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How are university CIOs trained in 2024?

The French Touch

Examining the Changing Landscape of University CIOs in 2024: Building Competencies to Address the Convergence of Cloud Integration, Recruitment Obstacles, User-Centric Services, and Operational Efficiency within the French Higher Educational Framework



- ADSI is The A-DSI is a national association facilitating exchanges between ESR IT departments on management and organizational issues as well as on the challenges of setting up an IT department in establishments.
- Amue is a French shared-services agency devoted to foster innovation among universities and other Higher Education and Research Institutions.
- CSIESR is a french national association of IT staff in higher education and research promoting training and pooling of practices.

1 INTRODUCTION

In the ever-changing landscape of higher education, the role of Chief Information Officers (CIOs) in universities has undergone a profound transformation. As academic institutions increasingly rely on digital technologies to enhance teaching, learning, and administrative processes, the responsibilities of university CIOs have expanded. In the post-Covid context, this evolution is accentuated by a convergence of factors, each presenting specific challenges and opportunities.

At the heart of current discussions about the role of CIOs is the imperative to strengthen their managerial skills. This arises from several developments that are redefining the educational ecosystem. First, the widespread integration of cloud computing technologies has revolutionized the storage, access and analysis of vast amounts of data, requiring expert management to ensure security, efficiency and compliance. Second, recruitment challenges weigh heavily, as universities compete to attract and retain qualified professionals in a rapidly changing job market.

Moreover, the shift to user-centric services requires CIOs to possess, in addition to their technical skills, a deep understanding of users' needs and preferences, making it essential to strengthen their managerial capabilities to adapt in this context. Finally, the quest for operational efficiency within a constrained budgetary framework highlights the importance of strategic skills for university CIOs.

This poster highlights the role of training in the transformation of university CIOs between 2018 and 2024 in the French educational context, with an emphasis on the need to develop managerial skills.

Training: an imperative for a changing university CIO profession



Hybrid training, mostly face-to-face and some distance learning

2 STAKEHOLDERS AND ORGANIZATION

Project ownership

Ministry of Higher Education | University Presidents' Association



Project management



Face-to-face training

The Institut des hautes études de l'éducation et de la formation (IH2EF) is a state-run department with national authority. The IH2EF provides a centralized training center for executives in higher education.

DSI training takes place at the IH2EF.

This single location enables the organization of cross-trade sequences within the training modules (e.g.: Digital Department / Heritage Department or Digital Department / Human Resources Department, etc.).

Trainees are accommodated on-site for the duration of the course, which encourages networking and formal and informal exchanges.

Co-constructed training

The training is not mandatory, and remains optional for the universities. It is based on an institutional mandate from the French Ministry of Higher Education and France Universités.

It is run by four organizations, and aims to build a collective reflection based on case studies, feedback, testimonials and analyses from CIOs and institutional or private players.

An institutionally supervised training program run by specialists in developing the managerial skills of directors of higher education and two professional associations of CIOs.

Training objectives and issues

CAPTURE	Employment and skills issues in CIO in IT departments	MA MB MC
MANAGE	Performance, management strategy and optimization of corporate resources	MO MA
KNOW	Team management based on a skills-based approach	MB MC
DEVELOP	Digital skills for students and staff	MB MC
INTEGRATE	New issues such as forward-looking management of jobs and skills	MA MB

HOW TO DEVELOP SKILLS?

The training courses organized are linked to the skills repository established for the CIOs professions. Although training courses are organized around a specific theme, they are also designed to develop cross-functional skills.

There are 5 main areas of focus

- Knowledge
- Managerial skills
- Technical skills
- Project and change management skills
- Personal qualities

Domain of Knowledge	
C1	General knowledge of the issues, developments, and regulatory framework of public policies and their processes of modernization and evaluation in a national and international context.
C2	In-depth knowledge of the organization of higher education, research, and innovation (ESRI) and the sociology of professions and university organizations.
C3	Knowledge of budgeting, finance, public procurement, and human resource management.
C4	Knowledge of internal and external communication techniques.
C5	Knowledge of contract law/public procurement.
C6	Knowledge of the legal and ethical framework of the civil service.

Managerial Skills	
CM1	Supervise and lead significant teams with high-level technical managers.
CM2	Foster team cohesion and promote favorable working conditions for staff.
CM3	Address the institution's digital evolution needs in the best possible conditions.
CM4	Ensure the development of staff skills through training, job transformation, and support actions.

Technical Skills	
CT1	Make information systems and digital elements understandable for all through targeted communications.
CT2	Master the concepts and architectures of information systems and digital services, technical environments, digital tools, and their uses
CT3	Master quality management concepts.
CT4	Master information system security and the current legislation on information systems and digital services.
CT5	Ability to identify and consider digital developments, as well as the regional and national IT and digital ecosystem.
CT6	Proficiency in the English language is mandatory.

Project Management and Change Management Skills	
CG1	Master the methodology for managing complex projects.
CG2	Ability to lead cross-functional work groups, plan, and estimate workloads, costs, and deadlines.
CG3	Master change management, negotiation, and conflict management techniques.

QP1	Ability to develop a strategic vision, be creative, and have a sense of innovation.
QP2	Curiosity about new technologies and their potential applications.
QP3	Proven managerial competence in leading significant teams, including experienced managers; ability to unite teams and delegate.
QP4	Proven experience in project management.
QP5	Strong relational, adaptability, and persuasion skills
QP6	Confirmed communication skills.
QP7	A strong aptitude and preference for teamwork.
QP8	Listening, facilitation, and negotiation skills.
QP9	Initiative and the ability to be a driving force.
QP10	Analytical and synthesis skills.

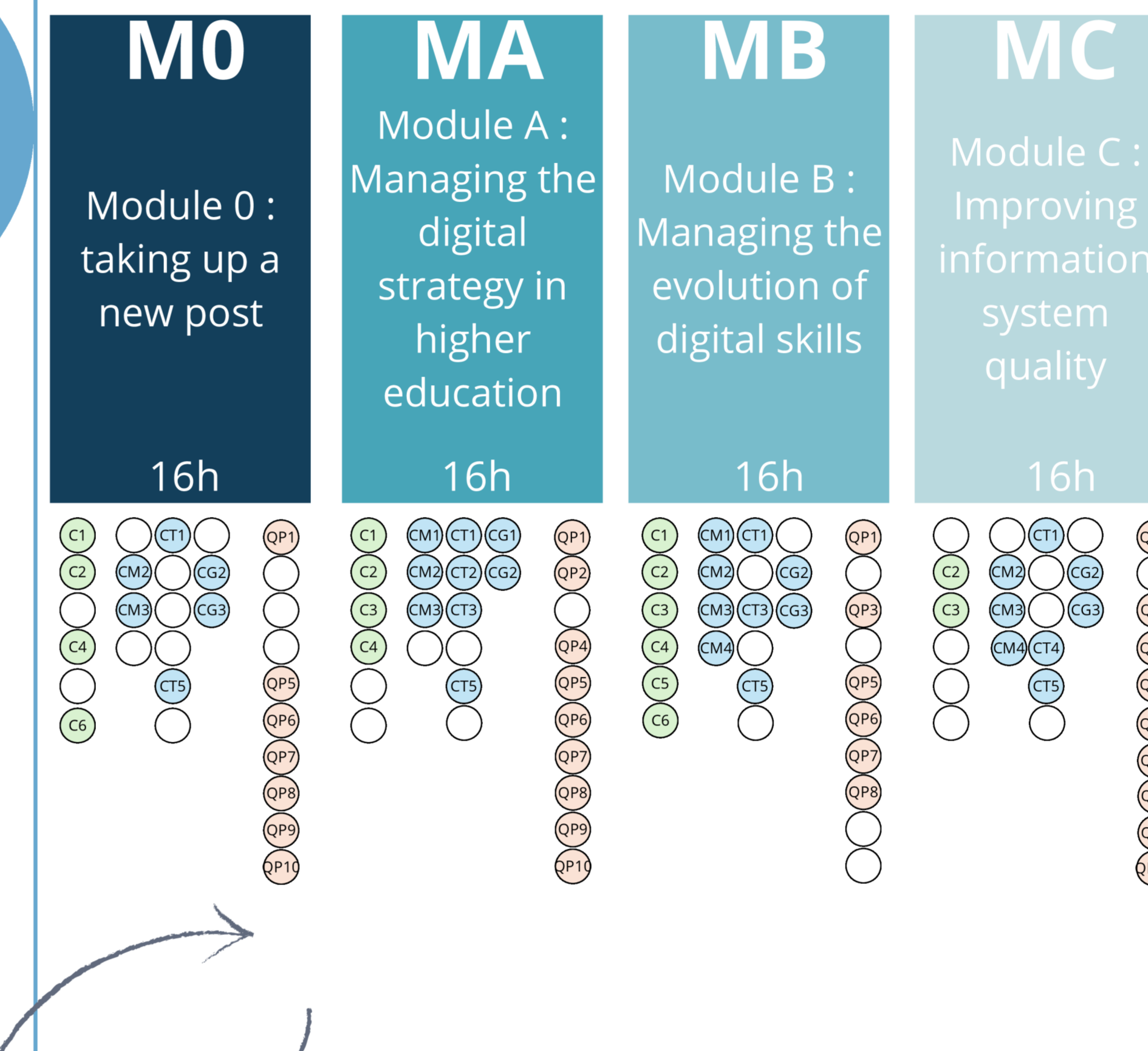


Download the CIO skills repository using the QR code (FR Version)

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Each module is based on a professional situation, and enables the mobilization of an element or sub-element of the reference system. In this way, training covers all the required areas.

A modular training architecture



One inter-directional module and tree module for CIOs

PEDAGOGICAL METHODS

The course alternates between theoretical input and shared experience with experienced CIOs from higher education and other public and private organizations.

These conferences are designed to prepare participants for the collaborative resolution of problems specific to each module: a real-life scenario, enabling them to mobilize skills from the reference framework.

At the end of each module, participants propose a solution in the form of an oral presentation, in a setting simulating a budget dialogue with the trainers.

Alternating transmissive moments and real-life problem-solving activities.

The deliverable is an oral presentation to the trainers.

A Moodle platform accompanies the training, providing early access to a variety of resources such as press articles, scientific publications and popular documents on digital management in universities. Participants also upload their own productions, and a forum is available to facilitate exchanges between learners outside of face-to-face sessions.

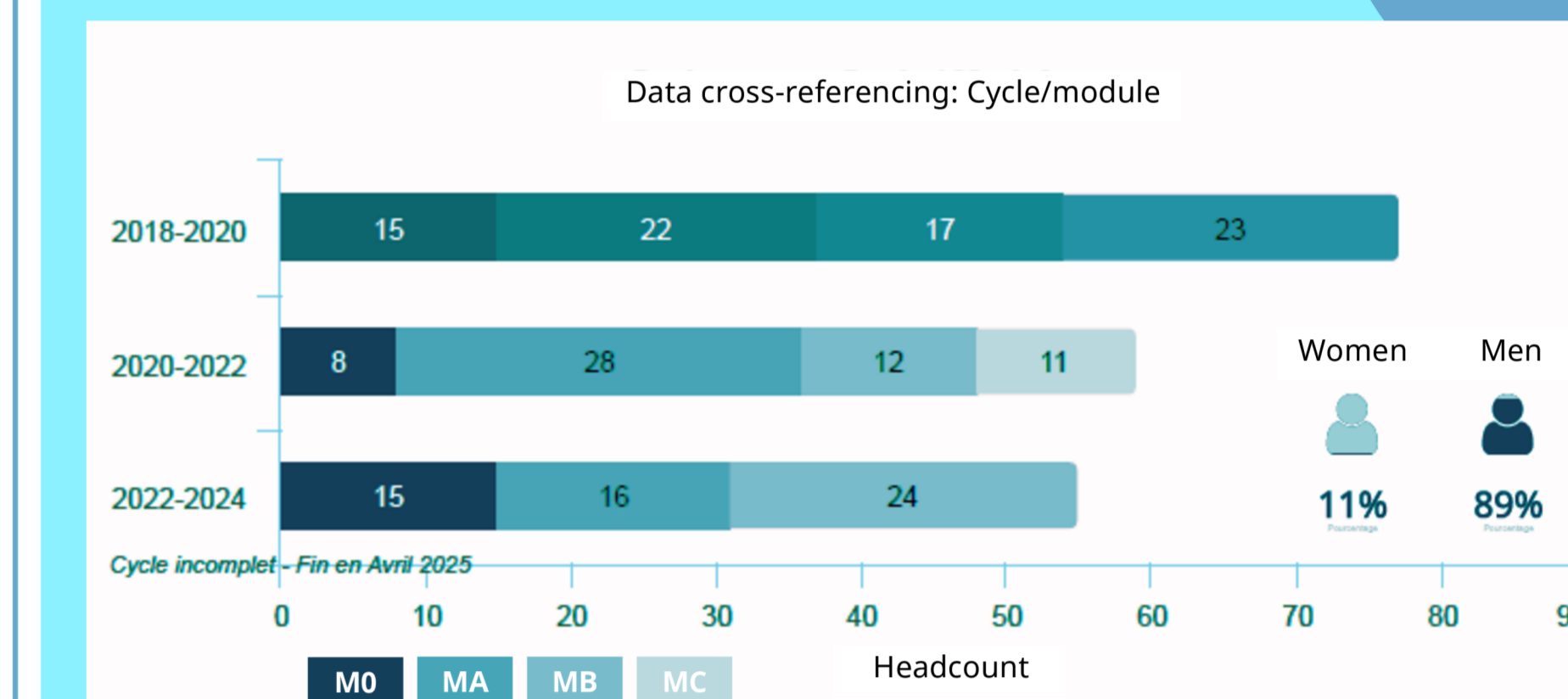


A moodle LMS for training

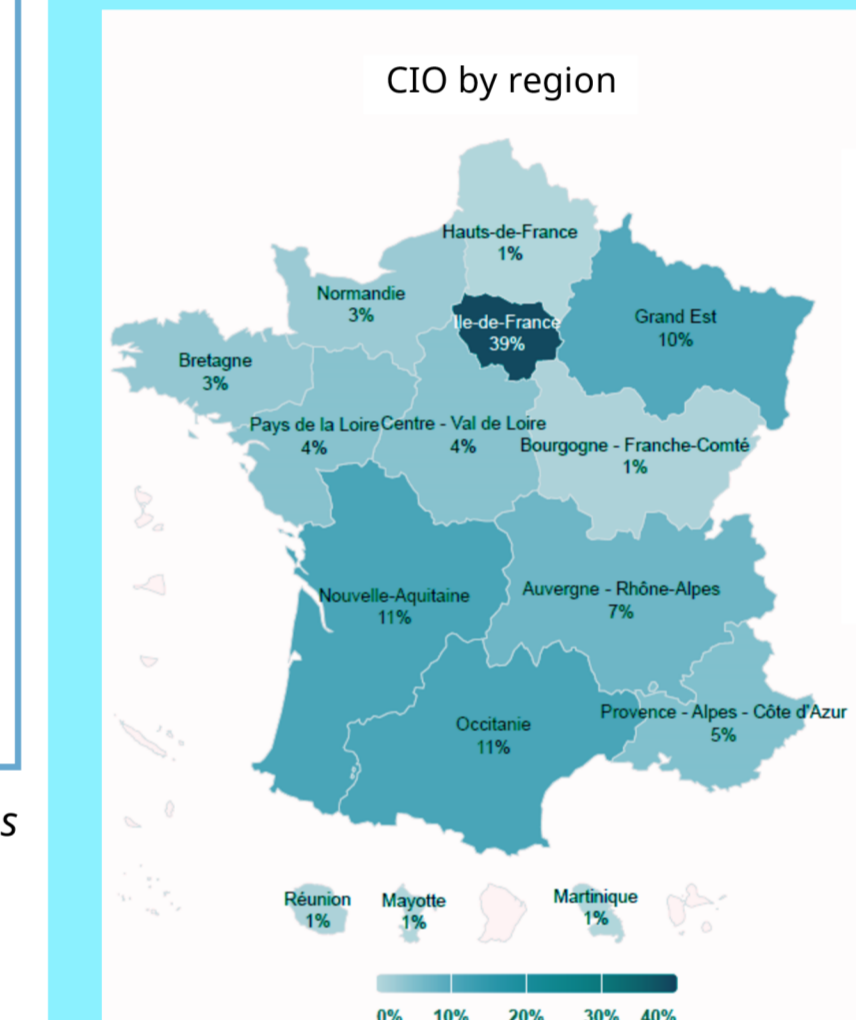
KEY DATA IN PROGRESS

The data comes from training courses carried out between September 2018 and June 2024.

The cycle began with 4 modules, and in 2020 a new cycle was introduced to develop cross-functional management skills.



Data collected between September 2018 and June 2024



Geographical breakdown of training participants

191 registrations over the past 6 years, including 114 unique CIOs, representing 68 universities and 27 other establishments

In France, there are about 80 universities and 100 public institutions.

CONCLUSION

Networked training, based on the development of essentially managerial skills by and for peers, has established itself as a solid foundation for the future. Thanks to this collaborative framework, participants have not only enriched their know-how, but also strengthened their professional ties. The success of this initiative, both in terms of participants' satisfaction and the momentum generated, justifies its continuation.

While we are already preparing the next cycle, we remain open to your ideas and suggestions for further enriching this collective experience.

By developing professional skills in real-life situations, we improve the ability to carry out job-related tasks and responsibilities.

Guest speakers (CIO and researcher) in person and online



CIOs, do you have any training experiences to share with us?

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