



**Z - B R E 4 K**

**Grant agreement n°: 768869  
Call identifier: H2020-FOF-2017**

**Strategies and Predictive Maintenance models wrapped around physical systems for  
Zero-unexpected-Breakdowns and increased operating life of Factories**

**Z-BRE4K**

**I-Like Machines and data value**

**How to receive and to use data from machines?**

**Document type** : Article  
**Date of issue** : 10/23/2019  
**Dissemination level** : Public  
**Author** : Serena Albertario  
**Lead beneficiary** : Holonix

***This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement n° 768869.***



The dissemination of results herein reflects only the author's view and the European Commission is not responsible for any use that may be made of the information it contains.

The information contained in this report is subject to change without notice and should not be construed as a commitment by any members of the Z-BRE4K Consortium. The information is provided without any warranty of any kind.

This document may not be copied, reproduced, or modified in whole or in part for any purpose without written permission from the Z-BRE4K Consortium. In addition to such written permission to copy, acknowledgement of the authors of the document and all applicable portions of the copyright notice must be clearly referenced.

© COPYRIGHT 2017 The Z-BRE4K Consortium.

All rights reserved.

## **DATA MANAGER**

*October 2019*

### **ANALYTICS**

#### ***How to accelerate innovation by unlocking the value of data?***

---

##### **I-Like Machines and data value**

###### **How to receive and to use data from machines?**

How to accelerate innovation by unlocking the value of data? How to receive data and take value from them? Holonix tries to answer to these questions that are coming from Italian and foreign companies' needs. I-Like Machines, an IoT Holonix suite, is thought for producers, maintainers and users that want to have real-time information about their machine functioning, to monitor them and to intervene promptly if any malfunction or alarm come. Thanks to a gateway, placed on-board customers' machines, solution is able to gather and transmit data to I-Like Machines. Once information are collected, how is it possible to have value from them? Very often, companies don't know how to manage a big amount of data. Data could generate value also for those who don't have physically the source (for example, machine producers and maintainers themselves). In order to create new procedures and rules to define corrective, preventive and predictive maintenance, it's necessary to create value from analysis of all information gathered from machines. Holonix is working at algorithms, developed applying technologies as Big Data and Artificial Intelligence, specified for a model machine or a single machine, to define rules to predict breakdown, malfunctions, etc.

How this represent value for several types of companies and operators?

Machine producers could monitor more than one machine, having a fleet management system. More machines are connected, more data are gathered and it's possible to speak about big data. Each machine is inserted in the system with a detailed of each characteristic and each geo-location. These details enable a monitoring in time and space of machines even after their sale. Producers could know their machines behaviour, registering defects to improve the product itself, supporting also user in maintenance activities.

Users interact with I-Like Machines, it's possible to register all maintenance activities and track what happens during production to monitor what could interact with production lines functioning.

Maintainer tracks corrective, preventive actions and with data gathered work to predictive maintenance.

Holonix experience in this sector is growing thanks to his participation to several European projects. In ZBre4k (<https://www.z-bre4k.eu/>) project, main objective is a platform creation about predictive maintenance where decrease failures, unexpected events and extend production systems duration. Thanks to several case of study, represented by three European companies: Gestamp, Spanish automotive components producer; Philips Holland and SACMI, an Italian company producing machine to produce pottery, beverage, packs, etc., Holonix has the possibility to test and improve day by day his I-Like Machines suite. New functionalities have been introduced to answer to maintenance needs and to predictive maintenance requirements. It's necessary to follow methodologies as functional test, negative test, usability test, maintainability and security evaluations to define companies' KPI on which build and base interventions.

ZBre4k project enables I-Like Machine to be part of a more complex system, forefront in this sector. Holonix is able to take more know-how and competences to a continuous improvement of his solution.

I-Like Machine is an ideal solution for all companies that want to have value from data and that want to start from them an innovation process.

The original text in Italian is available at the following link: <https://www.holonix.it/i-like-machines-e-il-valore-dei-dati/>