

Summary of keynote speech to the French embassy: Jonathan Kestenbaum, Chief Executive NESTA

28 January 2010

A visiting professor is invited to lecture Chinese students for an hour. Every 15 minutes the Chinese professor translates just one sentence. Amazed by this the visitor asks his counterpart what he said. The comments went, "he's not saying anything new"; "he's still not saying anything new"; "I don't think he's going to say anything new" and finally "I was right, he didn't say anything new". In a room full of industry leaders and technical experts, that seems an appropriate starting place.

2009 has been a challenging year for the UK: the recession is the most serious in 70 years. NESTA is leading work around how best to stimulate an economy over dependent on financial services and increasing property prices, so that the UK is able to emerge from the recession in a position of strength. At the heart of our work has been a relentless focus on growth, and how to turn the UK economy into an innovation economy.

However, this recession is different to anything anyone has known previously – the world is more connected and globalised. In a new look economy NESTA research demonstrates the indisputable fact that innovation drives growth; that innovation is happening in new ways and across all sectors; and that a re-balanced economy based on innovation offers significant growth potential. The key challenge is how this understanding is translated into public policy, building on the significant achievements made over the last decade by Lord Sainsbury.

NESTA research underlines the indisputable fact that innovation drives growth. Innovative firms, those that introduce new products and services, grow significantly faster, enjoy higher turnover and create above average employment. Firms introducing a new product between 2002 and 2004 saw average employment growth of 4.4% during the subsequent 3 years, only 2% for non-innovators. Innovators saw 10% growth in turnover only 5.8% for non-innovators.

Supporting high growth firms to generate wealth and jobs is vital if the UK is to become a more resilient and robust economy. The analysis reveals that just 11,500, or six per cent of UK businesses with 10 or more employees are classed as 'high-growth' companies. This small number of businesses has generated around half, or 54 per cent, of new jobs (1.3 million out of 2.4 million new jobs created by all existing businesses with 10 or more employees in the last three years).

NESTA's Innovation Index demonstrates how large a contribution investment in innovation has made to the UK's economy; the private sector invested £133 billion in innovation in 2007 or 14% of private sector GVA. Innovation was responsible for two-thirds of the UK's private-sector labour productivity growth 2000 to 2007, increasing productivity by 1.8% per year. This compares favourably with the best data available for countries like France and Germany, and similar to the US levels.

R&D is an important element in the innovation process, but the chances of success are enhanced when R&D is complimented by the processes and people who develop innovative products, services and new business models. R&D spend represents only 11% of UK investment in innovation. Innovation is collaborative and doesn't follow a linear model of scientific breakthrough to commercialisation, rather it is a network of interactions. However investment in skills, product design, organisational innovation and customer insights remain hidden from most existing metrics and consequently government and corporate policy.

Growth is dependent on innovation in a range of sectors. The biggest gains will be found in those sectors that draw on the UK's existing strengths and help meet long-term challenges: the low carbon economy and environmental services, biotechnology services for an ageing population and the creative industries. In the UK we have the largest creative industries sector in the world relative to GDP. Creative industry companies make up 6.4% of the economy and have been growing at 4% a year between 1997 and 2006, compared with 3% average for the whole economy. NESTA projects that the sector will grow 4% over the next 5 years (double the rate of the economy), generating £85bn in value added by 2013 (up from £59 billion). The UK's life science sector – comprising biotechnology & pharmaceutical and healthcare & medical technologies – is the largest in Europe and second globally only to the U.S.

Recession is an excellent time to invest in innovation; not least because opportunity costs are low. This is reflected in the finding that 70 percent of the companies in the Booz Allen Global 1000 survey plan to maintain or increase R&D outlays. Companies that are bold and continue to innovate in tough times are maintaining an advantage, such as Rolls-Royce.

At NESTA we know that innovation emerges from unlikely sources and in a variety of forms. Frank Whittle, the inventor of the jet engine, said that his passion for art stimulated his passion for engineering. I finish on a story about how innovation allows us to turn a difficult situation to our advantage.

In 1913 Communist Russia a group of revolutionaries sat in jail whilst their farms remained untilled. Understandably, their wives wrote to them inquiring as to when and how they would harvest the crop. One revolutionary wrote back that he would tend the land, but for now she must not dig up anything, as the field held a secret weapons cache. Within a week the Russian secret police had tilled the entire plot and harvested the crop for them.

Innovation is collaborative and a contact sport. The challenge for public policy is creating the best conditions and networks to connect up our world class research base with entrepreneurial finance and high growth firms. That's where the great potential for the UK lies. With high-tech competition from across the world, our future as a global economic player depends on creating the best conditions for innovation. Anything less would be a missed opportunity to build the road for recovery out of recession.