

Case of success at INM Colombia: Application using R as a programming language

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Volume Laboratory
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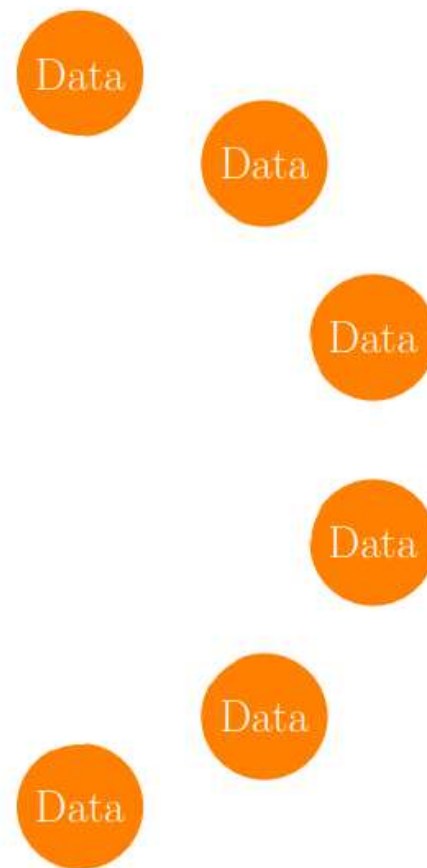
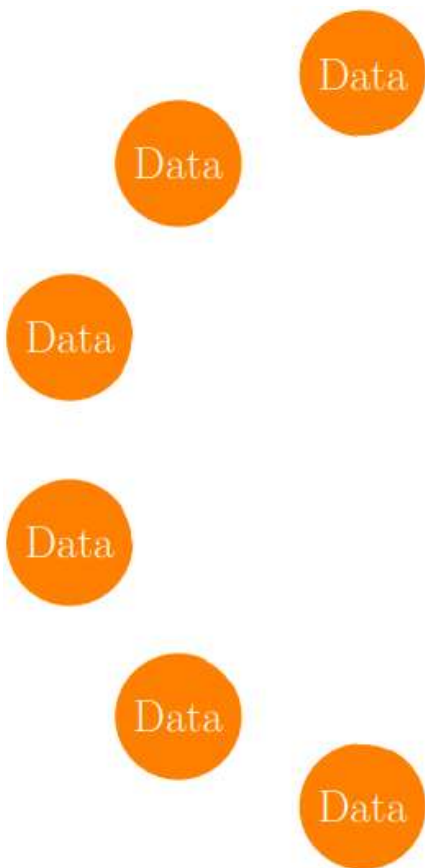


El progreso
es de todos

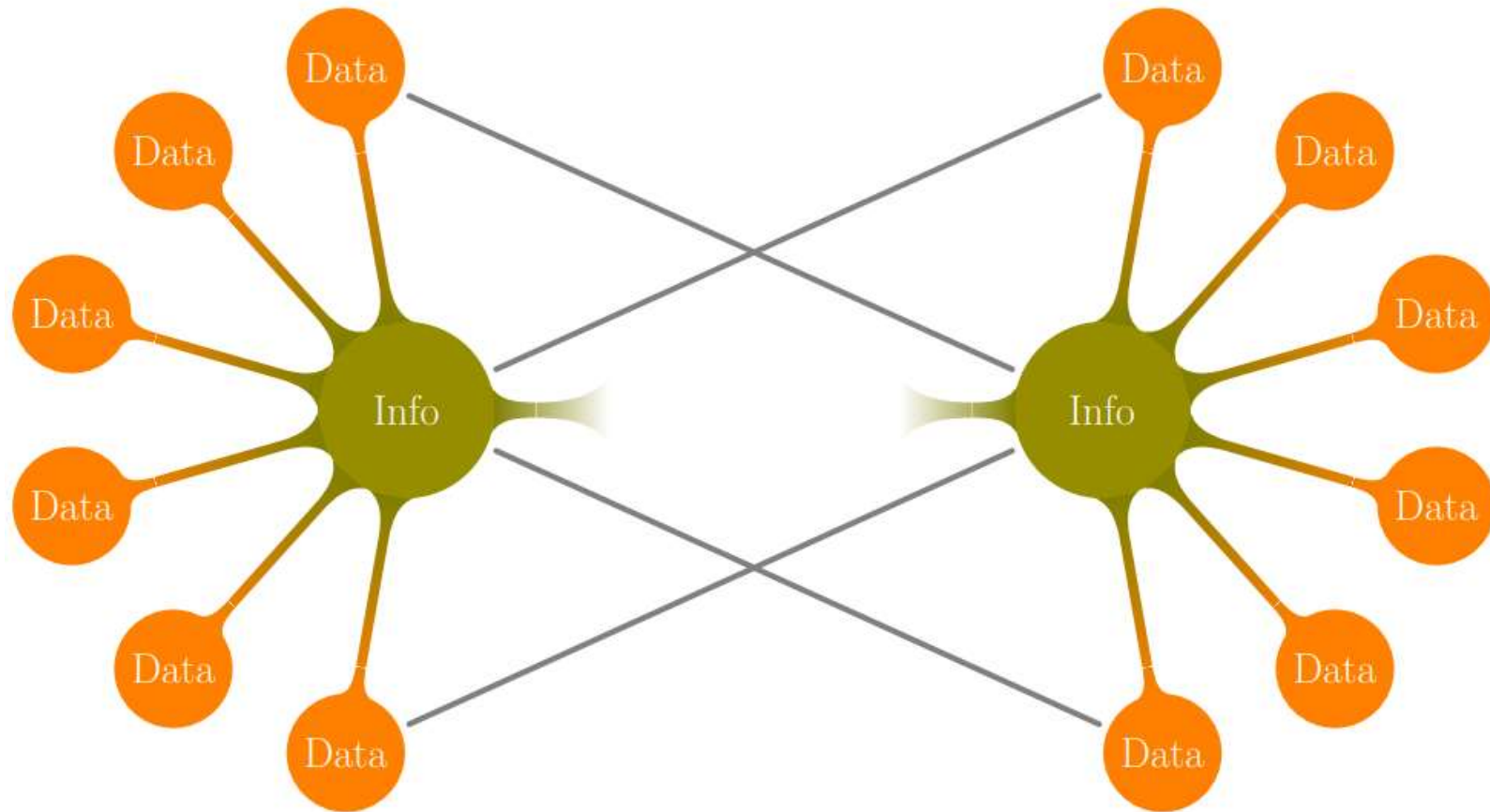
Mincomercio

The project's motive

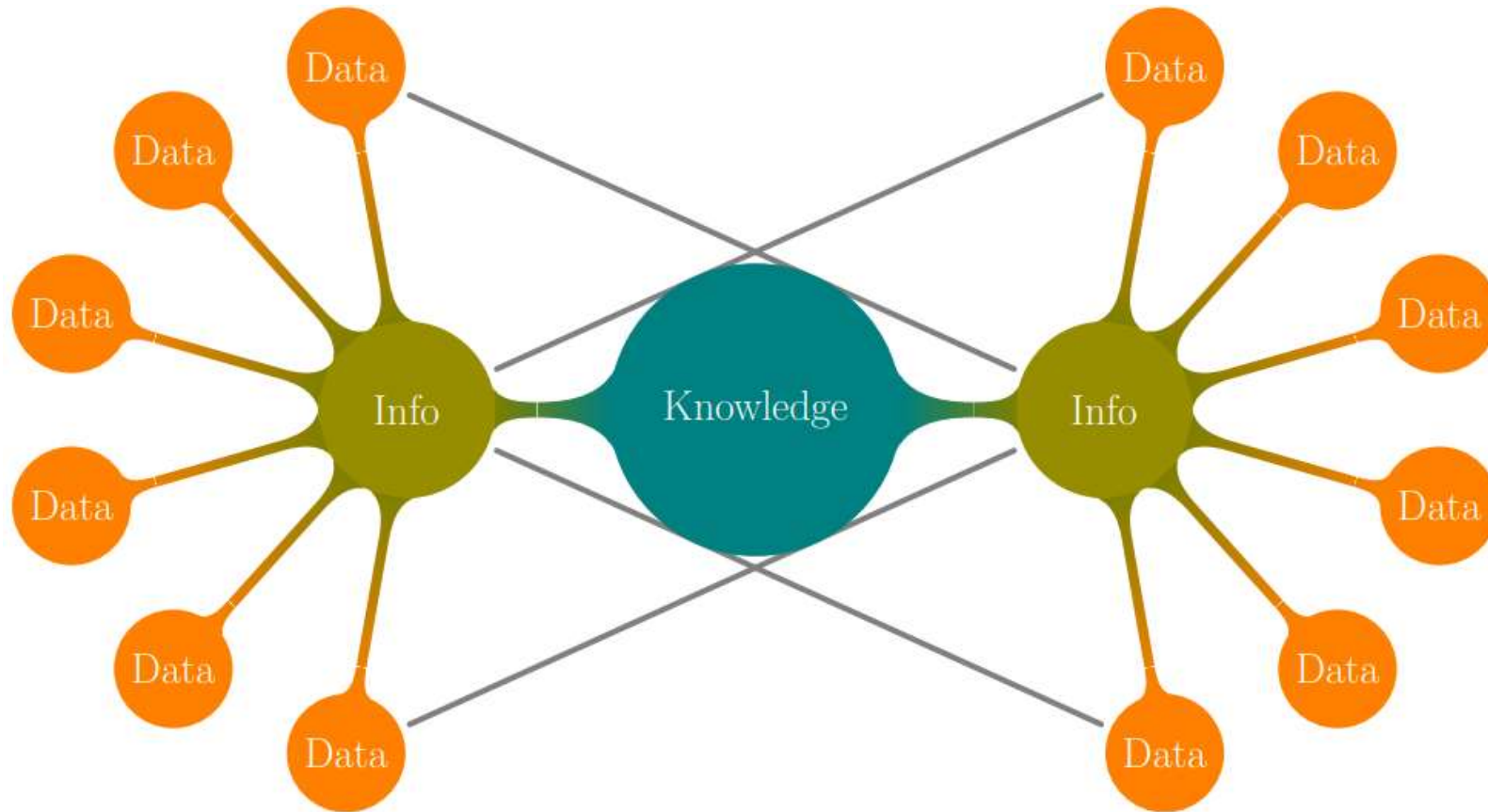
Project's motive



Project's motive

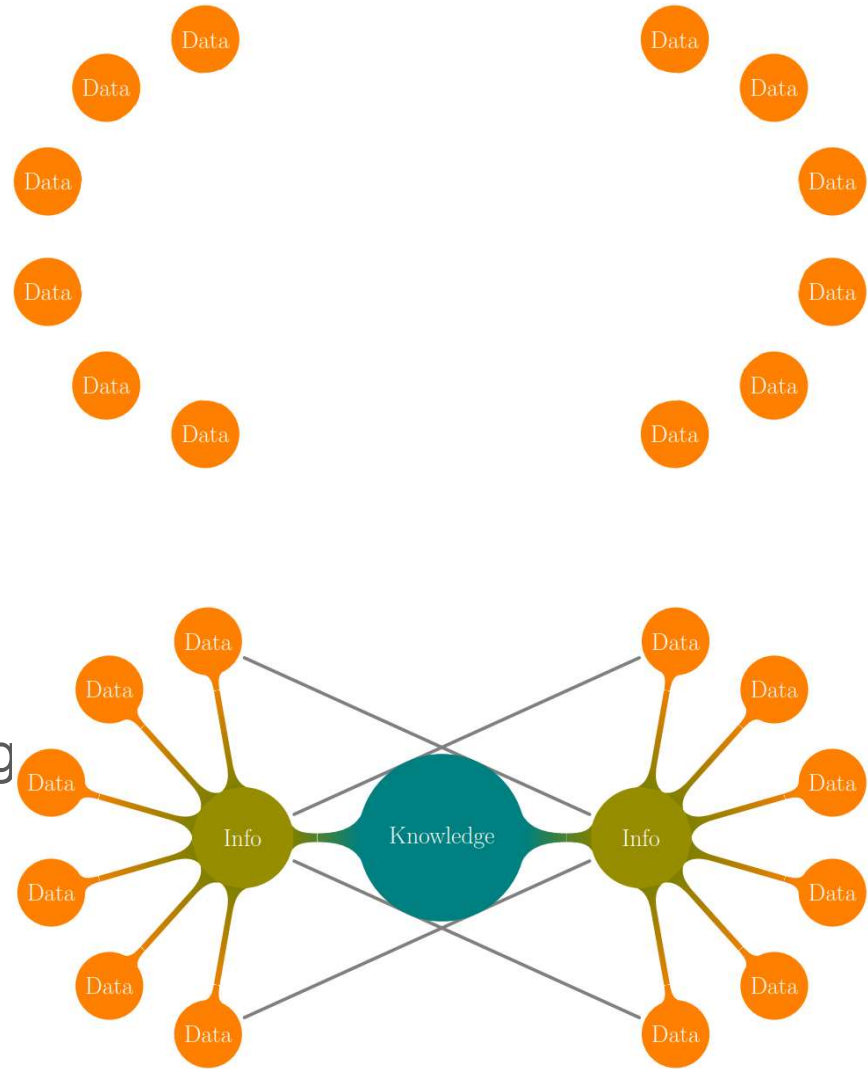


Project's motive



Project's motive

- Access to large amounts of data
- Specific set of needs for data processing



The project's outcome

The project's outcome...

http://127.0.0.1:3650 Open in Browser Publish

Lavyf Inicio Equipos Intervalos de recalibración Caracterización de ítems CMC Procesos de calibración

Generalidades
Principal
Acerca
Matriz de trazabilidad
Sobre el laboratorio
Políticas del laboratorio
Marco documental relacionado
Manuales
Manual del aplicativo
Manuales R y Shiny
Autenticación
Iniciar sesión

Laboratorio de volumen

150 ml
in 20°C

Glass plate
Gauge scale
Sight tube
Gauge scale

1
2
3
4
5
6
7
8
9
10
11
12
13
14

INM Instituto Nacional de Metrología de Colombia

The project's outcome...

Some functions of the software:

- General information and technical data of equipment.
- Graphic display of calibration records, maximum permissible errors, intermediate checks and other tests.
- Automatic completion of quality forms.
- Assisted completion of spreadsheets for calibrations (work in progress).
- More in the future...

The project's outcome...

Some history:

- The development was begun in May 2020 by physicist Cristian González
- The first working version with data base was released by him in September 2020.
- From December 2020 on physicist Daniel Melo has implemented graphic display of intermediate checks and automatic completion of forms.

The project's outcome...

It has yielded several benefits:

- Enhancement of the laboratory's system of quality assurance of the measurement process.
- Easy and quick access to calibration data from multiple certificates for different instruments.
- Quicker and more complete knowledge transfer to new laboratory members.
- Broad possibilities for statistical analysis on the data base.
- Scalable to other INM laboratorios (Quality assurance analyst Linda Petro)