019-tutorial/
EW-Shopp & The Semantic Web Community

What we offer

• Tools
  • **Grafterizer** + **ASIA**: a semantic-based and UI-powered open source tool for table manipulation, annotation and enrichment of large volumes of data (“OpenRefine made more scalable and smart”)
  • **QMiner**: a library for efficient training and deployment of predictive & descriptive analytics
  • **ABSTAT**: a DIY knowledge graph summarization/profiling tool (profile using a web interface)

What we’d like to get

• Tools
  • Third-party table annotation services plugged into ASIA (bring your smart algorithms into our tool)
  • Third-party reconciliation services and enrichment services, to make your data usable as “enrichment data” by third parties
  • Spatial information hubs (resources that interlink across different spatial identifiers)

• Use cases
  • Data enrichment use-cases
  • Event and weather-based analytics use cases
Visit our data blog at www.ew-shopp.eu/data-blog!

Get in touch with us at

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EW-Shopp H2020 Project

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