

Doctor of Technology, h.c. Jorma Eloranta 10.10.2014

Mr. Chairman, Madam President of Aalto University, professors and doctors, ladies and gentlemen, dear friends,

For me, this is the very first time that I am speaking publicly as a Doctor. By definition, a speech by a Doctor should be wise. If that is not the case this time, the reason might be that I wrote the text before I was made a Honorary Doctor, when I was only a Master of Science in Technology.

My aim today is to contemplate what the role of education and research, is for an individual, for Finland as a country, and for mankind, education and research in particular in the area of technology.

### **First a person, the individual**

A couple of years ago, I claimed in a discussion that it does not matter what education I have forgotten in my old age. I was strongly opposed by a more knowledgeable person, who made it clear, based on certain scientific studies in the USA, that university studies have a lifelong impact on how a person analyses and solves problems. Thinking about it again, I realized he was right.

A discussion that took place at the Stanford Graduate School of Business came to mind. A group of international executives were discussing how differently people solve problems. We took a simple example: what is  $1 + 1$ ?

I would guess that most Otaniemi graduates would answer immediately: two. But when asking the same of a legal counselor, the counter question might be: "Whose side are we on?" And when a CEO challenges his Chief Financial Officer with the same question, the CFO might politely respond: "What do you want it to be?" And when asking advice on the same problem from an investment banker, the answer would be: "Most likely close to three, but if it's implemented well even more than three."

So, for an individual, education makes a lifelong difference. Education will always have a meaningful impact on how an individual experiences things around him/her. Visionary independent thinkers are always needed.

### **Nation/Finland**

For me, the fundamental idea of Aalto University was, and is, that it is a university where students and researchers of different educational backgrounds learn to cooperate seamlessly in order to understand how to create and develop new innovations and businesses. – Better university governance and definitely more funding as well were important reasons why Finnish companies decided to strongly support the founding of Aalto University.

In order to sustain economic prosperity we need innovations. Innovations are not the same as inventions. For me, innovations mean new ways of doing things and creating economic value. To create an innovation, one obviously needs various new technologies. But one must also know about branding, financing, design, customer engagement, and many aspects of leadership and management. The Industrial Internet is a prime example of a megatrend, where success demands many skills: engineering, machine building, software programming, and ITC, as well as many other elements of business.

If different areas of expertise remain in separate, closed silos, business wastes know-how and new opportunities. An internally and externally open-minded company is more competitive and better able to innovate successful new business concepts and to earn more money – and, above all, more likely to have happy customers.

Seamless cooperation between different people and organizations is a skill, which hopefully will be learned at Aalto University. Cooperation based on mutual respect is needed for the benefit of successful Aalto graduates and researchers and competitive Finnish companies.

We live in an expensive country. An industrial manufacturing company can operate successfully here only if it is able to continuously renew its offering and business model and if it can adapt its operations to the general economic conditions in Finland. Therefore, we need a steady stream of new innovations.

Professor Robert Solow received the Nobel Prize back in 1987 when he came to the conclusion that some 85% of the growth of national production is the outcome of innovations.

Finland can survive as a country with a relatively high standard of living only if and when our education and research system is competitive and well-funded. Finland needs open-minded and well-educated people, who can and want to do business to create globally successful innovations.

### **Mankind**

When visiting various countries, I have noticed that people almost everywhere want to increase their living standards but also use natural resources efficiently. One way to solve the world's sustainability and environmental challenges would be to reduce our living standards radically. I'm quite convinced that this won't happen, at least voluntarily. The only way to avoid environmental catastrophes is to find new, more effective ways to use our natural resources like energy, water, and minerals. The tools – and our hope – for a better future are research, technology, and innovations.

In a market economy, nobody can know nor decide which industry, technology, or company will be successful in the long run. Globalization has increased competition and created an enormous amount of prosperity, both in developed countries and newly developing countries. I'm certain that we will have better opportunities for balanced global development and prosperity when global trade is open. Companies in any industry can be successful if they are innovative and have a high level of productivity. In any case, global competition is everywhere and it is very demanding. Every individual, organization, and country needs to work hard to remain competitive now and in the future.

### **Ladies and gentlemen,**

I'm the only one among the honorary doctors, who was not a doctor this morning. I guess that is the reason I have been asked to deliver a speech. Juniors need to work, when the more advanced can relax. I want to express my most sincere gratitude and warmest thanks to Aalto University being granted the title of Doctor of Science in Technology honoris causa.

I'm convinced the Aalto University has had and will have an extremely valuable role in educating individuals, who will – by seamlessly cooperating – have an important role both in Finland and globally.