The Open Microprocessor Initiative (OMI) was an EC-funded activity that sponsored over 150 projects involving some 250 companies from 17 European countries over a six-year period from 1992. The aim was to stimulate the micro-electronics industry and encourage the use of micro-systems in product design.

OMI has involved some of the largest and longest established names in electronics such as Philips and Siemens and has helped newcomers such as ARM Ltd. to grow into world-leaders. Some of the companies it has assisted have, however, been much smaller. One such, OptionExist, is a small Cambridge-based IT design consultancy, set up by Simon Payne, Simon Rayne and Stephen Love to pursue a novel opportunity.

Their idea for a small, portable, fax machine soon won them a DTI SMART award for a feasibility study. As the project was entering its prototype development phase, the company came to the attention of ARM. ARM had been developing tools for designing ASICs (Application Specific Integrated Circuits) within OMI and was looking for applications to test the tools with. ASICs have revolutionised the electronics industry and OptionExist got a cost-effective way of building the prototype, which they subsequently licensed to Fujitsu, in exchange for the user-feedback they were able to give ARM.

Buoyed by that success, and with a healthy revenue stream coming in from commercial design consultancy, the directors began to look at building a next generation of mobile device, smaller and with much higher resolution.
They turned again to ARM for assistance and were invited to join a follow-up OMI project, OMI/ATOM, as full partners. As Simon Payne recalls, participation in an international research consortium meant a steep learning curve and a great deal more bureaucracy than the relatively straightforward SMART project. He recognises, however, that collaboration on a European scale allows smaller companies to engage in relationships and developments that they would be unable to undertake otherwise.

Much of OptionExist’s commercial work is hidden behind non-disclosure agreements and Simon Payne attributes a lot of the company’s credibility as a design consultancy to the demonstrator that they produced within OMI/ATOM. It is still in use today as an example of a complete development that the company has taken from concept to manufacturing. The company is now 15 people strong, with a seven figure turnover and a client list that includes ARM, their original collaborators, Mitsubishi and AT&T, for whom they have recently developed a broadband phone.

The directors acknowledge that they have learned a lot about themselves and their strengths and weaknesses through the collaborative projects they have been involved in. Although they would always recommend SMART as a first port of call for a fledgling innovator, Simon Payne acknowledges that many companies will develop longer-term business models that are more likely to succeed in Europe. His advice is to invest in research into the markets that you are gaining access to and back-up your commitment in the technical resourcing of a project with the marketing effort necessary to exploit the credibility gained from involvement with key European players.