

Workshop at European Robotics Forum 2013

The Clearing House effect on Robotics: ECHORD from the point of view of robot manufacturers and suppliers

Lyon, France
19 March 2013
(8h30 - 10h30)

European Clearing House
for Open Robotics Development
www.echord.info




ECHORD equipment catalogue effect in European awareness of robotics industry

- Long internal discussion on types of products, financing and price strategy
- Big range of SCHUNK products in catalogue (28 Items, some with different variants)
- All categories:
 - Simple modules (eg. Sensors, Rotary Units, Linear, Axis)
 - Complex products (eg. 7 DOF manipulators, SCHUNK Dextrous Hand)
 - Complete packages (eg. “Friend”: Wheelchair with Manipulator and Sensors)
- Results:
 - Few inquiries
 - Very limited amount of sales
- Main drawback:
 - Only depreciation funded (Very limited amount of money in 18 months for capital equipment)
 - Some customers still demanding Echord price

European network of robot manufacturers and components providers

- All complex components needed for robotics can be purchased from European manufacturers
- “Components of components” from Asia or America (Gears, Motors, Electronic components)
- System integrators for complex robot solutions needed (Non-industrial, industrial service robotics)
- Cooperation between some component suppliers exist
 - Manipulator and Mobile Base

Superior Clamping and Gripping **SCHUNK** 

European Clearing House
for Open Robotics Development
www.echord.info



Industry role in consortium formation

- Extensive paper work (Reporting, Publications and proposal writing) difficult to fit in day to day business
- Proposal writing requires experience and knowledge
- Possibilities of public funding often only known if already confronted in university
- Some employees have difficulties in understanding the concept of public funding
- Decision to accept funding is not always easy for industry (IP, Patents, etc.)
- To bring in new partners is difficult due to paper work and often short time scale
- University is more dependant on external funding
- Industry partner pushes for real world solution and is necessary
- One SCHUNK Echord project with industry partners only, but experienced in funding

Industry role of experiment participant vs equipment supplier

- We try to find partners that fill caps we have in our own development
 - HW SCHUNK – SW External partner
- ECHORD is a good chance to get industry partners together
- Long Term partnerships established
- In case of equipment supplier little different to standard sales
- In the whole Echord project only once support went beyond “standard” sales.

ECHORD monitoring in comparison with Industry project management

- Product development is much more specific for such a short time frame.
- Product development and industry research is not the same.
- ECHORD found the right balance for reporting and “reduced” paper work
- For industry new to EU funding, things need to be a lot more simpler

SCHUNKs involvement in Echord

- Participated in set up
- Extensive Hardware in Catalogue

European Clearing House
for Open Robotics Development
www.echord.info



- Draft -

**Annex 2 to Call for Robotic Equipment:
Form 2: Description of offered equipment and applica-
tion suggestions**

Company: SCHUNK GmbH & Co. KG
Date: 07.08.2009

SCHUNKs involvement in Echord

“Kanman”: Develop a “KANban integrated, magnetic orientated modular mobile MANipulator”

- Develop and evaluate a localization approach based on the ambient magnetic field in the floor
- Investigate and implement safety concepts for joint work spaces
- Develop and evaluate approaches for a low-cost detection of crates
- Lasting and ongoing industrial partnership



Superior Clamping and Gripping



SCHUNKs involvement in Echord

“Kanman”: Develop a “KANban integrated, magnetic orientated modular mobile MANipulator”

- Develop and evaluate a localization approach based on the ambient magnetic field in the floor
- Investigate and implement safety concepts for joint work spaces
- Develop and evaluate approaches for a low-cost detection of crate
- Lasting and ongoing industrial partnership
- Completely industry driven
Push and Pull !



Superior Clamping and Gripping



SCHUNKs involvement in Echord

Flexprass: Flexible Precision Assembly with Light Weight Robots

- a hybrid precision assembly station for laser optics based on
 - lightweight robot technology
 - and ultra-precise micromanipulator technology,
 - integrated machine vision
 - intuitive operator interface.



SCHUNKs involvement in Echord

Participation in North American Lab Tour
CEO Henrik Schunk participated



Superior Clamping and Gripping



European Clearing House
for Open Robotics Development
www.echord.info

