



The EuroCIO Executive Education Program

1 Background

It is recognized by a number of institutions (EuroCIO, universities and business schools like INSEAD) and further explored in inquiries (Harvey Nash, Deloitte) or research (Emperica) that Europe will lack thousands of highly educated people with the right e-skills coming years. In particular in ICT user organizations (as opposed to the ICT industry), using ICT to innovate and to improve the business there are today thousands of vacancies in the higher ranks. In many organizations projects are delayed or even not starting due to the lack of the right staffing. This situation will hamper the European industry to innovate and to grow, while Europe is under constant and even growing pressure of global competition.

Furthermore, it is broadly recognized in many studies that for most key Corporate Information Management (CIM) functions, starting with the CIO position itself, adequate educational offerings are lacking. Both in respect to the CIO function and for some other key CIM functions, hardly any formal education exists. Present educational offerings are not at the right level, not international, not vendor independent, not broad enough and anyway not certified by a neutral body. This observation is important in relation to the fact that ICT and subsequently CIM is becoming more and more a key success factor in every organization, requiring professional ICT people with appropriate education in all key CIM disciplines in order to provide the appropriate support to the business, both in assisting in business innovation as well in the maintenance of the many important systems.

Given the importance and severity of this problem, the EuroCIO association (www.eurocio.org) took the initiative and launched the EuroCIO e-skills Workgroup in 2009 in order to investigate and address this issue in depth. The EuroCIO e-skills Workgroup, now renamed into the EuroCIO HR Workgroup, had meetings with the academic world about these issues and came to the conclusion that we should strive to develop a innovative, tailor-made EuroCIO Executive Education offering to contribute to solving the needs of the ICT user organizations at large in Europe.

The fundamental purpose of the EuroCIO Executive Education program is to establish an educational offering:

- prepared to educate a wide range of people (from business and IT) to fill in existing and future vacancies at higher managerial and executive levels
- driven explicitly by the demand side (the CIO community) to cover the needs of the CIO and his/her organization. In essence, it is an educational program for ICT user organizations in need for professional CIM practitioners at a diversity of levels. Having said this, from the outset the program is designed such that also governmental organizations, NGOs, SMEs, ICT-industry, etc. can participate in the program. The CIO community takes an active role in the program, accepting the responsibility to drive the content of the various educational offerings according to their needs, of course in dialogue with academia. The CIO community is participating in the educational efforts by playing an active role in the courses presenting real world case studies to the students.
- aiming at the further professionalization of the CIO and his/her organization and, where appropriate striving for international (at least European) certification of the participating students, if the ongoing professionalization of the demand community such requires.
- in addition to or in cooperation with existing education in the market. As an example, for future CIOs no appropriate education could be found at MBA level in Europe. For that reason, EuroCIO started developing an own approach. As another example, for enterprise architecture education, a consultancy was found (CEISAR) already working with a number of multinationals. However, the courses

were not yet complete. Together with EuroCIO, an educational program is now developed to cover such needs

- aligned and compliant with major new developments in e-skills arena in Europe, like the e-skills program of the European Commission, in particular the e-Competence Framework, EQF, curriculum guidelines, job-profiles and other related projects and activities.
- at all levels, where appropriate, accredited by European and national authorities
- checked on consistency, quality, alignment with requirements, etc. by a Quality Assurance Group formed by CIOs
- also aiming at creating awareness in a broader community for the value and career options of the CIO and other ICT functions

2 Introduction

The EuroCIO HR Workgroup decided in 2009 to develop the program in three discrete layers as shown in the pyramid:



Layer 1: Aiming at the education of the top level in the pyramid of IT functions in organizations. The EuroCIO Executive MBA program on Corporate Information Management (Business & IT), aims at the high-potentials, future CIOs, top-consultants, etc. striving to obtain in their career the highest responsibilities in managing ICT departments, digital transformation or innovative business projects, in general leading to a C-level position in larger organizations. This layer 1 level is intended both for experienced IT managers in

need to broaden their scope with business knowledge, as well for business managers in need to understand better Corporate Information Management. The program is a full MBA program but pays much attention on IT decision making.

Layer 2: Multiple EuroCIO Professional Programs in Corporate Information Management (CIM) disciplines. Layer 2 aims at the highest IT professionals, in general reporting to the CIO, enterprise architects, program or project managers, IT security and risk managers, demand- or sourcing managers, etc. The education consists of a diversity of modules, all targeted at the highest level in the ICT organization. The structure of layer 2 is based upon the so-called e-Competence Matrix (e-CM). This e-CM divides Corporate Information Management into the seven disciplines most critical to the ICT user

organisation. The aim of EuroCIO is to develop a linked set of professional programs in these seven disciplines.

Layer 3: Modular EuroCIO Courses on Corporate Information Management. This level aims at the more regular staff in a CIO department. This level however is no longer developed by EuroCIO. It is left to the market to fill in the gap for this category of professionals. EuroCIO however stimulates the eCF framework as basis for courses at this level.

All levels are logically linked to each other, using the same terminology, definitions, business or IT approach. All levels are compliant with eCF and related projects of the European Commission like job-profiles. Some content might be used in all layers, where appropriate.

3 Layer 1: EuroCIO MBA for Corporate Information Management, OR Executive MBA in Business & IT

Today: Executive MBA at Nyenrode (The Netherlands) and TUMünich/StGallen)

At Layer 1, a EuroCIO MBA for Corporate Information Management (CIM) has been developed in the Netherlands by Nyenrode Business School (business content), together with Delft University of Technology (IT context). It is named the "Executive MBA in Business & IT".

The motivation for this own development is that, after research on existing executive MBAs in Europe, no one was found that explicitly aimed at the top-business people (like CIOs) responsible for large ICT departments, large innovation or digital transformation projects, in general aiming at the renewal of organizations drive by a substantial technology impact. It was felt this new educational offering would fulfil a fundamental need of the CIO community and could solve a considerable and important niche or white spot in the existing education for top business people, interested in business renewal based upon IT.

The program consists of nine modules, seven of which have roughly the same set-up. The work-load of each of these seven modules is spread over six months. Each of these seven regular modules has three class sessions, each of which will be held on two consecutive days and will include evening sessions. In order to successfully complete a module, attendance at all sessions is mandatory. The writing of a paper concludes each module. Between the classroom sessions there will be a month to six weeks for self-study, readings, discussions and writing. The sessions are "enriched" by cases studies from CIOs, presented also by CIOs. In particular the link between business and IT (systems, management, projects) is given attention.

The modules are: Strategy and Organization, Ownership of Enterprise and Governance, Demand and Supply Management, Leadership and Co-operation, Business Processes and Technology, Change Management and Human Capital, Risk and Finance, Marketing, Law, and Business ethics. All modules are lectured in the context of IT decision making. The program is concluded with the Master thesis.

The set-up is made in such a way that business schools or technical universities in other countries can also educate some (or all) modules, provided they keep the structure of the program and obey the rules about the content of the modules and program, as defined by the CIO community. In this way students can attend modules in different countries, thus also being familiarized with CIO case studies in different countries, while they will get one European certificate of the executive MBA.

To govern the content of the program, a Program Review Board (PRB) has been established, chaired by a CIO, while CIOs and HR managers are member of the PRB. The aim of the PRB is to keep this MBA a re- ally demand-driven program. Regular meetings between the PRB and professors aim at tuning the educational program on the requirements from the field. Additional to the PRB, a Quality Assurance group is be- ing established, checking the program against the eCF, the Curriculum Guidelines, AMBA and EQUIS requirements as well as the requirements from the PRB. Furthermore, active CIOs are invited to give lectures, so that students can study practical cases from the CIOs.

The modular set-up allows students to follow only one or more modules, just to improve one's knowledge in certain areas. For each completed module the student receives a certificate. Those who run all modules and the thesis successfully are granted a full MBA certificate.

The status (October 2011) of the Dutch initiative is that > 65 students are participating in the program that started October 2010. It is expected that in 2012 the maximum of about 120 students will be reached. For more information on this program, please visit www.mbabit.eu.

At the moment, discussions have started for the European roll-out in 4 European countries. The ultimate aim of this roll-out is that a number universities and business schools all over Europe adopt the modular structure of the program, thus allowing students to take modules wherever they want. The approach will be that EuroCIO will invite national CIO communities to join this Executive MBA pro-

gram. When they do so, in their turn, they can invite a local university and/or business school to provide the modular program (or parts of it) in their country, and add local members to the Program Review Board. We hope four additional countries will join this program in 2012.

4 Layer 2: EuroCIO Professional Programs in Corporate Information Management Disciplines.

Today: BEA (Business & Enterprise Architecture course) set-up by TIAS (The Netherlands), Henley (UK) and TUMünich) and ISM (Information Security Management) set-up by TIAS (The Netherlands) and AMS (Belgium/Antwerp)

At Layer 2, the EuroCIO Executive Educational offering provides for multiple EuroCIO Professional Programs along the dimensions of the e-Competence Matrix of CIM disciplines, developed by the EuroCIO HR Workgroup. These programs are primarily designed to address the CIM skill needs of the ICT user organizations, focussing on business-driven IT management. However, a broad range of other people, working for the Government, SMEs, NGOs, ICT supply organizations can also follow these courses. A Professional Program course is broadly structured as follows: a student will get one week of education in each of the seven disciplines of the e-CM. The focus domain of the specific Professional Program then gets additional teaching time. For example, in case of the Professional Program in Enterprise Architecture, the student will not follow only one week, but three weeks of education in Enterprise Architecture. On top of that, the student has to write a thesis, what will also take about one week. This implies that a complete course will take 10 weeks including the thesis. The elegance of this approach is that every student gets a broad education in all seven CIM disciplines. Besides, if he wishes to follow another course also, he only has to do the “extra” weeks in the chosen discipline and the respective thesis. In this respect, a consistent and interdependent educational ecosystem is being created.



Initiative 2: addressing the CIO needs for Enterprise Architects

Based upon the EuroCIO e-Competence Matrix

Domain	Explanation
Strategy and Innovation	Translate or drive business strategy to IT strategic plans with the following activities: function and service improvements, business process improvement, business innovation, determine technological direction.
Architecture	Define and maintain the information architecture, including process, information, applications, and infrastructure.
Demand management	Identify business and automated solutions. Maintain IT portfolio. Define and manage service levels.
Global Sourcing Management	Define and maintain sourcing strategy. Manage suppliers and supplier performance. Procure IT resources: people, software, hardware, and licenses.
Project delivery	Specify, build, test and deploy business and IT solutions. Manage change. Educate end-users. Manage projects.
IT Support and Execution	Manage service delivery management. Manage operations. Control Master Data.
Quality, Risk and Compliance	Define IT process, organization and relationships. Provide IT Governance. Monitor and control IT performance, internal control, regulatory compliance. Assess and manage IT risks. Manage quality.

As a broad outline, each module has a week of attendance time. Attendance is mandatory for a significant percentage of the module’s duration, which otherwise will result in not passing the module. At each module end there is an exam or rated assignment. Significant time between individual modules has to be catered for to allow for both MBA and Professional Programs to be taken on a part-time basis. The teaching language is English.

The content of the EuroCIO Professional Programs in CIM is directly driven by the requirements established in the e-Competence Matrix (e-CM), governed through Program Design Boards (expert level) for the individual Professional Programs and one over-arching Program Review Board (CIO level) to assure consistency of the layer 2 offering. The structure of the programs is inherently European, with various international business schools participating in the overall program. The individual strengths of top European business schools is brought together to create a truly unique European educational offering.

Several inquiries into the specific needs of CIOs made it clear that the CIO community was most in need for an educational offering in Enterprise Architecture. Accordingly, it was decided to establish this course with priority. Via CEISAR, a consultancy established by French multinationals in order to provide in the need of an Enterprise Architecture course, contacts have been made with four universities, in UK, France, Germany, Switzerland and the Netherlands. Focus was given to business schools that have a good track record in co-operating with the respective national CIO communities on executive education in the past. As a result of these discussions, at this point in time, Henley Business School and the Dutch TIAS Business School joint efforts to develop the Professional Program in Enterprise Architecture under the lead of CEISAR. Jointly, they are well prepared to cover all seven CIM disciplines, fostering also their relationships with the CIO community. It is planned currently that in early 2012 a start can be made with the first EuroCIO Professional Program in Enterprise Architecture. Once this course is established, others will follow.

5 Layer 3. EuroCIO Courses in Corporate Information Management

No specific additional activities are foreseen at this moment for layer 3 other than stimulating the market and educational institutes to use the eCF framework as guideline for the courses at this level in order to standardize courses and to stimulate international exchange.

6 Core Features of the EuroCIO Offering

The core design features of the anticipated offering are:

International set-up. A clear requirement from the CIO community is to arrive at a truly European, or even global, approach. This implies that the whole program in the first place will be educated in English. Secondly, the cooperation of several business schools as well as technical universities across several European countries is a core feature to the offering. Thirdly, the students are encouraged to follow modules or parts of a course in several European countries. Both for layer 1 and for layer 2, this will lead to a truly European certificate. Cooperation with other regions, Asia, US, etc. will be established, once the European basis is established. An exchange of students and professors between several regions in the world can further help to turn this a truly global education.

Modular approach. The EuroCIO Executive Educational offering will be constructed such that individual members of the EuroCIO network can benefit from the various layers of the offering independently, based upon the member's individual demand and capacity to invest in IT training. This is especially important in the currently tough economic conditions. Also, within each layer a modular approach is followed. While at MBA level, one can choose to do one or more modules, or the whole course, where modules can also be followed in different countries, at the Professional Programs level it is possible to follow one course, while later following only the additional expert weeks to complete a second or third course.

Demand driven. It is vital that this offering and all its individual programs remain inherently demand-driven. All education, both at layer 1 and layer 2, is directly coupled to the ICT user community. Links with CIOs and top ICT managers are core to the overall program in order to guarantee the demand driven-ness. On top of this, a Program Review Board of CIOs and HR managers from larger organizations monitor on a regular basis the content of all programs.

Interconnectivity of Layers 1 and 2. We aspire a design, where the programs to reach the EuroCIO Executive MBA in Corporate Information Management (CIM) and those to reach the associated EuroCIO Professional Programs in CIM will be interlinked and designed in a way that there is an up-grade path to the MBA level.

Sponsoring. The program is endorsed by larger ICT organizations from both the demand and the supply side. ICT companies actively endorse the programs by sending students, making free publicity, providing expert knowledge. Member organizations actively endorse the programs by providing students, participating in the Program Boards, making free publicity, providing knowledge, giving lectures, etc.

7 Governance and Implementation of the EuroCIO Executive Education offering

In order to establish the whole EuroCIO Executive Education Program, a step-by-step approach is being taken.

In all cases EuroCIO requires with regards to the Governance:

- to be member of the Program Board of a program
- to be able to influence the program content, to assure a demand driven programming
- to be assured the program is taught in english and has a truly international approach
- to be assured that at least two Universities from two different countries are involved, to confirm an international approach
- to be assured the program is aligned with the European e Competence Framework

With regards to implementation:

For layer 1, individual countries are approached via the CIO communities. In the Netherlands the CIO-Platform is responsible for the Nyenrode program, while in Germany VOICE is member of the German PRB. Once a new country likes to participate, they will set up an own PRB for layer 1. Simultaneously, students from different countries will be encouraged to follow modules in different countries.

For layer 2, a different approach is followed. For the development of the EuroCIO Professional Program in Business & Enterprise Architecture (BEA), the initial co-operation between several universities in different countries has been established. Once this course is established a similar approach was followed for ISM. At the moment no new programs are foreseen, due to several reasons, in particular the wish to further establish these two courses before expanding with other countries and/or Universities. In all this, it is EuroCIO's fundamental role as a market maker to assure sufficient marketing and PR efforts encouraging both the EuroCIO members and the members of the national bodies associated to EuroCIO, to make use of the offering and send students to the various programs.

8 Status of the EuroCIO Executive Education Program in 2016

Now in 2016 EuroCIO is proud to be able to mention that both executive MBAs had together over 150 students that received a certificate, while today ca. 100 students are in the program for one or more of the modules. The BEA course had been running twice with over 40 students, while also ISM has been running twice with over 60 students.

Study is underway about a formal EuroCIO certificate for these courses, to promote the standing and relevance of the courses.