EVOLUTION OF DATA ANALYTICS

LONDON BULLION MARKET ASSOCIATION A&R CONFERENCE

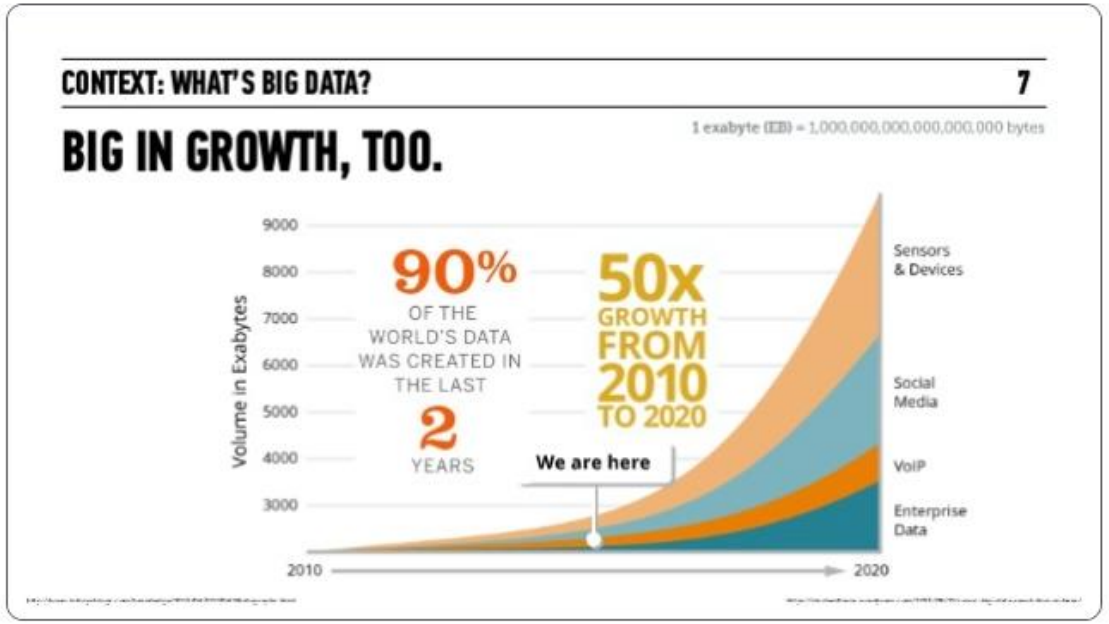
MARCH 2023

RAND REFINERY

DATA IS EVERYWHERE

Research by Statista showed the total worldwide data amount rose from **9 zettabytes** in 2013 to **27 zettabytes** in 2021.

The use of analytics by businesses can be found as far back as the 19th century when Frederick Winslow Taylor initiated time management exercises. Another example is when Henry Ford measured the speed of assembly lines. In the late 1960s, analytics began receiving more attention as computers became decision-making support systems.



https://www.promptcloud.com/

DATA ANALYSIS

- Initial process - inspecting, cleansing, transforming, and modeling data
- Role in decision making in many fields
- Ability for
  - Data mining
  - Data integration
  - Data visualization

Ultimately data analysis is a process of obtaining raw data and converting it for useful decision making to answers questions, test hypotheses or disprove theories.

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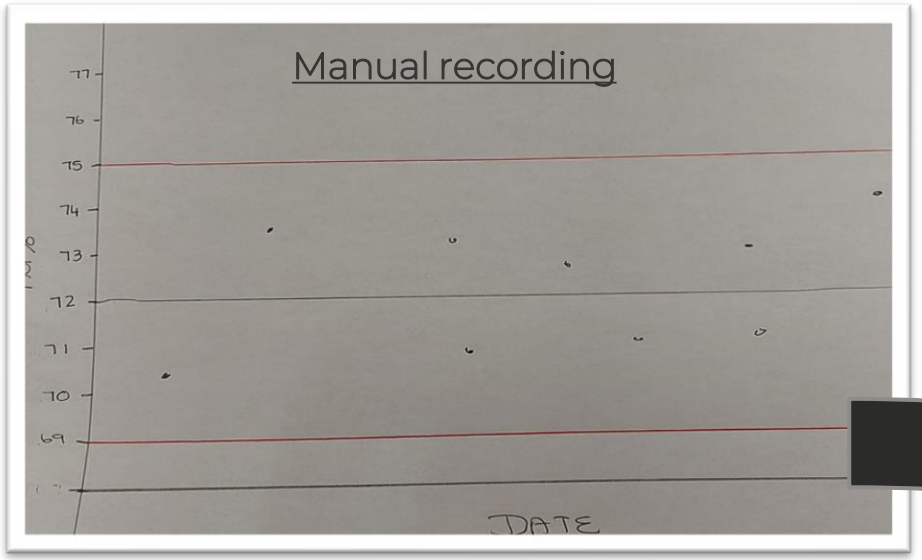
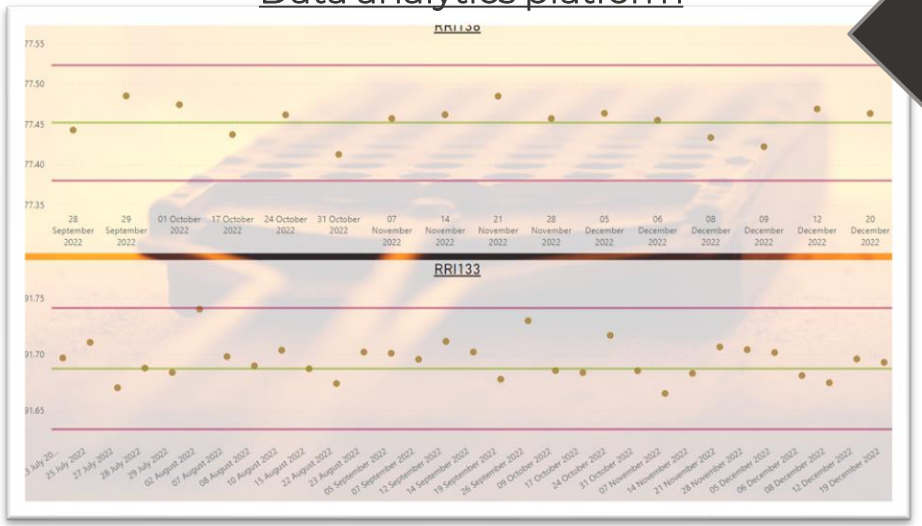
EVOLUTION …

Manual recording

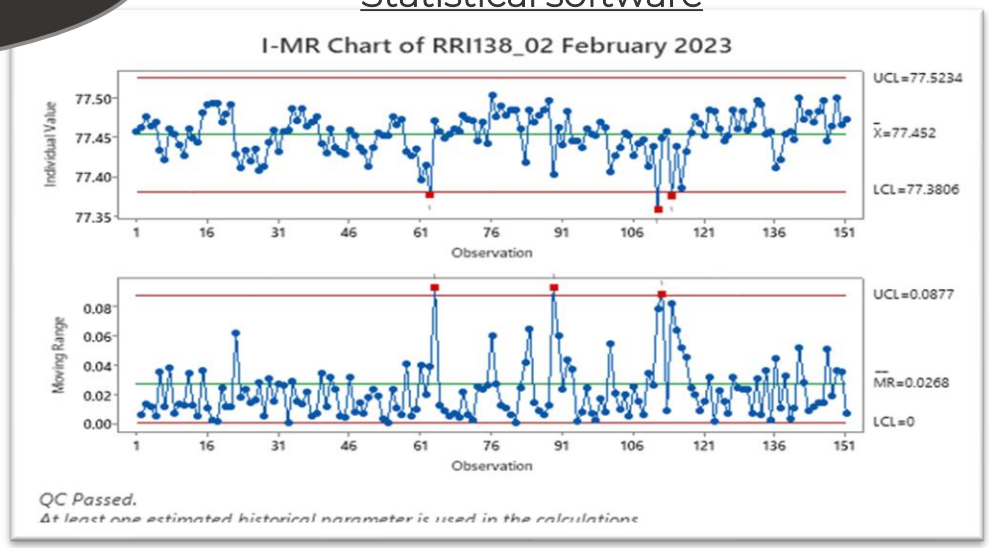


Excel era RRI140

Data analytics platform



Statistical software



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BENEFITS OF DATA ANALYTIC PLATFORM

- Improved decision making:
  - analyze large amounts of data
  - various sources
  - providing insights

- Increased efficiency
  - automating data collection and analysis
  - save time and resources
  - speed of decision making

- Enhanced performance tracking
  - real-time visibility into (KPIs)
  - track progress of material, results reporting

- Cost management
  - Real time expenditure vs budget

- *Report creation and meeting discussions*

Reference

datacentrix

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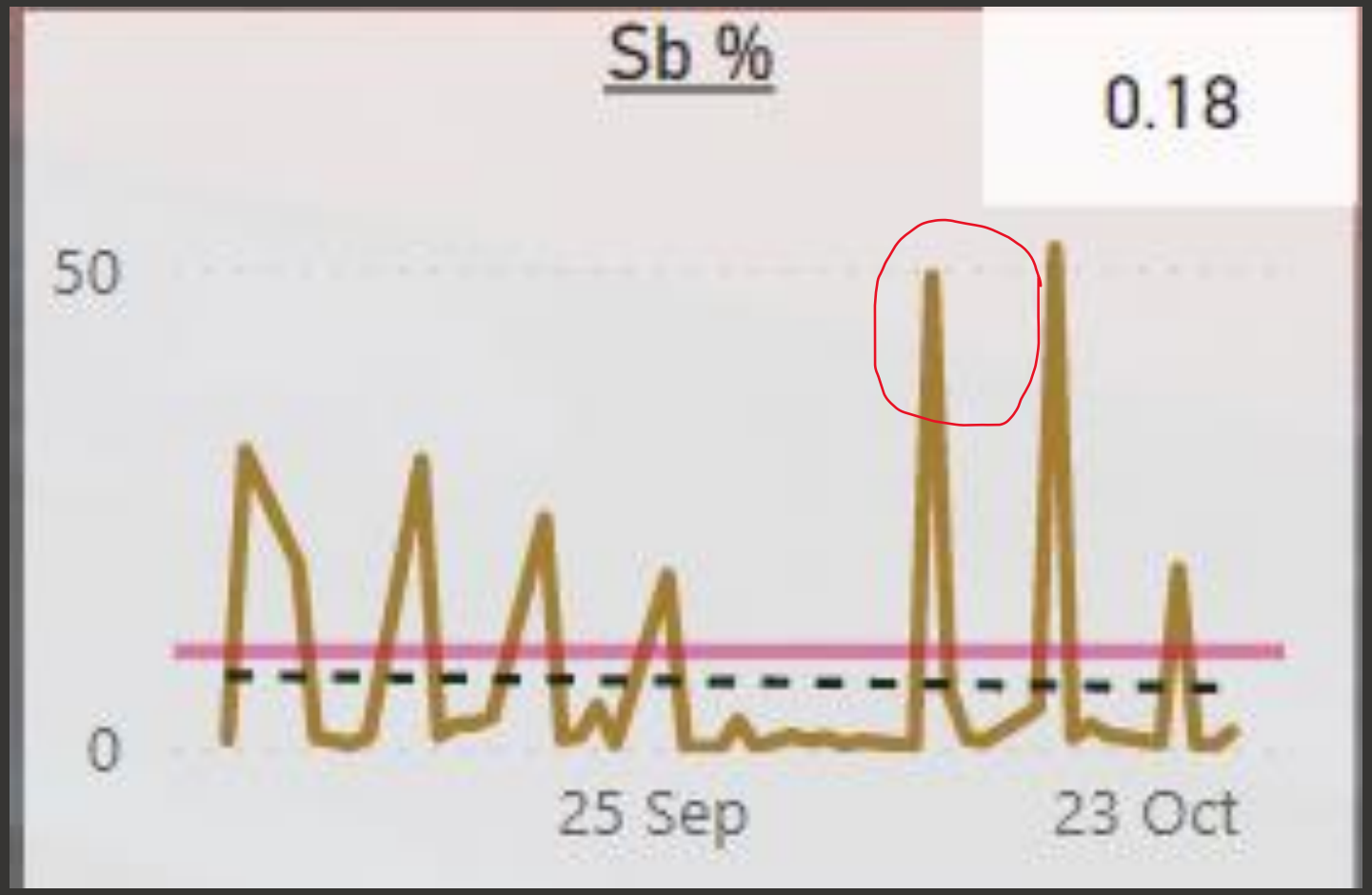
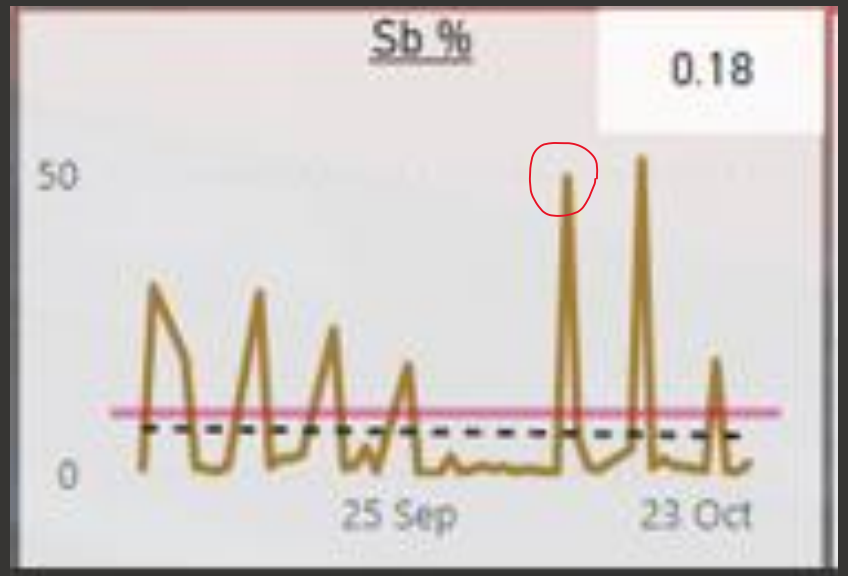
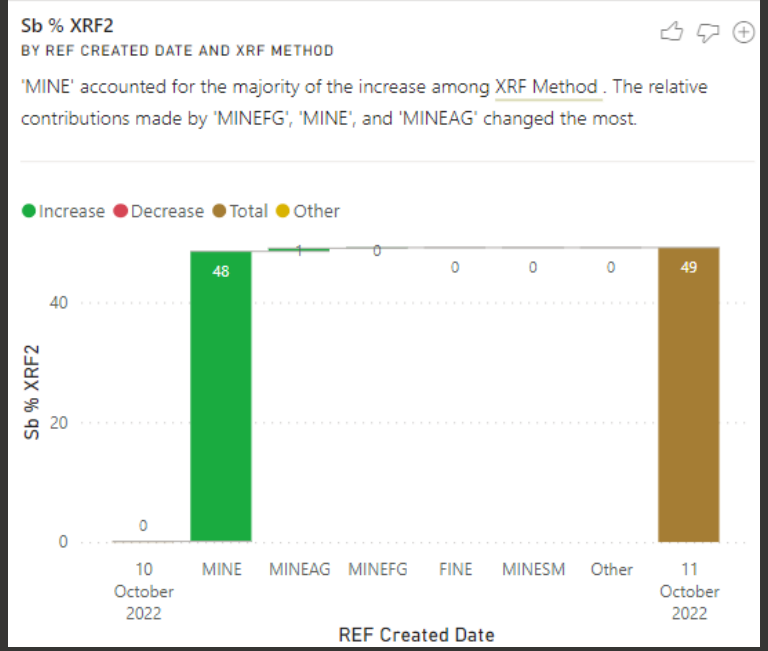
XRF CALIBRATION

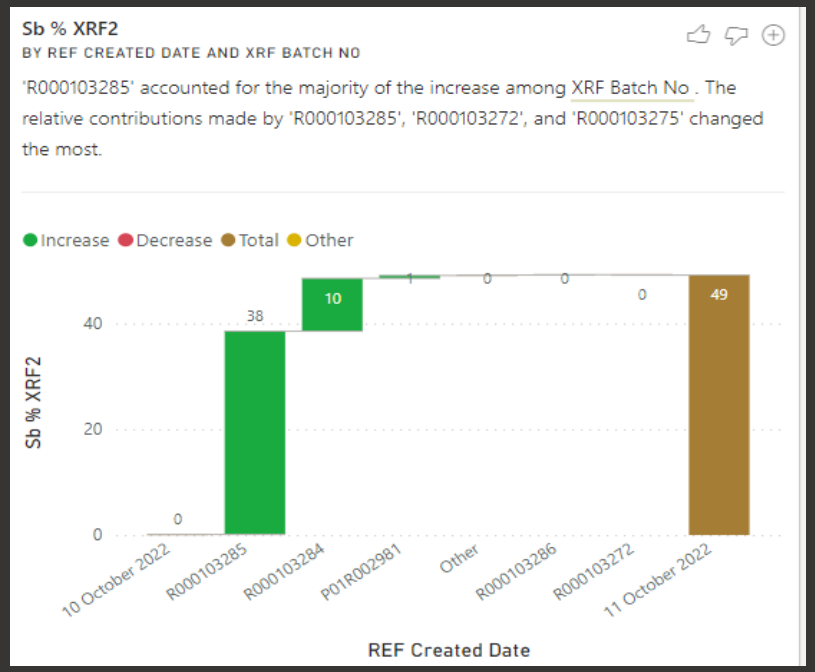
SB ISSUE

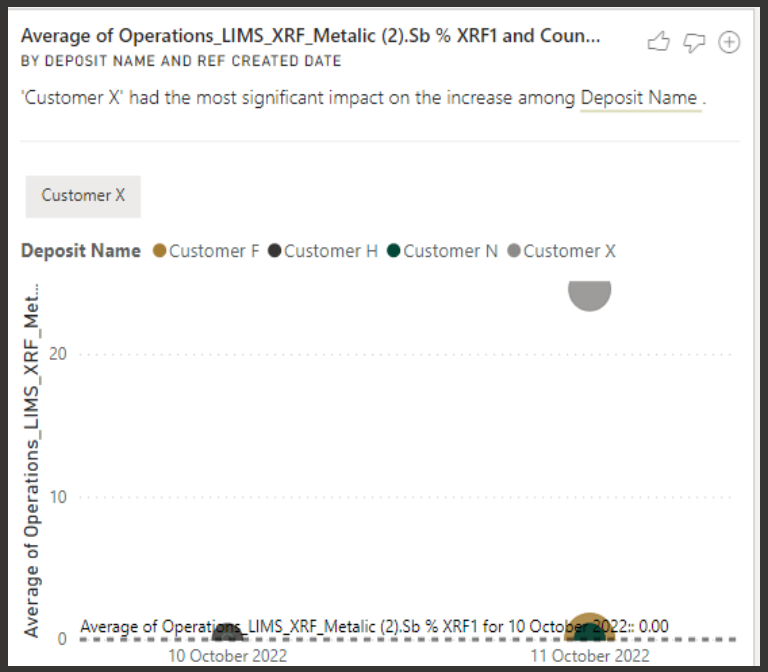


DATA ANALYSIS





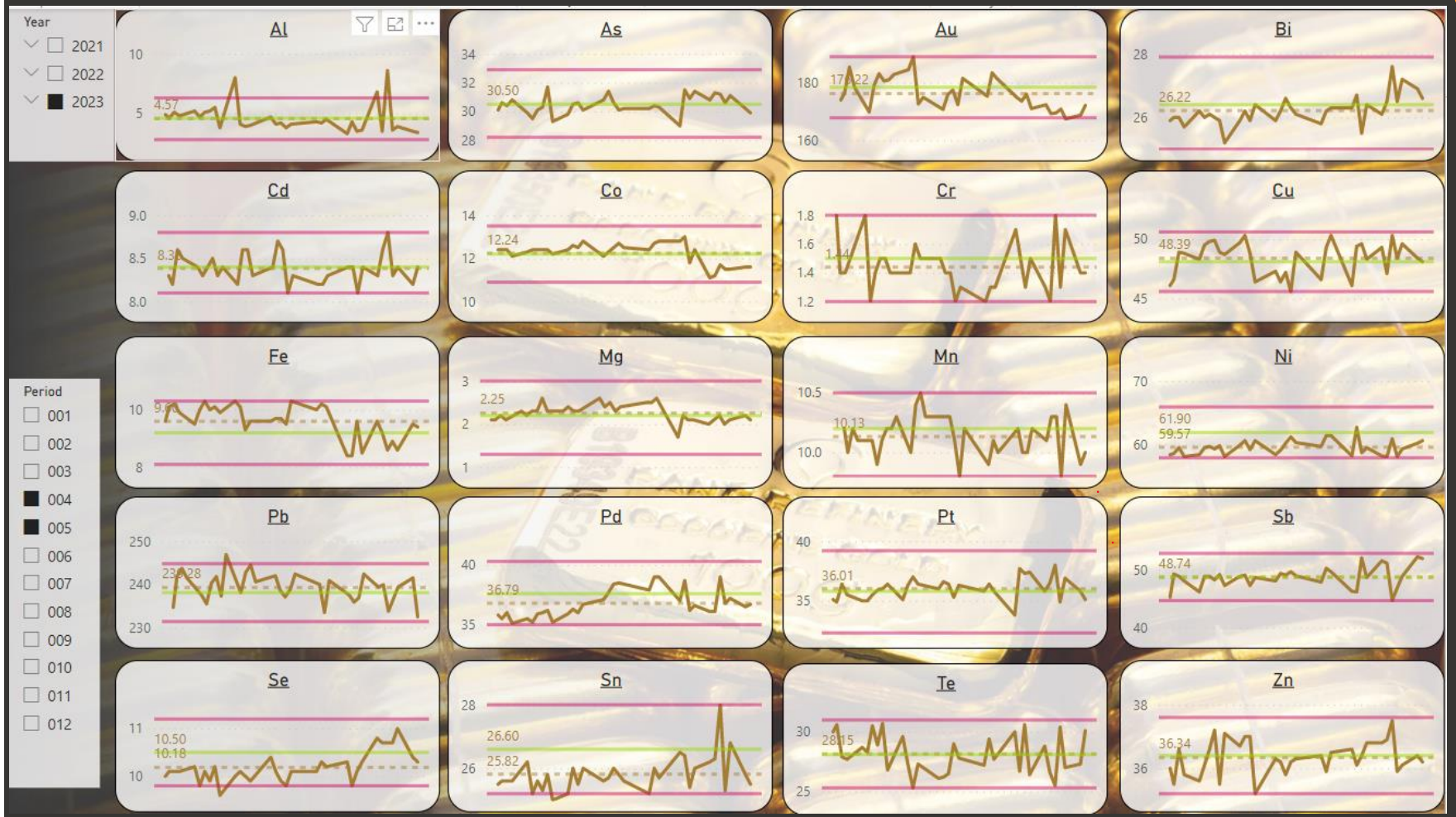




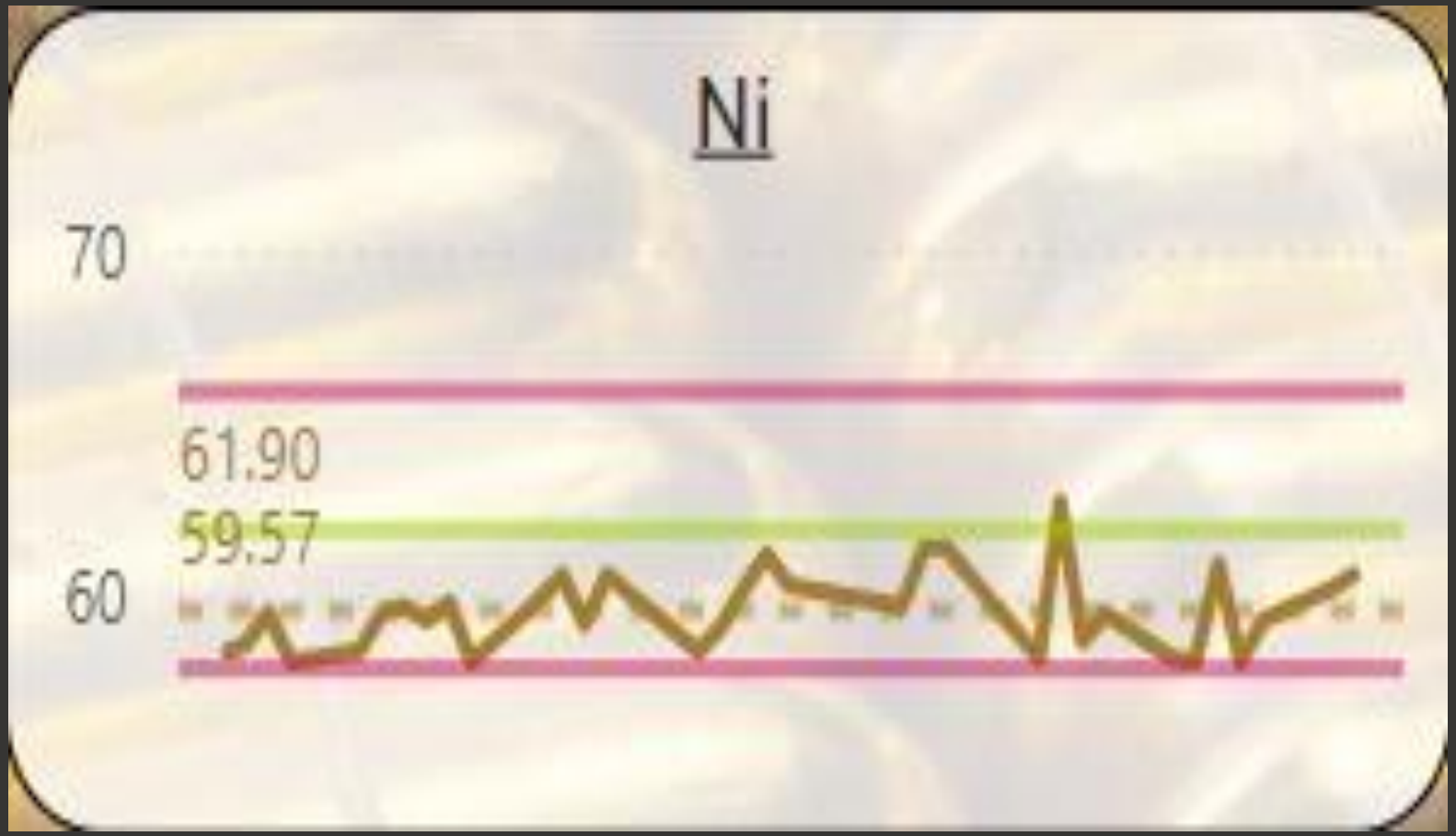
REAL TIME STATISTICS

COST MANAGEMENT

QUALITY GOVERNANCE



NI - LONG TERM



LESSON LEARNING

CHOOSING A SUITABLE DATA ANALYTICS PLATFORM

- **Data cleansing and validation**
- Business Appetite for change
- Statistical knowledge & understanding
- Dependent vs independent users
- Access control (mobile devices)
- Support
  - Learning(Online)
  - Expert
  - Continuous learning appetite
- Cost effectiveness
- User experience (data visualization, statistical ability)
- Data analyst **BIAS**

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BIGGEST LESSON LEARNED

An effective dashboard(report) is measured by it's success of driving change.

Don't ask ''What can I do with this data''
Ask yourself "What objective , change or decision can I implement through this dashboard(report)."

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