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IR's role in creating a campus-wide reporting solution using data warehousing technology

Questions to Gauge Audiences' Farmilarity with Data Warehousing

Yes, No, or Maybe

- ***Fact tables versus dimension tables***
- ***Fact tables versus perspectives***
- ***Nominal, ordinal and interval variables***
- ***Grain versus unit of analysis***
- ***Data cubes***

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Theoretical Model of Data Warehousing

From an Analyst Perspective

Diagram One

Distinguishing decision making, analysis & data

Diagram Two:
The Fully Employed Analyst

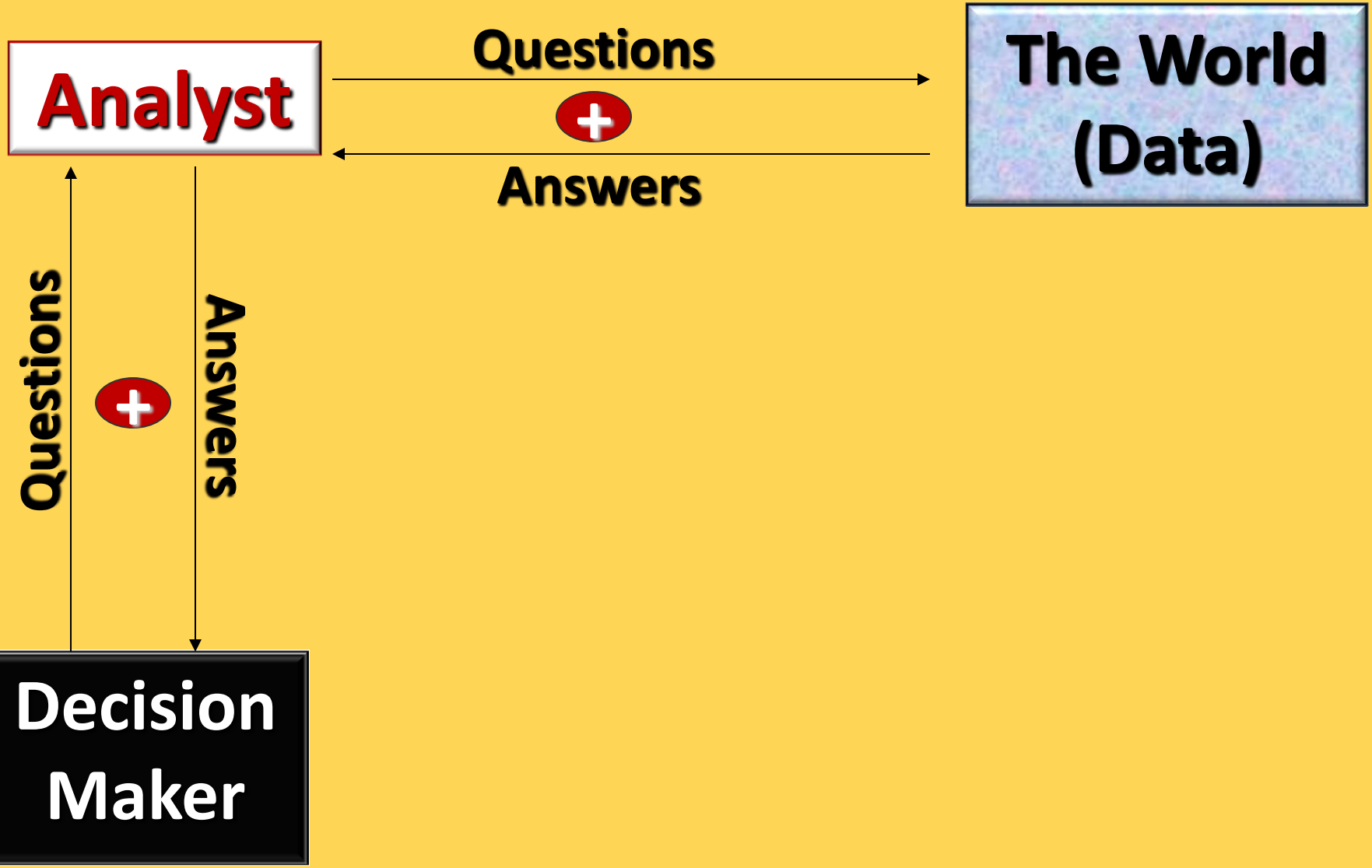


Diagram Three

The Frustrated Analyst

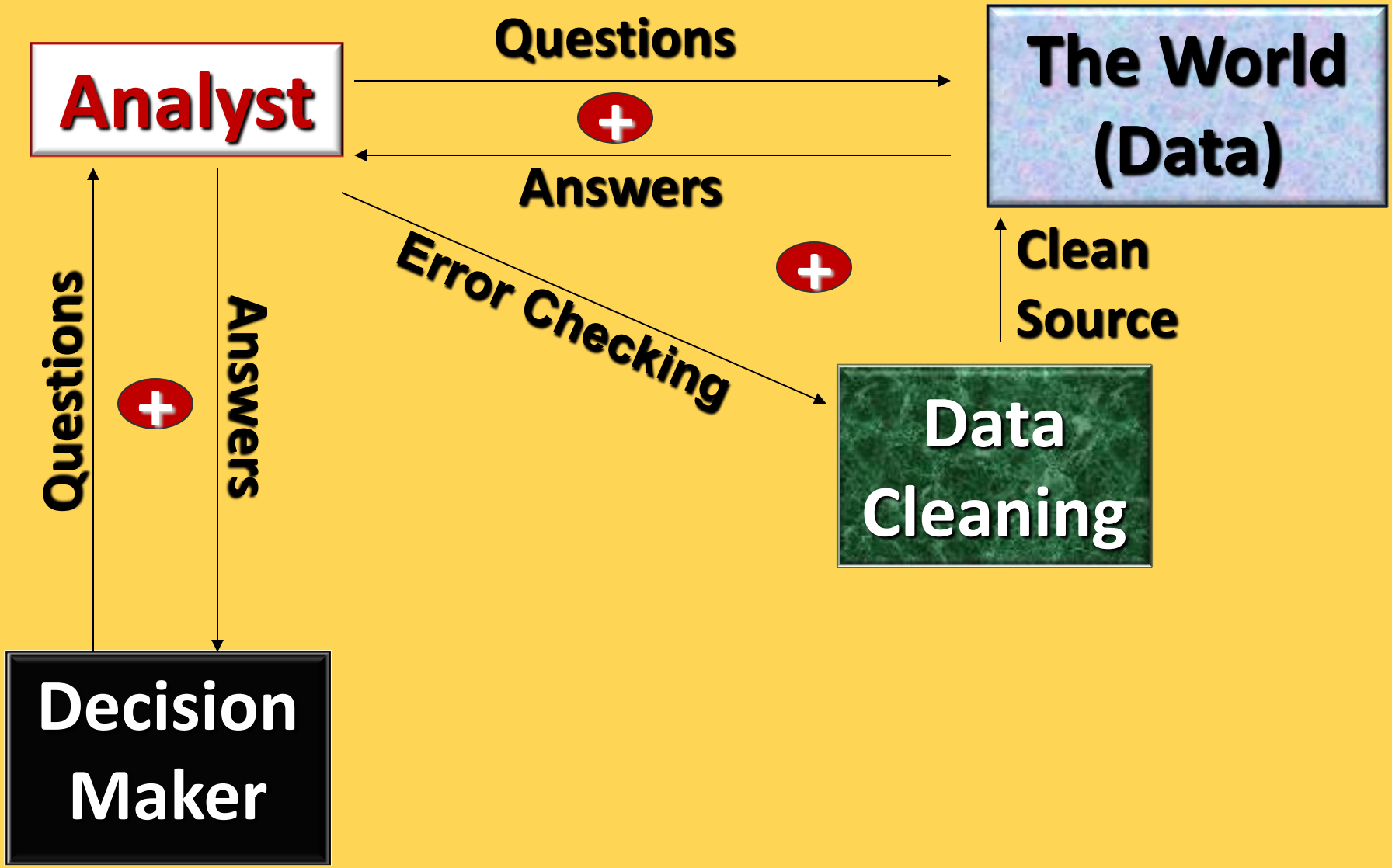


Diagram Four

The Really Frustrated Analyst

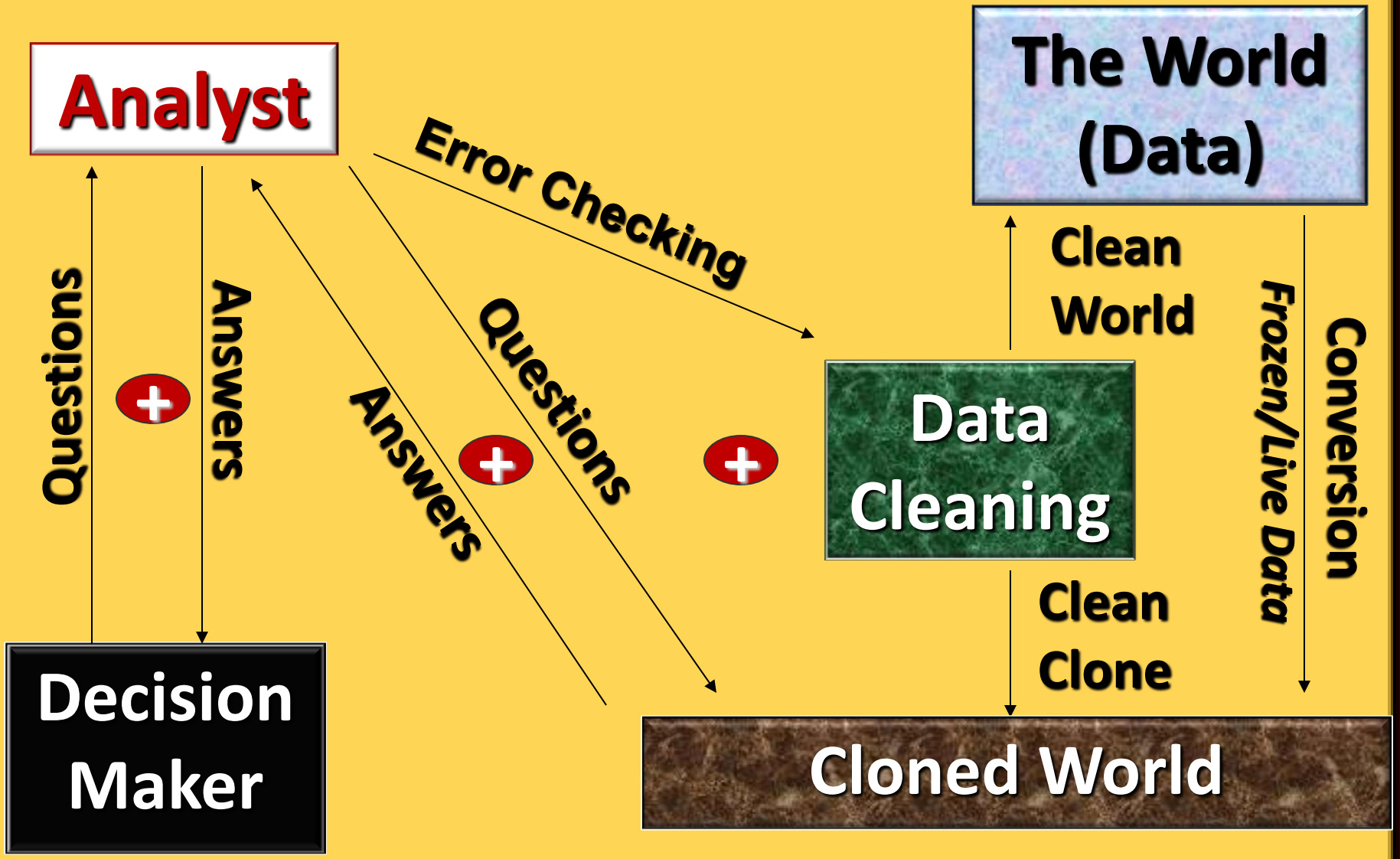


Diagram Five
Report Exchange (REX)

OLAP - *ProClarity*

On-Line Analytic Processing

(Delivery System)

Data Storage - *iStrategy*

One Table per Unit of Analysis

(Grain)

Business Intelligence (BI)

Diagram Six

The Lazy Analyst

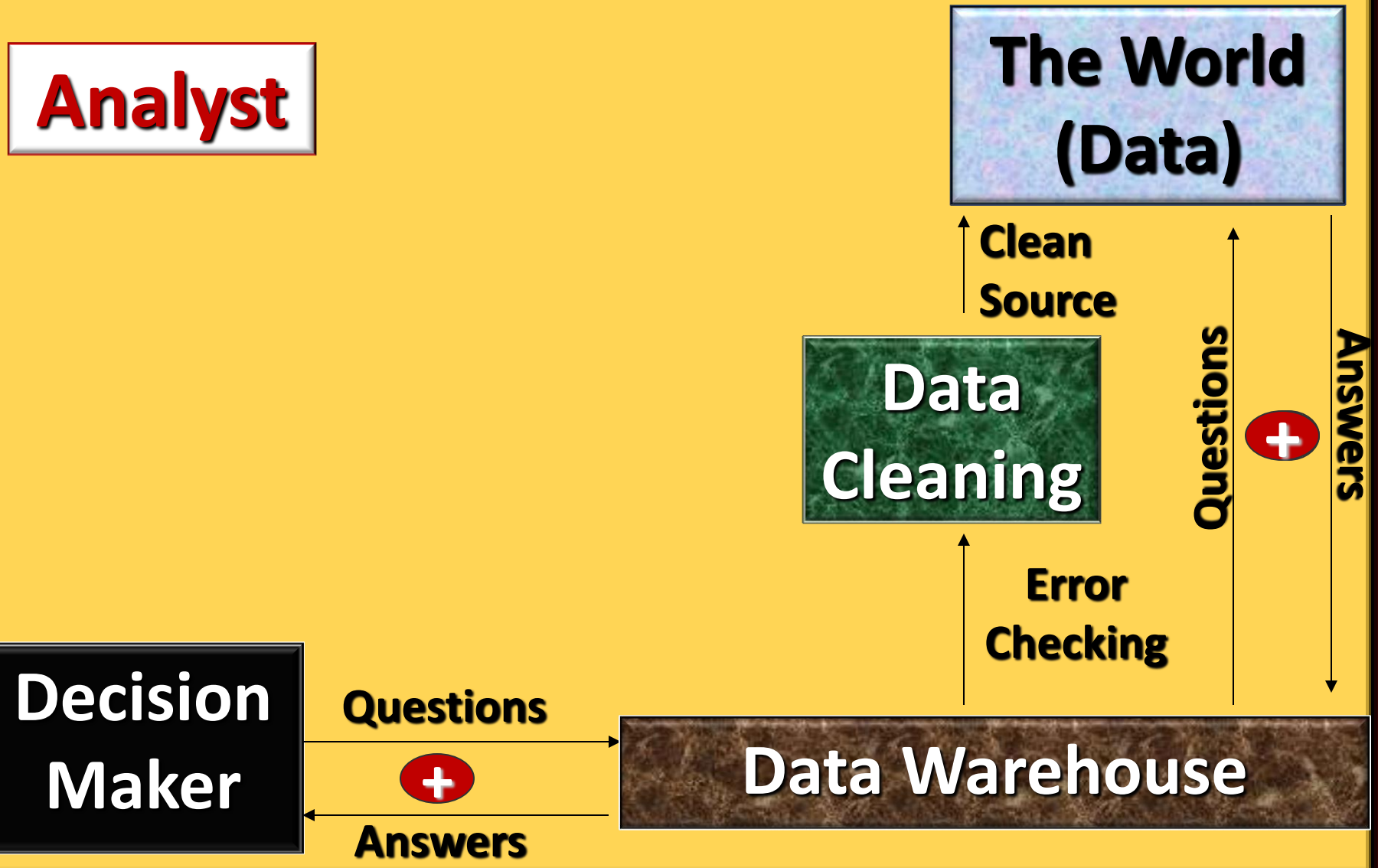
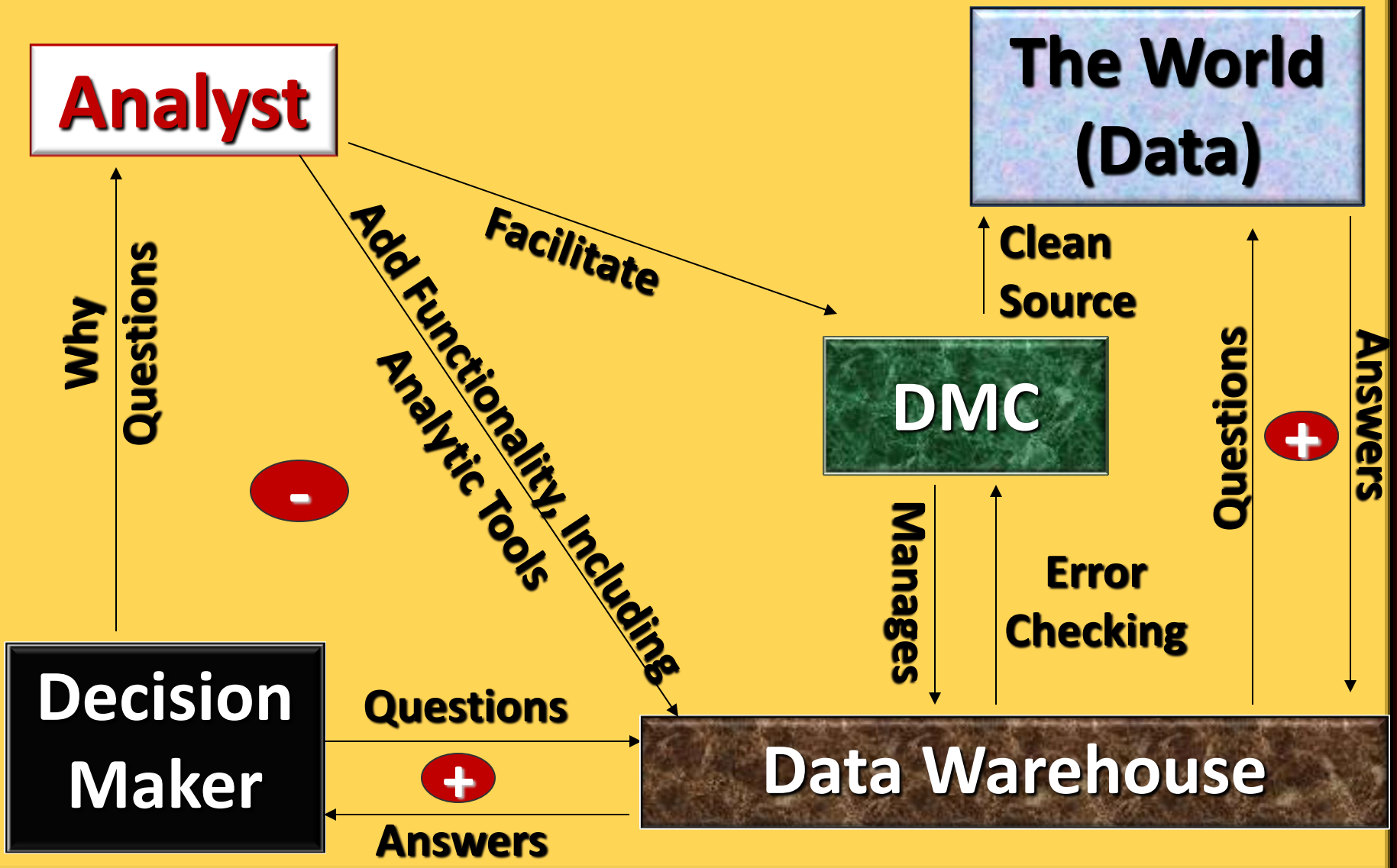


Diagram Seven

Optimizing Analysis



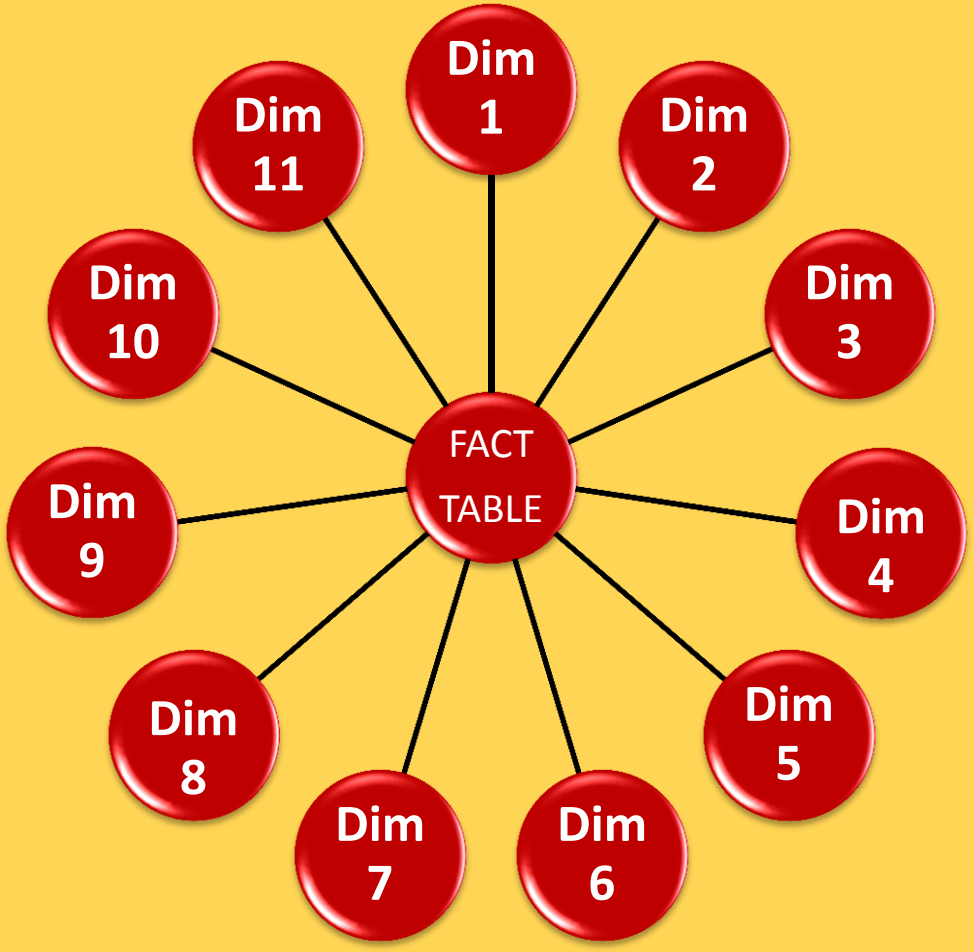
Implications for Future Analysis

- **Incorporating Multivariate Statistics**
  - ***First-Year Experiences***
- **Utilizing Peer Analysis**
  - ***Course Redesigns***
- **Broadening Decision-Making**
  - ***First-year invention and Blackboard usage***
- **Linking Planning and Budgeting**
  - ***Growth of Applied Master's Programs***
- **Simulating Policy Initiatives**
  - ***Evaluating yield enhancement strategies***

iStrategy Delivered “Fact” Tables

- Applications
- Class Instruction
- Class Schedule
- Course Attributes
- Degree Awards
- Recruitment Attributes
- Registration
- Service Indicators
- Student Financial Items
- Student Groups
- Student Plan
- Student Term

Star Schema


Dim 1
Dim 2
Dim 3
Dim 4
Dim 5
Dim 6
Dim 7
Dim 8
Dim 9
Dim 10
Dim 11
FACT TABLE

Differentiating Facts (Measures) From Dimensions

- ***Nominal (dimension tables***
- ***Ordinal (Fact)***
- ***Interval (Fact)***
- ***Dummy (Either)***

Data Cubes

Build or Buy?
iStrategy as an Example

- ***Pros***
  - *Easy to get started*
  - *Easy to get under the hood & you will need that*
  - *Microsoft product (versatile)*
- **Cons**
  - *Built with older version of SQL server*
  - *Pro-Clarity*
  - *No slowly changing dimensions*
  - *Too little consultation with IR*

Governance

- Getting IT/IR/EM cooperation
- Data Management Council
- Access
- Security
- Database administration
- Report Generation
- Training/Documentation

Conclusion

- Resources
  - HEDW
  - Each Other
  - Me
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