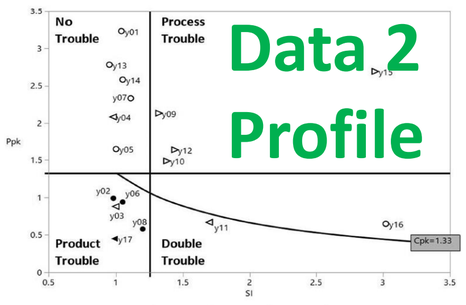
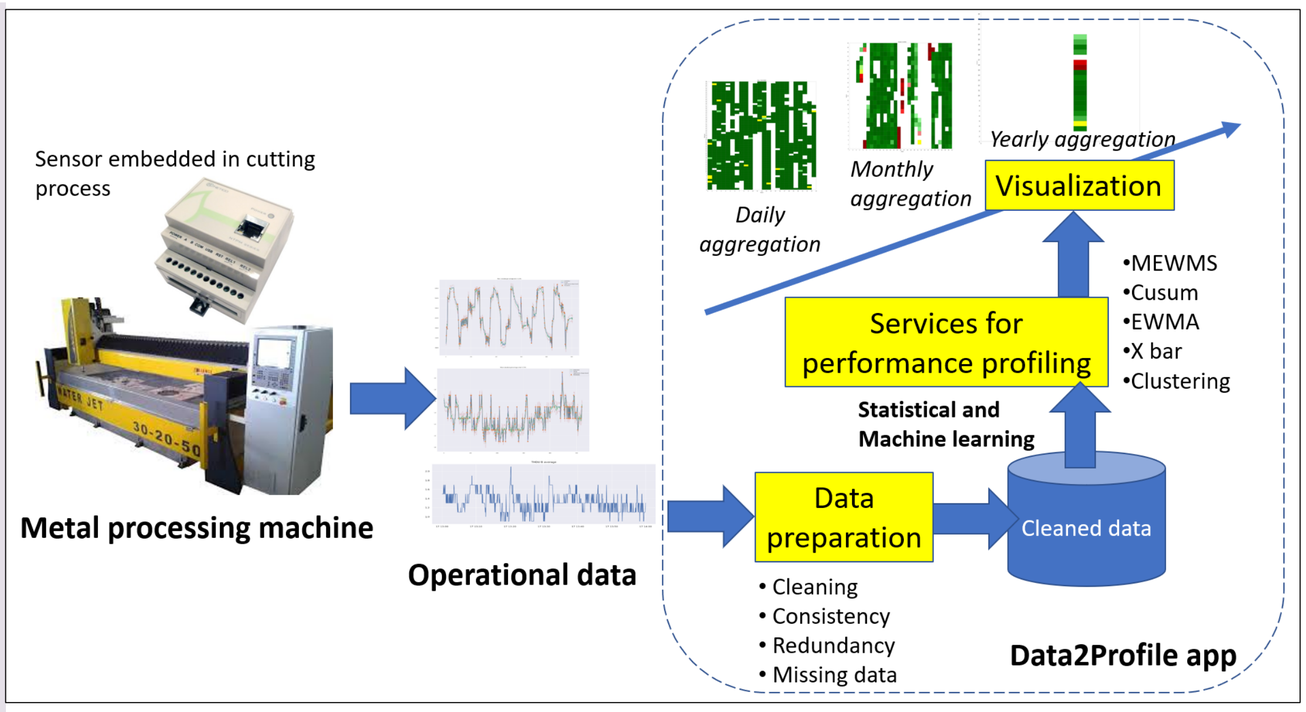


Data2Profile

Secured Service for Data-driven Performance Profiling for Metal Processing Machines

Process Performance analysis

- **Process Performance App is a client-server app that provides an automated analysis of the process characteristics. Main goal is to understand process characteristics (like stability and capability) in order to create models of the normal process behaviour, to be able to detect some anomalies (outliers) in the process real time execution**



Features

Process Performance dashboard is comprised of two panels (tabs) which offer different views on the same results:

- **Exploration panel – offers the ability to find combination of date and parameter which would be interesting to analyze further**
- **Focus panel - offers the ability to analyze Stability results for specified date and parameter**

Benefits

- **an efficient and affordable anomaly detection in a wide set of cases related to IIoT.**
- **offers a scalable data-driven development of complex models in order to enable real-time multiparametar monitoring of processes.**
- **enable a transformation of manufacturing systems from reactive into proactive**

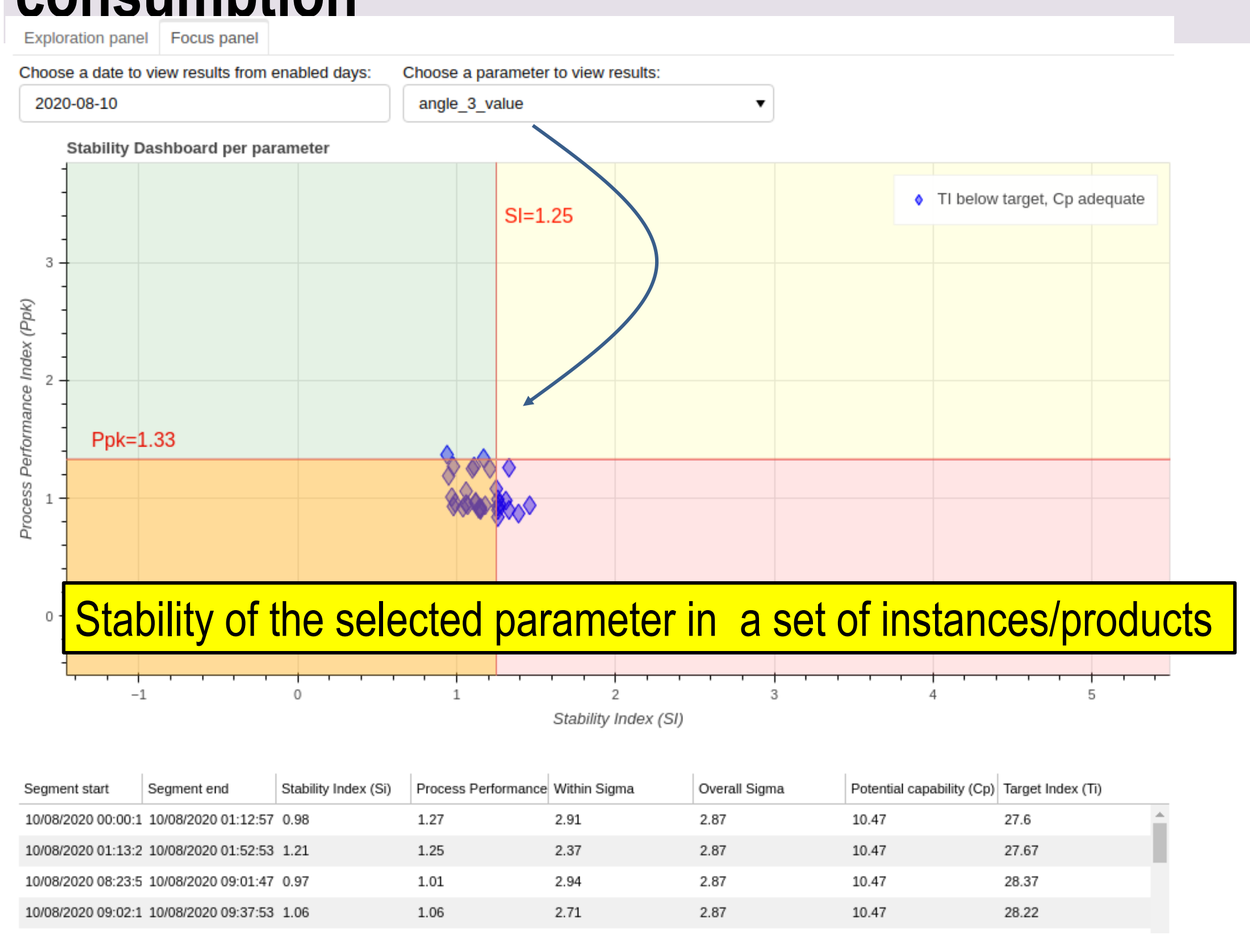
Service validation

1) Understanding the process behaviour

- the modeling approach covers the needs of a user (e.g. process owner) who wants to explore the process (data) space

2) Checking the technical performance of the app

- Reduced processing time and memory consumption



Segment start	Segment end	Stability Index (Si)	Process Performance	Within Sigma	Overall Sigma	Potential capability (Cp)	Target Index (Ti)
10/08/2020 00:00:1	10/08/2020 01:12:57	0.98	1.27	2.91	2.87	10.47	27.6
10/08/2020 01:13:2	10/08/2020 01:52:53	1.21	1.25	2.37	2.87	10.47	27.67
10/08/2020 08:23:5	10/08/2020 09:01:47	0.97	1.01	2.94	2.87	10.47	28.37
10/08/2020 09:02:1	10/08/2020 09:37:53	1.06	1.06	2.71	2.87	10.47	28.22

MARKET4.0
CONNECT & PRODUCE

Acknowledgment

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- Netico, www.netico-group.com

The H2020 MARKET4.0 project develops an open multi-sided digital platform for enabling production equipment and service providers to connect and work together with manufacturing companies. The MARKET4.0 platform enables new business, based on value-adding interactions among the production equipment and service providers and their customers while at the same time provides an open and participative infrastructure for these interaction

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