Applied Socio Economic Assessment using web based tools

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About the application

Decision making process for the Socio Economic Assessment of MUOP on different Mermaid Sites

- Web based analytics platform
- Open Source Technologies
- Can take advantage of cloud based technologies

Common practice shortcomings

Disparity of data and multiple non comparable methodologies

- **Multiple Stakeholders**
- **Multidisciplinary Project**
- Lack of ubiquitus language
- Manual data handling
- Manual assessment with industry standard packages for commercial products
- Non comparable methodologies (Data collection, data cleaning, data analysis, results interpretation)

Application advantages

Streamlined robust methodology

- Formalized language that enables correct workflow from data collection to results production and interpretation
- Automated assessment
- Cost saving
- Faster analysis
- Extending data analysis ability to a larger and / or more refined parameter space

Application extra features

Immediate comparison of scenarios

- Automated parameter comparison
- Capability of producing alternative scenario with / without Socio – Economic Externalities
- Clear user friendly workflow
- Techical & Legal Feasibility assessment / Environmental Impact Assessment interactive questionnaires

Future work

Expansion to

- Other projects with different Socio – Economic Activities
- Different domains
- Different geographical areas

Automated data preprocessing

Performance optimization

Online functionality with connection to external data repositories

Integration with MADgIK software

AITION : Advanced analytics platform

DCV: Data cleaning and curation

EXAREME / MADIS: Scalable cloud based data flow processing

Web Application demo

Watch a video demonstrating the application

CASE STUDY: ATLANTIC

ATLANTIC SITE FACTSHEET

Geographical location	Atlantic Ocean, north of Spain
Surface area of study site	100 km²
Offshore distance	3 - 20 km
Depth	50 - 250 m
Substrate	mix of sandy and rocky seabed
Water temperature	10 - 20°C
Max. tidal currents	1.5 cm/s
Wave heights	Mostly < 6 m
Mean wave energy potential	20 kW/m on 50 m depth
Average wind speed	7.5 m/s