

TEXT OF THE INTRODUCTORY ADDRESS DELIVERED BY **PROFESSOR STEWART FOTHERINGHAM**, National University of Ireland, Maynooth, on 16 September 2010, on the occasion of the conferring of the Degree of Doctor of Science, *honoris causa*, on **NICHOLAS MICHAEL DONOFRIO**

Your Excellency, Minister, President, colleagues, and distinguished guests,

Nicholas Donofrio, former Executive Vice President of Innovation and Technology at IBM and now an IBM Fellow Emeritus is an outstanding engineer, a visionary in the field of Information Technology, an innovator, a leader and an educator.

Born in Beacon, New York in 1945, he earned a Bachelor of Science degree in Electrical Engineering from Rensselaer Polytechnic Institute in 1967 and a Master of Science in Electrical Engineering from Syracuse University in 1971. He has received honorary Doctorates in Engineering from the Polytechnic University of New York; in Sciences from the Universities of Warwick and Edinburgh; and in Technology from Marist College.

Nicholas Donofrio's name is synonymous with IBM. His first exposure to the company came in 1964 working on the development of the legendary System/360 mainframe computer while studying for his bachelor's degree at Rensselaer.

He joined IBM full time in 1967 and spent the early part of his career in integrated circuit and chip development as a designer of logic and memory chips. He held numerous technical management positions and then executive positions in several of IBM's product divisions. He has led many of IBM's major development and manufacturing teams - from semiconductor and storage technologies, through microprocessors and personal computers, to IBM's entire family of servers. He recently retired from IBM after 4 decades of service and is now an IBM Fellow Emeritus.

In this period of economic uncertainty as we look to innovation as a way forward, we have no better example than IBM under the guidance of Nicholas Donofrio. Most people, at least those of a certain age, are probably aware of IBM's reputation as a manufacturer of powerful mainframes and as a pioneer in the development of personal computers. Perhaps they are less aware that the company almost disappeared in the 1990s as hurricane-force winds of change swept across the IT landscape with software and services replacing hardware as the dominant components of thriving businesses.

IBM realized that despite its vaunted prowess, "technology was simply not enough" and that innovation was necessary in order to survive. Nicholas Donofrio was a central part of IBM's innovation strategy at this critical time.

Among the many milestones accomplished under Donofrio's leadership, IBM:

- Generated more patents than any other company for 15 consecutive years.
- Reengineered and revitalized its systems business.
- Developed leading-edge CMOS semiconductor technology.
- Developed the world's fastest supercomputers designed to help scientists unravel the mysteries of both the physical and the life sciences.
- Developed breakthrough microprocessor architectures, including Power and Cell, which are the engines for every major consumer gaming platform and a host of other computing applications.
- Developed and nurtured one of the largest and most capable technical talent pools in the industrial world.

In addition to helping save IBM from bankruptcy, Nicholas Donofrio spent a great deal of effort advancing education, employment and career opportunities for underrepresented minorities and women.

- He served on the Board of Directors for the National Action Council for Minorities in Engineering and was the Board's Chair from 1997 to 2002.
- He was appointed to the Board of Directors for INROADS, a non-profit organization focused on the training and development of talented minority youth for professional careers in business and industry.
- He was appointed by the US Department of Education to serve on the Commission on the Future of Higher Education, a 20-member delegation of business and university leaders charged with developing a new national strategy for post-secondary education to meet the needs of America's diverse population and also to address the economic and workforce requirements of the future.
- In 2006, he was named IBM's delegate to the World Business Council for Sustainable Development, a coalition of 190 companies united by a shared commitment to economic growth, ecological balance and social progress.

Nicholas Donofrio is the holder of seven technology patents and is a member of numerous technical and science honour societies. Among many prestigious appointments; he is a Fellow of the Institute for Electrical and Electronic Engineers, a Fellow of the UK Royal Academy of Engineering, a member of the US National Academy of Engineering, a member of the Board of Directors for the Bank of New York, a member of the Board of Trustees at Rensselaer Polytechnic Institute and a member of the advisory board for the Genographic Project – a research partnership between the National Geographic Society and IBM to map how humankind populated the earth.

In 2002, Nicholas Donofrio was recognized by the Institution of Electrical Engineers with the Mensforth International Gold Medal for outstanding contributions to the advancement of manufacturing engineering. In 2003, he was named Industry Week magazine's Technology Leader of the Year; the University of Arizona's Technical Executive of the Year; and was presented with the Rodney D. Chipp Memorial Award by the Society of Women Engineers for his outstanding contributions to the advancement of women in the engineering field. In 2005, Mr. Donofrio was elected a member of the American Academy of Arts and Sciences; he was presented with Syracuse University's highest alumni honour -- the George Arents Pioneer Medal; and he was honoured by CNBC with its Overall Technology Leadership Award. There are many other honours and achievements that time unfortunately does not permit listing.

The world recognises Nicholas Donofrio as an outstanding engineer, innovator and leader. The National University of Ireland also recognises him as a champion of the disadvantaged. Appropriately for someone who hails from Beacon NY, his achievements in both areas will shine long into the future. He is indeed a most worthy recipient of the highest honour of the National University of Ireland.

Praehonorabilis Pro-Vice-Cancellarie, totaque universitas.

Presento vobis hunc meum filium, quem scio tam moribus quam doctrina habilem et idoneum esse qui admittatur, honoris causa, ad gradum Doctoratus in Scientiae, idque tibi fide mea testor ac spondeo, totique Academiae.