

PTB project “Metrology for Digital Transformation – International Cooperation” CABUREK Global Program

Working Group: WG1 – Digital Transformation Strategy
National project title: Improvement of digital transformation implementation in the INM Colombia
National Metrology Institute: Instituto Nacional de Metrología, Colombia

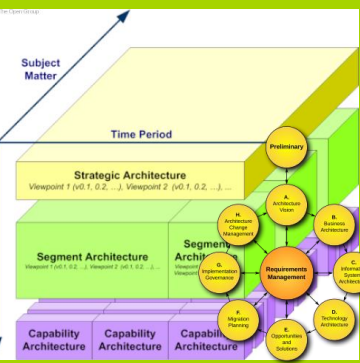
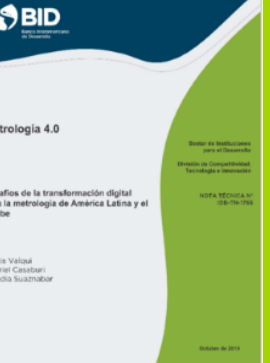
Coach: CENAMEP AIP – Panama

Alignment with another strategic plans:

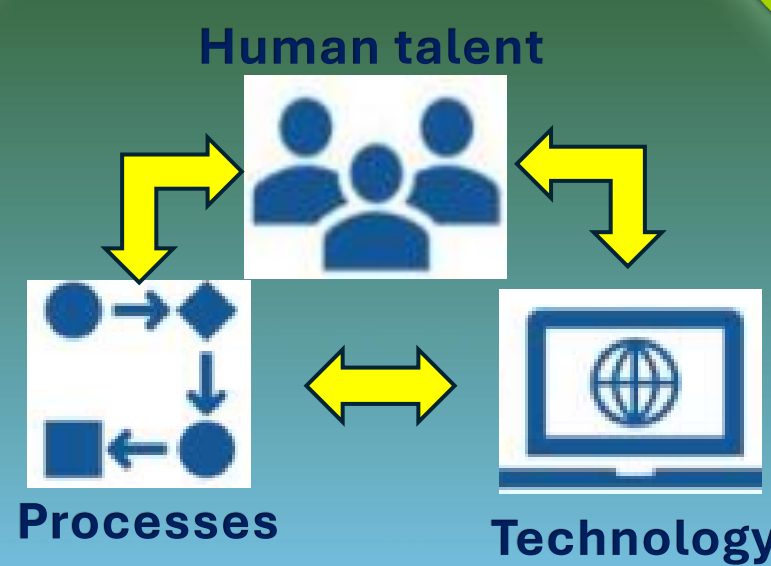
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 - Implementing projects for the M4DT process within the SIM region
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 - Support the productive transformation of Colombia
 - Transform institutional capacity and responsiveness to strengthen trust.
 - Promote use and appropriation of data and digital technologies
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 - Use of precise methods to guarantee the highest quality
 - INM alignment between business, data, process and technology.
 - Build data and software development governance models,
 - Implement Zero Trust Network Access
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 - Institutional Strategic Plan
 - Digital Transformation Plan
 - Strategic IT Plan
 - Strategic Cybersecurity Plan

DT Considerations, challenges and frameworks

- DT considerations:**
- Trustworthy AI,
 - Harmonized DCC & DRMC,
 - SI Digital Framework
 - Data Quality and use of FAIR principles
- DT Challenges:**
- Digitalization of services,
 - Better Technological infrastructure
 - Data modelling
 - Virtual measurements & simulations
- DT Frameworks:**
- Regulatory framework: A public policy that promotes digital transformation for Quality Infrastructure affairs. It performs the planning and implementation of initiatives.
 - Use of solution blocks that are replicable and avoid duplication of efforts,
 - Enterprise architecture framework implementation
 - SI Digital Framework application.



Capabilities development



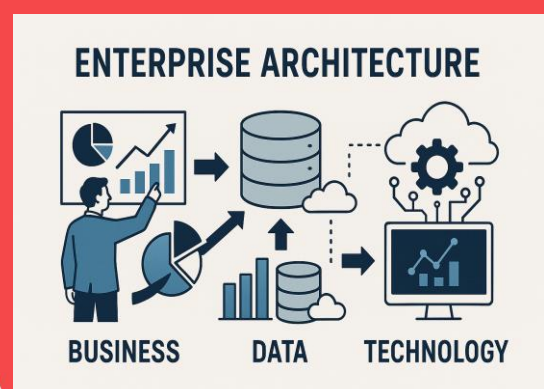
R&D+i and DT integration at the INM

Governance Model for R&D+i:

The Scientific Technical Advisory Team (EATC) at the INM is responsible for providing technical support and advice on scientific and innovation issues within the institute.



Digital Transformation in different initiatives related with new metrology projects, devices or services.

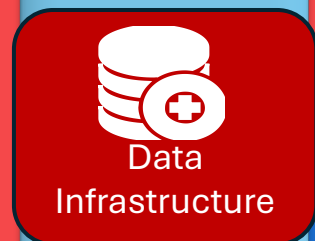
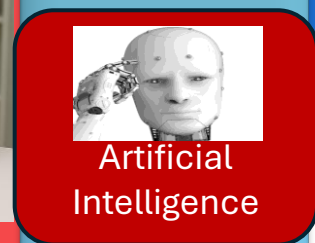


Governance Model for DT:

It has been adopted Enterprise Architecture Governance and Management Model at the INM for decision-making in digital transformation and institutional development processes.

Integration with stakeholders

- Identify Opportunities for interoperability
- Design new cross-sectional data models
- Develop platforms that allow visualization of data sets and digital formats



TYPES OF EMERGING DIGITAL CERTIFICATES



- Design solution architectures for the provision of new comprehensive services as a quality infrastructure
- Co-create solutions that facilitate future advances in establishing a digital product passport

The digital transformation strategy involves defining key elements, such as potential customers, the value that can be provided, the business model, and how human talent, data, and technology enable it. It also includes relevant strategic elements and the perspectives of key organizations. The resulting dynamic elements described in the axes are focused on developing initiatives that enable digital transformation at the INM Colombia.