

Production Monitoring

Open Innovation Community



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The AKUINO project **shares** methodologies, designs, systems, software and documentation sustaining development and dissemination of **Production Monitoring** projects.

AKUINO project already helps...

Production SMEs :

- Workshops, Factories, SMEs can computerize :
 - their various Quality / Safety controls (HACCP),
 - the automatic monitoring of production processes and installations,
 - the planning of input needs, personnel, equipment...



No more data encoded several times and scattered notebooks !

- Distributors may access a complete record of the controls carried out on products they acquire.
- Organizations active in Certification and Quality Assurance can use these tools for the learning and implementation of production control methodologies.

AKUINO is a free software project: you can make adaptations or integrate it with other systems and projects.

For Researchers (Universities, NGOs) :

- AKUINO also contributes to the research sector: for their different experiments, researchers can integrate automatic data collection (sensors) and the entry of all their manual observations.
- AKUINO helps academic institutions in their journey towards « *Open Science* » :
 - sharing of tools and methods: open data collection platform; modeling of controls related to scientific experiments ;
 - publication (possibly in real time) of data validated according to defined protocols ;
 - sharing of competences: horizontal synergies within the Institution (several sections reuse designs, hardware and software) and vertical synergies between partners of international projects.
- Students and young researchers can start their careers in an open and creative environment: AKUINO is already a successful place for many internships and jobs !

Sustainable Development

The AKUINO community is particularly interested in applications that support **Sustainable Development**: we want to contribute to the protection of the Environment by helping Producers to meet all the requirements that it requires.

With field based computer systems ensuring that interactions with the Environment are correct 24 hours a day, AKUINO supports the assessment of the rules to be applied and provides the means to apply them more easily and economically.

The organization of an ethical operation has significant costs. We believe that automation is essential to reduce those costs and that, through systemic thinking based on reliable measurements, it brings real benefits.

We also believe that this approach must be open, shared and based on a community.

An Open Innovation Community which contributes to the Quality of Production

Computerized production management requires solving problems beyond the offices, where interactions are made with users but also with the physical world.

The actors of Production IT are confronted with the harsh requirements of **Quality** in the sense of ISO-9126 : aim to ensure user satisfaction at the levels of **Functionality, Reliability, Usability, Efficiency, Maintainability** and **Portability**, this in an environment much more difficult than the office.

The **AKUINO Open Innovation Community** is the place for sharing skills and resources to develop components that can be reused by everyone (methodologies, designs, systems, software, documentation).

To catalyze the sharing and benefits of each of the actors, AKUINO is an open « hub » at multiple levels:

Open Source :

Software and documents are available under the « *Creative Commons* » licence with options :

1. « *Attribution* » : appropriate credit must be kept for authors contributions ;
2. « *Share Alike* » : anyone may build upon this AKUINO even for commercial purposes, as long as they license their additions under identical terms.

Open Source enables projects involving Developing Countries to be deployed without license costs, to receive support from large communities for all applied technologies and therefore, to benefit from contributions from all stakeholders.

Open Hardware :

There are electronic equipments managed by large communities and with a high level of maturity. For example, PCs in general, Raspberry Pi, the different versions of the Arduino concept... It is therefore easy to find reusable and well-proven software for those platforms. Moreover, those lineages of equipments are not interrupted because millions of users are keen to receive technical upgrades as long as they remain compatible with existing models.

Open Science :

Research funding agencies are increasingly requesting (and even paying for) open access to results, whether it is Publications (**Open Access**) or validated experimental data (**Open Data**). This evolution allows teams from different sections of an University or from different institutions to gather more easily around new projects. Previous and current research results are reusable and can be shared without more constraint than the Attribution to previous contributors (Citation).

Open Innovation :

Craft or industrial companies (or other organizations) can expand their pool of skills and share their improvements in product and software design in all aspects of Quality (ISO-9126 mentioned above).

Contributing to your Leadership

Leadership is about giving others the desire to share your goals to achieve theirs.

An open Innovation community like AKUINO is a sharing space where several Leadership wills pool skills and resources to develop better IT systems and methodologies.

We would like to know your interest in contributing and accessing the results of the AKUINO project.

I would be very happy to discuss this personally with you :

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