

Advancing Enterprise 2005

4 February 2005

Speech by Sir John Rose, Chief Executive, Rolls-Royce at Advancing Enterprise 2005.

Advancing enterprise: creativity and innovation.

Thank you very much, Patricia, and good afternoon ladies and gentlemen. I thought you were going to refer to us as the most successful old economy company, but I'm glad you didn't. We've been asked to discuss innovation and creativity in a context of enterprise, and I'd like to start with an assertion and then outline what I consider to be the sort of key conditions for success, and then make a couple of observations and end with a question which I hope will add something to the debate later.

The assertion is that innovation and creativity don't exist in a vacuum but flourish in an environment where there's a high probability that the output of that innovation and creativity will result in added value and wealth. Darwin made a similar observation about animals in the Galapagos. It seems to me that the conditions that need to exist, and there are a number of those conditions that will influence the probabilities, particularly in manufacturing, really come down to three in particular. Firstly: strong education. By this I mean the availability of enough well educated people to make a difference in the sectors that we believe will drive growth and wealth creation. Today a lot has been said about IT, engineering, pharmaceuticals, genomics, etc. In that context, I think we in the UK should be concerned about the decline in science students in both school and university. Secondly: effective R&D. Again, much has been said today about increased investment in the science base, and that's really extremely encouraging. However in the UK's spending as a percentage of GDP on R&D, it's still below other world leaders, and in my view, we still have too great an emphasis on the R rather than the D, which is where the wealth is created, and by that I mean that science as an investment, if applications of the science generate revenue and profit. If it isn't turned into application, it's just a cost. Thirdly: good routes to market. Access to market will be crucial in prioritising R&D because it'll determine the probability of commercial success that I've talked about.

The innovations, whether they're in garages, science parks, universities or large companies, will be focused on those activities where the possibilities of commercialisation are greatest, and I'd like to make a couple of observations in the context of that, and the first one won't come as a surprise given my background. It's that large manufacturing companies in a healthy economy contribute to creativity and innovation in many ways, some of which will not always be apparent to the casual observer. In an increasingly globalised economy, large companies with substantial balance sheets, strong brands and routes to market are key in ensuring that innovation can be converted into products. It's that step, as I said, that adds to the value that creates the wealth.

A large company such as Rolls Royce influences the education system both at the school level by providing mentors and governors and work experience and so on, and at the university level where clearly we provide opportunities for employment

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and therefore influence choice. The availability of those future choices for students will influence their decisions about the subjects that they study at university. A healthy and diverse economy with plenty of opportunity is therefore crucial if we're going to encourage people to tackle difficult subjects. Secondly, through our network of university technology centres, we influence the research and technology priorities of our university partners by focusing their efforts and our money in areas that address problems to help us satisfy market requirements. By doing so, we get access to highly capable people who prefer to work in a university environment, and we leverage their capacity and the funding that goes into the universities from the science budget. The third observation is that in the rapidly globalising economy, access to market is the key attribute. Often the innovators do not have the resources or appetite for the risk that will enable them to access these markets. The aerospace industry is I think a good illustration of the general point about market access. We draw on a huge number of small and medium sized suppliers in systems design and integration, advance materials and electronics, and in doing so we stimulate innovation across a wide range of technologies.

We then focus our own strong R&D culture and proprietary knowledge on delivering the final product, and our brand scale and ability to take risk allows us to access both difficult or fast-growing markets. Of course we like to think, at Rolls Royce, that big companies can themselves make a powerful contribution to the creative process from time to time. Fourthly, large manufacturing companies which in today's world are almost invariably global entities have the ability to build their genuinely wealth-creating activities almost anywhere in the world that suits them. Today there's more choice than ever. Tom Freedman, and it's slightly odd quoting from a book that hasn't been published, but Tom Freedman will point out in his new book *The World is Flat*, that a number of factors including the ending of the Cold War, China's accession to the WTO, broader adoption of market economics and crucially developments in information technology well illustrated by Meg Whitman, have made markets and talent greatly more accessible.

The critical question I want to end with is, if we assume that Asia is the fastest-growing economy in the world, and on current trends will be the largest economy by 2030, and that has a substantial population of well-educated, aspirational and relatively less expensive employees, is the UK, that has a relatively small market, must be pre-eminent in the other aspects that make location attractive, i.e. education, R&D and routes to market, doing enough to be a compelling place for global manufacturers to locate their value added activities in the future, and are we doing it fast enough? In that context, I greatly welcome the kind of initiative represented by this conference, and appreciate the government's concern to boost innovation in the UK, and as a company we applaud the Chancellor's action in setting some really ambitious targets for R&D spending in the future. Thank you very much.

Ends.