

A new report and guideline to optimize smart systems penetration into the diagnostics and food/ beverage markets

With the emergence of molecular biology, POC solutions and an increase in demand for industrial testing, diagnostics is a dynamic field. With their uniqueness to provide an increase in intelligence and autonomous solutions, smart systems technologies are well-positioned to bring breakthrough innovation to the field and reinforce European competitiveness.

The more attractive the opportunity, the greater the challenges and barriers are for innovative solutions to enter the diagnostics field. The high market concentration and tight regulation explain why there has been a low penetration rate of smart systems technology in the field.

However, over the last three years the situation has evolved. With the acquisition of smart systems-based companies like I-Stat and Biosite by leading diagnostics companies, new products are now entering the market that offer innovative new tests and cutting-edge solutions for better patient diagnoses and management. For example, the "Tear Lab solution" enables the accurate and rapid measurement of biomarkers in tears at the POC, which has never been done before. Also, in the food and water quality control and testing field, Pall Genesystem's Genedisc is growing in popularity

and further demonstrates the added-value and market-readiness of microfluidics technologies. This is only the first step -- smart systems are poised to bring widespread innovation to the diagnostic field, with intelligence and autonomous functions that will generate new applications and business.

The European Commission is willing to support Europe's competitiveness in this field, as evidenced by the recent EC FP7 call in which a portion was dedicated to micro and nanotechnologies bio convergence systems. Indeed, as illustrated in Figure 1, Europe benefits from the emergence of many activities in the microfluidics and smart systems fields -- which only adds to an already broad range of competitive European clusters in the Life Sciences field.

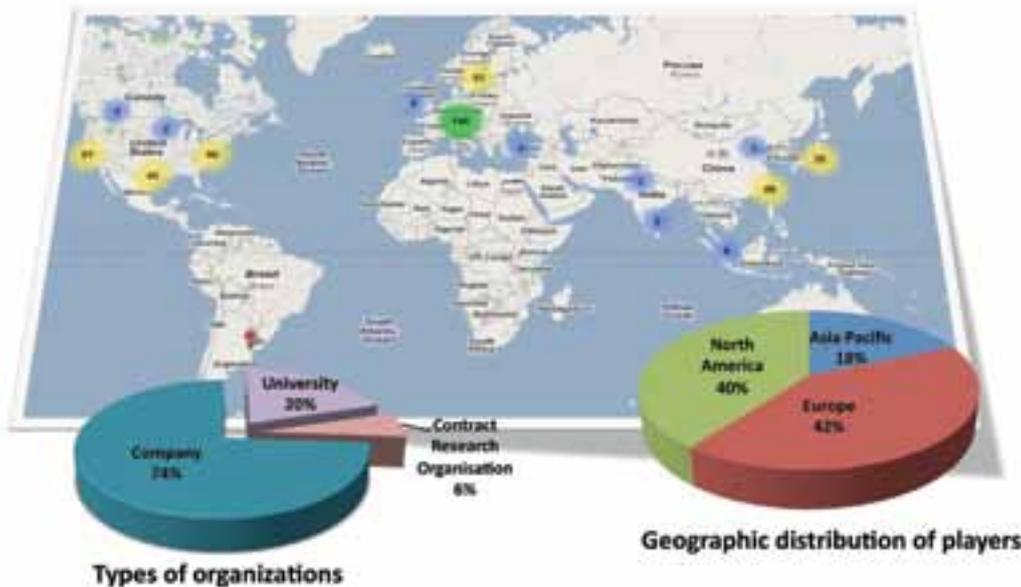
On this subject, the European Commission is supporting COWIN, an action dedicated to optimization of smart systems value creation through the better exploitation of research projects results. Through its strong actions, COWIN encourages collaboration between the smart systems community and the players who are active at the applications level -- this is a first step towards bridging the gap between technologies



Géraldine Andrieux-Gustin, COWIN coordinator, Yole Développement

Geographic distribution of microfluidic players (researchers, suppliers,...)

(Emerging Markets for Microfluidic Applications report, Yole Développement, 2011)



Strong growth, from 420 players identified in 2009 to 620 in 2011.

"Smart systems are poised to bring widespread innovation to the diagnostic field, with intelligence and autonomous functions that will generate new applications and business," says Géraldine Andrieux-Gustin, COWIN coordinator.

and market. COWIN also works hand-in-hand with researchers and companies active in the smart systems field to support their diagnostics market penetration by helping them find the right process, partners and resources.

One example of this support is COWIN's forthcoming launch of a new report that presents the main challenges and barriers to bringing miniaturized smart systems to IVD and Food/Beverage markets. This report, created by Yole Développement (which coordinates COWIN's actions), contains added-value information for researchers and companies who want to better understand the diagnostic field's trends and needs. The diagnostic field is very fragmented, and a sound analysis of the right applications to address is required. The report also highlights common beliefs and reinforces the tangible benefit that smart systems offers to different diagnostic markets. Also provided are examples of specifications to better address the food and water quality market, in order to better support smart systems' penetration in this emerging and growing market. Regulatory constraints are also addressed in the report, and a solution is proposed to consider regulation as a driver and not just a barrier.

The report can be used as a guideline to drive R&D projects, and also for building a concrete business plan to ensure that technologies and solutions developed will fit a real market need.

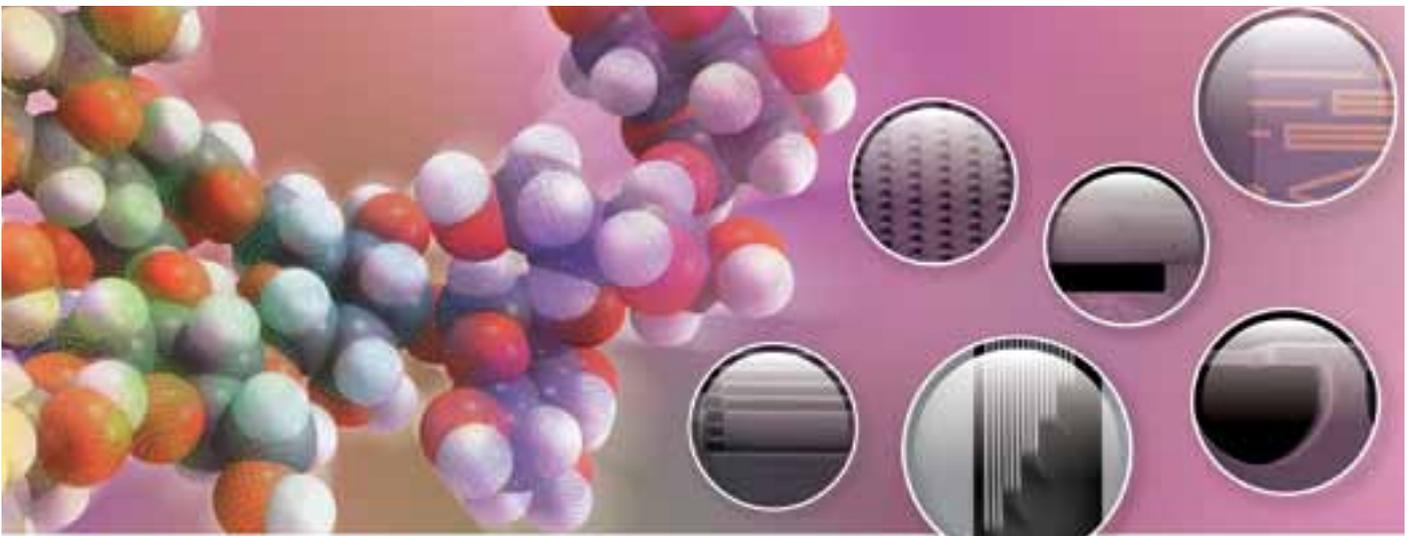
The report is available on COWIN's website: www.cowin4u.eu. If you wish to optimize the commercial exploitation of your research project results in the field of smart systems, do not hesitate to COME to WIN!!!

- Register at www.cowin4u.eu and gain access to:
- The report and the key information it contains.
 - COWIN customized matchmaking events where you'll have the opportunity to meet key partners that COWIN will identify for you.
 - A host of other resources to help drive your R&D projects efficiently.

About COWIN

COWIN is a support action launched in 2010 under the 7th Framework Program of the European Commission in order to strengthen European competitiveness in Miniaturised Smart Systems. COWIN is dedicated to the commercial exploitation of advanced technologies developed within the framework of European collaborative research projects.

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