



Scale model demonstration of PEI

PIXEL CLOSURE EVENT

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Reminder of what PEI wishes to accomplish

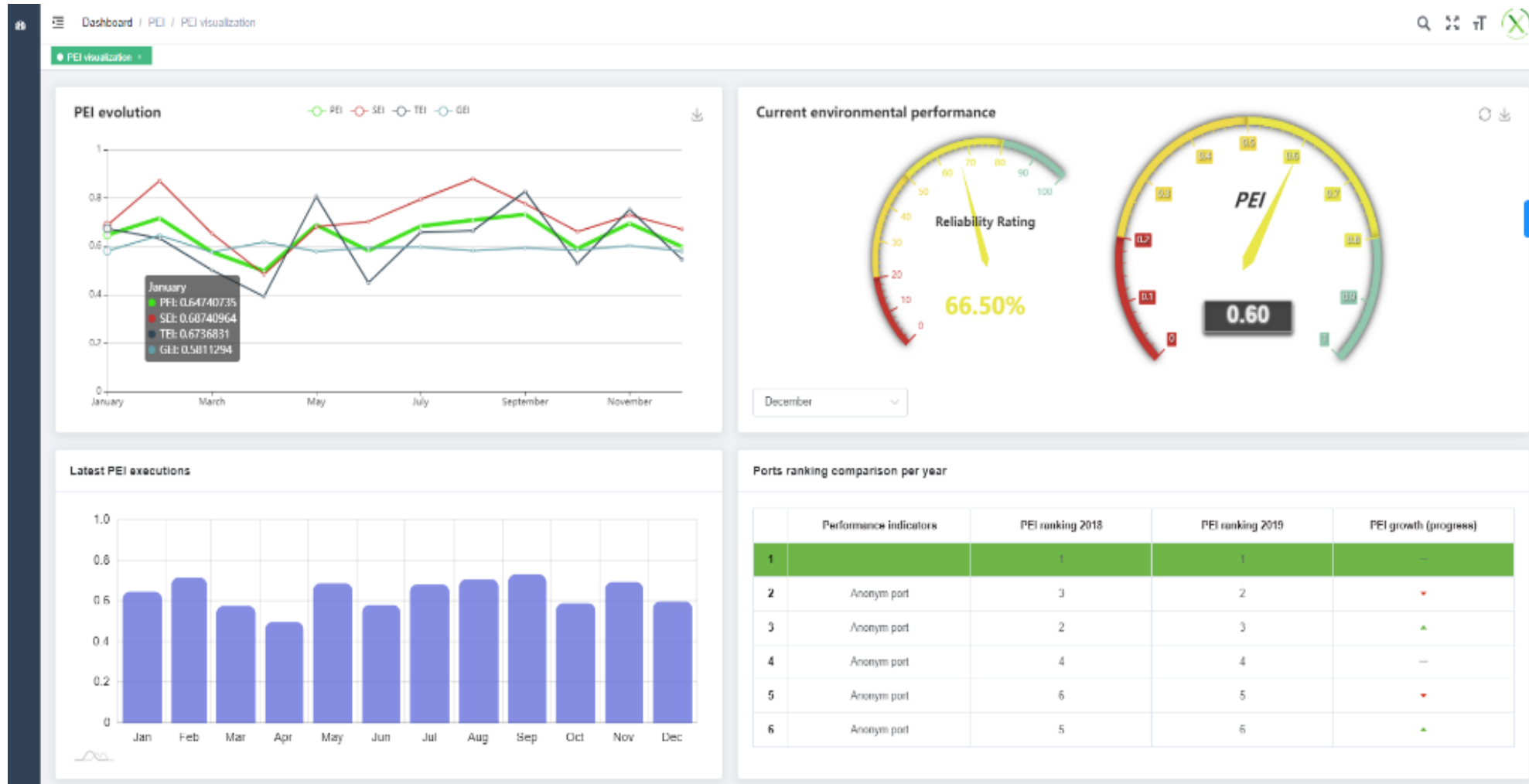


- Towards the Port of the Future: increasing environmental awareness, realising the need to (i) monitor and (ii) reduce the impact of the port. Most TEN-T ports are interested on measuring and improving the impact but the lack of standard, references, solid benchmarks is hindering their application.
- Quantifying the environmental performance at the port, the PIXEL-PEI approach:
 - Via a composite indicator (PEI)
 - Divided in sub-indexes categorised per type (waste, air quality...) and origin (terminal, ships...)
 - Relying on mathematic tools for normalisation, weighting and aggregation.

• A meaningful user experience



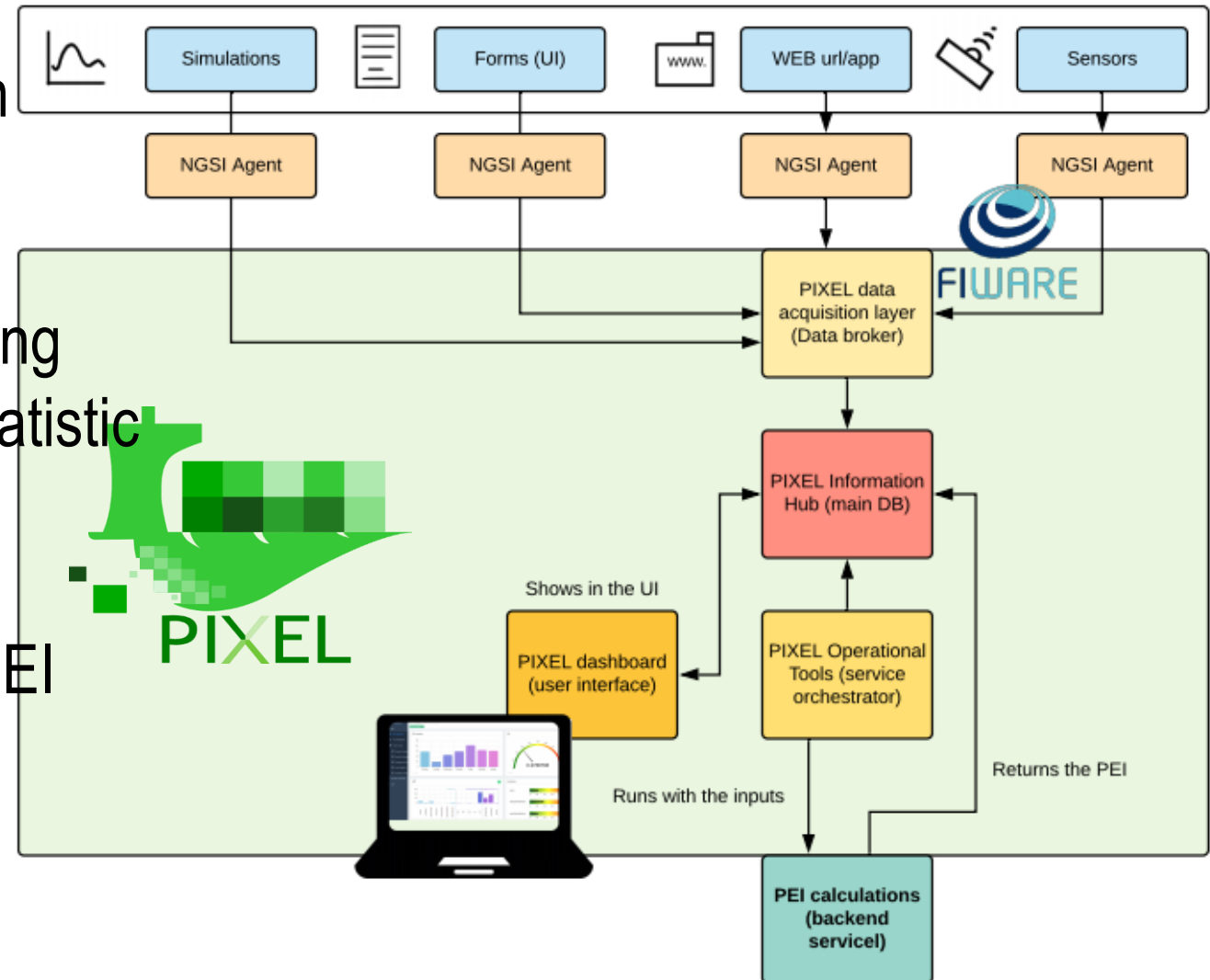
Port Environmental Index meaningful experience



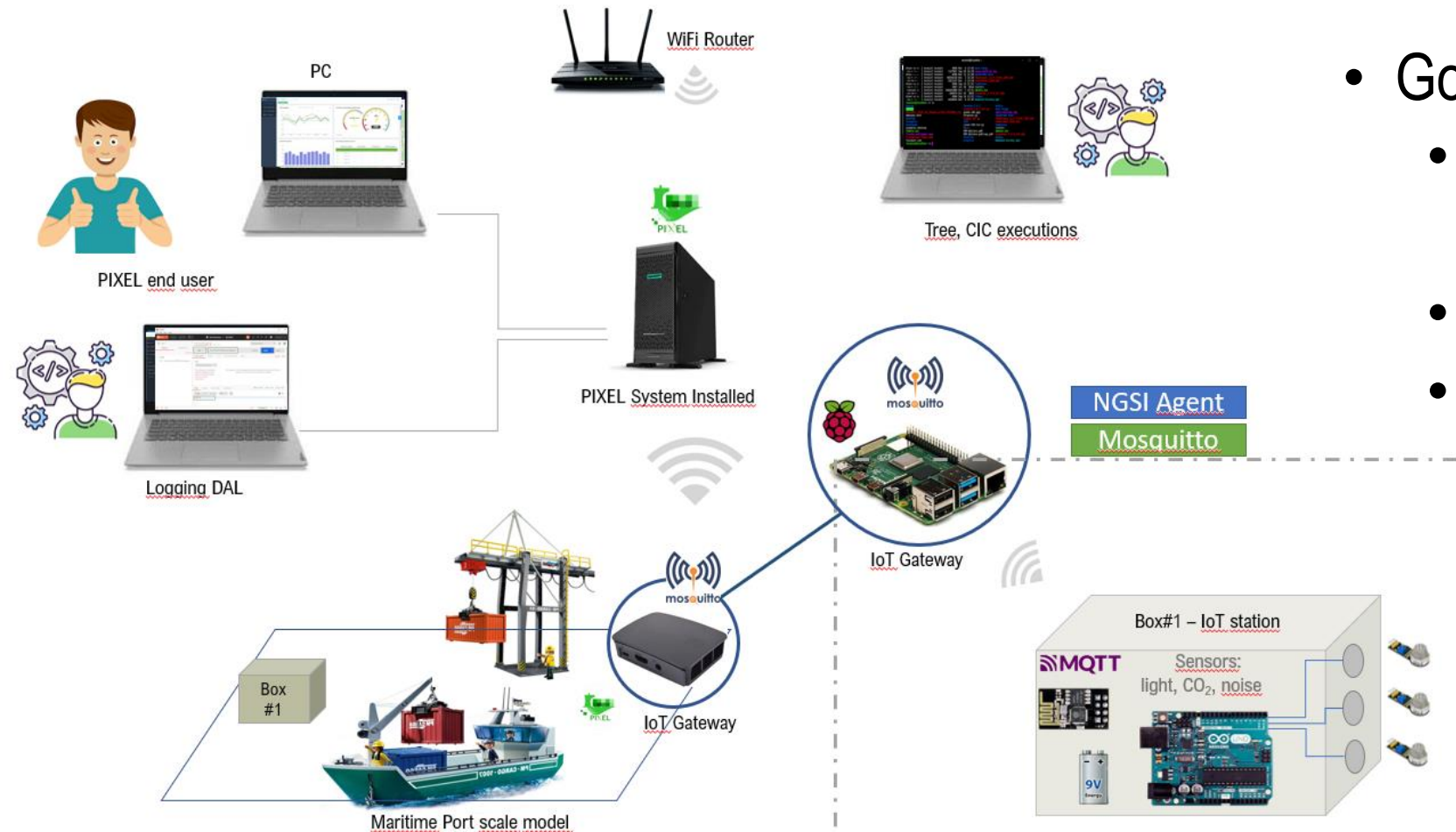
Technology behind the PEI



- Real time IoT sensors combined with other data acquisition methods
- Normalization, aggregation, weighting procedures established according to statistic studies and collaborative design
- Virtualization of model execution (PEI as a model within PIXEL architecture)



The scale model demonstrator



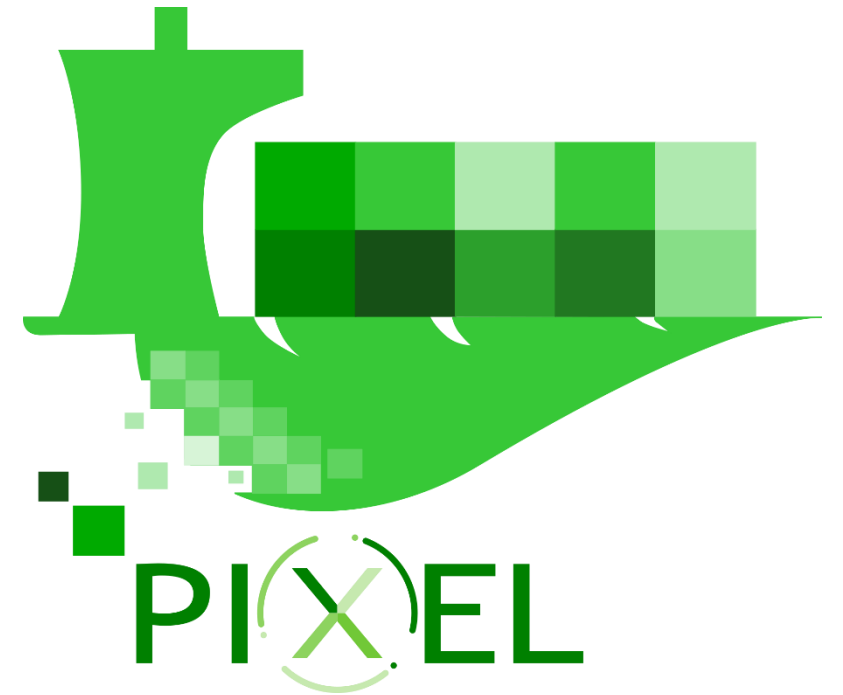
- Goals
 - Showcase a tiny maritime case flow
 - Tool to be shown: SEI
 - What is observed:
 - IoT data is gathered in real time
 - SEI changes retroactively while PIXEL Works in real time.
 - Ship Air Pollution eKPIs are related (but not drawing



The demonstration



Thank You + Questions?



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