



CIO: Enabling Innovation

Globalisation has changed the rules of the game and it takes a certain kind of person to play by them. But where do you find these people and how do you get them on your team?

Think tech and you get: Microsoft, Cisco, Amgen, Oracle, Google, Sun, Qualcomm, Apple, Genzyme and eBay – an impressive list, and all young, “born” after 1975 in the capital-rich terrain of Silicon Valley in the USA. All have undoubtedly benefitted from the U.S. innovation ecosystem that nurtures and rewards risk-taking, and according to the World Bank’s [Golden Growth 2012 report](#), American companies lead the way in innovation, especially in fast developing sectors such as technology.

Take Google, which didn’t exist in 1995: today it boasts a market capitalisation of some US\$200 billion and ranks high on the “innovation” scale. In contrast, the World Bank study says, companies leading in innovation in Europe are often older firms in established sectors where new practices have been used to develop ever more efficient versions of traditional technology.

Europe’s leading firms are increasingly relying on technology to operate their business processes more effectively and efficiently and to innovate products and services that ten years would have been difficult to imagine. You only have to think of the German car manufacturer Audi and their slogan *Vorsprung durch Technik* (Progress Through Technology) to find a firm clearly in this category.

Another company far away from the likes of Silicon

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Valley start-ups that have grown global is Ferrovial. This multinational conglomerate is focused on transportation infrastructures and started its life as a Spanish construction company. In 2008, when **Federico Flórez** was appointed Ferrovial’s Chief Information Officer, he and his team focused on controlling the costs and increasing the efficiency of technology within Ferrovial. They then moved on to operate business processes more effectively and efficiently. Today, ICT is now so integral to Ferrovial that Flórez has earned a new title, Chief Information and Innovation Officer. Speaking on the side lines of a recent e-leadership skills conference on INSEAD’s Fontainebleau campus, CIO Federico Flórez told INSEAD Knowledge, “In recent years the CIO was a technology-driven guy... [who] had to integrate technology in the company. Now the CIOs are supporting all business processes and [therefore] are transversal... and a key person to lead innovation.”

Technology leads innovation

One of Ferrovial’s core businesses is managing airports and with six airports in the U.K. alone, including Heathrow, their knowledge of the passenger experience is extensive and confirms Flórez’ commitment to innovation. Florez explains, “With social networking [you can maybe] send messages to the passengers with smart displays

showing the best products,” thus encouraging the idea to buy before they board their plane. Another “green” innovative project is the planned installation of a floor in several areas of Heathrow airport which produces energy as passengers walk on it. With billions of passengers yearly, this will be a considerable contribution to energy efficiency and demonstrates how technology can lead innovation.

Flórez explains that many non-core business processes at Ferrovial have been outsourced as he sees this as a key advantage for the company’s operational flexibility. With outsourcing, companies can focus on growth; but the more global a company becomes, the more it needs information technology, as well as specialist IT employees. And that means specialist training – the domain of policy-makers.

In Europe, the deputy head of cabinet of European Commission Vice-President Neelie Kroes, **Constantijn Van Oranje-Nassau**, believes that in Europe specifically, there is a danger of creating a “lost generation” because of a mismatch between the jobs posted and the technology skills young people are being taught. Van Oranje-Nassau spoke with INSEAD Knowledge during the aforementioned e-skills conference on campus in Fontainebleau.

One area Van Oranje-Nassau highlights is the app economy which simply didn’t exist a few years ago. He believes that bringing industry, educators and industry together is a necessity because otherwise “you continue to trail the real developments” with school and university curricula that are outdated. Quoting a McKinsey survey, which calculated that for every job lost in IT, 2.5 jobs are created, Van Oranje-Nassau says, “It’s just that they are different kinds of jobs. CIOs are looking for combinations of ICT with strategy or with security and not pure systems engineers that we’re producing at the moment.”

Europe’s Digital Agenda

Van Oranje-Nassau is also concerned about the lack of harmonisation in Europe’s systems which he sees as an area of weakness in the digital space within the European Union. “The internet domain is borderless and this is what we want to achieve in Europe - to have a borderless economy.” However, from his position within the European Commission, he is aware that barriers to trade that existed before the digital era, such as rules and language, are now being resurrected in the digital space. And yet, with Commissioner Kroes, they are all too determined to ensure Europe’s Digital Agenda is taken seriously by national governments and private industry alike. With a €7 billion European Union investment in building fixed- and wireless broadband networks, it is anticipated that the private sector will contribute

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between 15 and 20 times this amount.

“It’s really linking up... I think that’s what IT does,” explains Van Oranje-Nassau “...link up policy domains to make sure we’re moving into the 21st century where data will be ubiquitous and where most processes will have IT in them, be it in industry or in the way we govern.” Add academic intellect into the mix with public funding and private finance and you have an environment in Europe that would vie with the U.S. in terms of innovation.

“One of Europe’s strengths has been its emphasis on lifelong learning,” notes Theodoros Evgeniou, Associate Professor of Decision Sciences and Technology Management and Academic Director of INSEAD eLab. “More and more, academic institutions are helping firms and policy-makers identify critical success factor and key skills for implementing them as well as providing a range of opportunities for individuals – whether they are trying to enter the workforce or are already in it – to develop those skills.”

The changing CIO Role

As technology becomes more and more crucial to the functioning of the global economy, and through Europe creating a true single market for goods and services, it is not only government-led policy which needs to keep apace. The CIO himself (or herself!) is evolving too, moving up from the “basement” – next to the technology hubs – to the boardroom – where decisions and strategy are increasingly dependent upon technology.

Van Oranje-Nassau opines, “Looking forward, I think the CEO should have a lot of ‘I’ [Information]. The tech savviness of our leaders should be much higher, so the CIO as a separate entity is important but it will be much more integrated into the board... In the 1990s the CFO became the centre of power; today I think the ‘I’ bit is going to move into that space and it’s going to be very close to the CEO.”

As for Ferrovial, the CIIO has already found his way to the boardroom. “We decided at the executive committee level that innovation was critical for the future... you know, the CIO is very well trained for change management because we are changing everything all day... and innovation is part of a changing process. You have to change the culture, the procedures, to look for new ideas and you are changing the environment of the company so it was quite natural,” says Flórez when questioned about his title. “I think it was positive to differentiate between IT and innovation and I wanted [people] to recognise me for both functions.”

EVENT DETAILS: [e-Leadership:Skills for Competitiveness and Innovation Conference](#) was

held on INSEAD Europe Campus, Fontainebleau on 5 February 2013.

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