

# A DEMAND DRIVEN INNOVATION MODEL AND CONSUMER ENGAGEMENT



Dr Suzanne King



Mark Dyball

Directors of People Science & Policy Ltd

Two articles in the Summer 2010 edition of *Science in Parliament* made us pause for thought. Both, we think, are linked, although perhaps the link is not immediately apparent. The articles are: *A Gap in the Innovation Market* by David Dent and *Consumer Engagement with Emerging Technologies* by Rob Reid.

David Dent is commenting on the supply driven model of innovation in the UK and Rob Reid on the need for more public engagement early in the development of new technologies. Bringing public engagement into the innovation model could be the way forward for those concerned that innovation models do not consider demand and for those

who want to see the public more engaged with research.

Since the House of Lords report in 2000 *Science and Society* the concept of 'public understanding of science' has been derided and the focus has been on two-way dialogue between policy-makers, scientists and the public. In 2004 Demos published *See Through Science* which championed 'upstream engagement', that is, researchers and policy-makers engaging with the public about new scientific developments as technologies emerged, rather than waiting until they were close to market. Survey work from that time suggests some public support for this approach. In the Office of Science and Technology's 2005 nationally representative survey of public attitudes to science (*Science in Society Findings from Qualitative and Quantitative Research*) 79% of respondents agreed that "I would like more scientists to spend more time than they do discussing the implications of their research with the general public" and 74% agreed that "We ought to hear about potential new areas of science and technology before they happen, not afterwards".

'Upstream engagement' was largely seen within a policy context and was described as having the potential to inform decisions about the nature of developments before "entrenched or deeply polarised positions appear". This tends to see public engagement as a tool for averting conflict through early conversations between researchers, policy-makers and the public about research priorities.

Nevertheless, some researchers

resist the drive for more public engagement. Our survey for the Royal Society (*Factors Affecting Science Communication*, 2005) found that many cited the lack of time and competing pressures as the main barrier. Some researchers fear the public will veto research in their field, although such a specific veto seems unlikely. This year Paul Benneworth's *review of the evidence base surrounding the value of public engagement by scientists* for the Science for All Expert Group (convened by BIS to help develop the science and society strategy) refutes this possibility. He states that "there is no reasonable prospect of encouraging engagement which significantly impinges on scientists' autonomy to pursue interesting avenues". Indeed, DIUS's more recent nationally representative survey of the public published in 2008 (*Public Attitude to Science*) shows that there is public support for basic research, with 86% agreeing that "Even if it brings no immediate benefits, scientific research which advances knowledge is necessary and should be supported by government".

Perhaps a more realistic fear, given the way that plant science was affected by the GM furore of a decade ago, is a loss of a broader licence to operate. Benneworth suggests that "a little more engagement, of the sort already being undertaken, but more effectively organised, can help to secure science's licence to practice in these increasingly sceptical times".

Despite the recommendation in *Science and Society* that "... direct dialogue with the public should move from being an

optional add-on to science-based policy making and to the activities of research organisations and learned institutions, and should become a normal and integral part of the process", public engagement remains something of an add-on. However, *Factors Affecting Science Communication* shows that many academic researchers believe that public engagement positively helps their research. Over half (53%) agreed that public engagement could help researchers make new contacts and only a fifth (21%) agreed that there were no personal benefits associated with public engagement.

Based on this positive response we see a role for public engagement in the innovation process, not to avoid conflict, but to promote better, more usable, satisfying products that are commercially viable. We suggest that engaging the public in innovation as partners could update and improve our innovation model and ensure that market pull complements technological drive. After all, market research is increasingly facilitating the co-production of products that are nearer to market with the public and new commercial products and services have long been tested with potential consumers. Such co-production is becoming ever more the norm in service delivery, especially in healthcare environments.

We conclude that the innovation process could benefit from public engagement, not only in an upstream fashion to "promote and protect" public interests as Rob Reid describes, but downstream as a potentially crucial element in David Dent's "market-led" innovation model.