ЕВРОПЕЙСКИ СЪЮЗ
ЕВРОПЕЙСКИ ФОНД ЗА
РЕГИОНАЛНО РАЗВИТИЕ

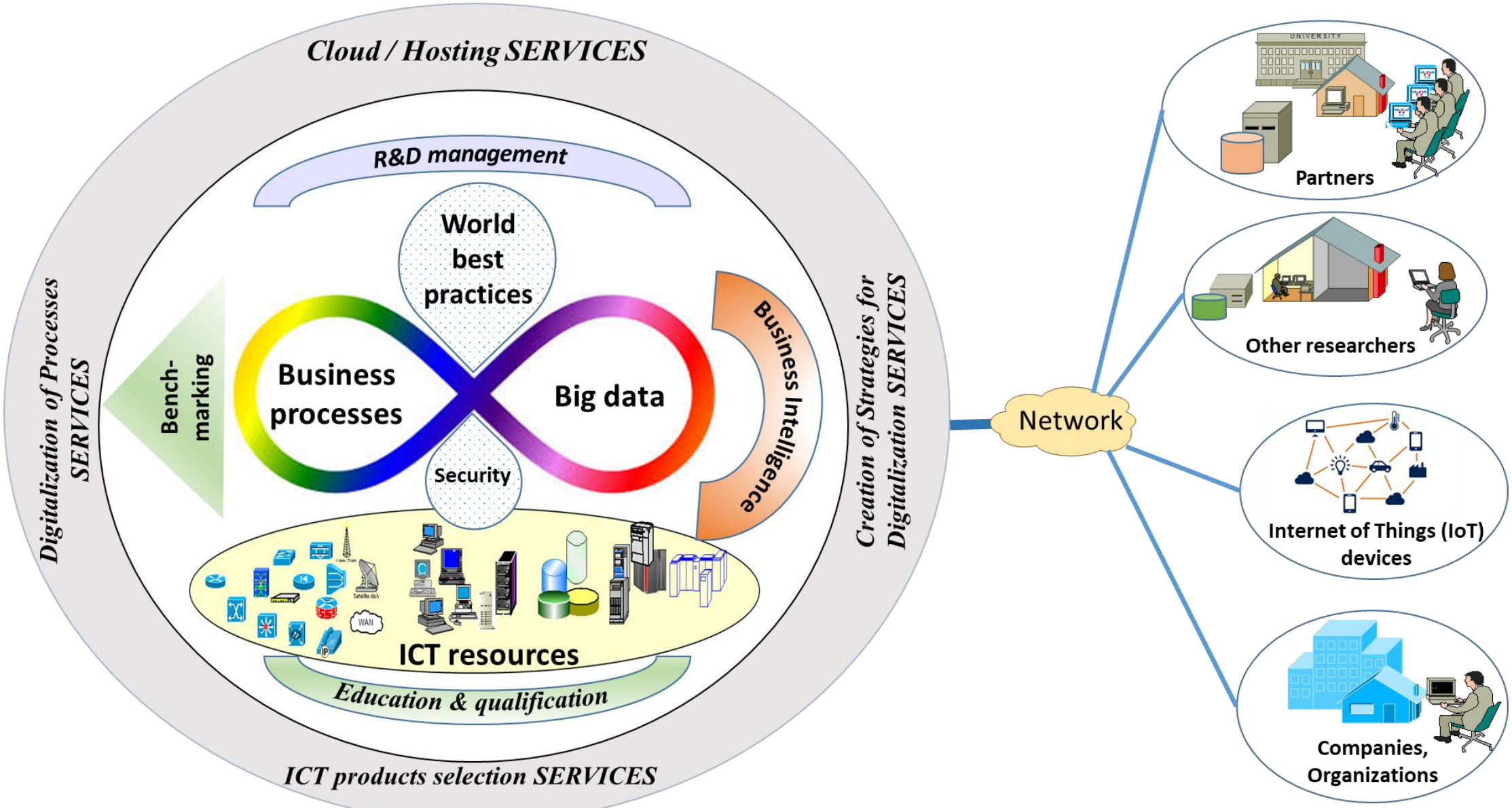
ОПЕРАТИВНА ПРОГРАМА
НАУКА И ОБРАЗОВАНИЕ ЗА
ИНТЕЛИГЕНТЕН РАСТЕЖ

# The Center of Competence (CoC) is established according to

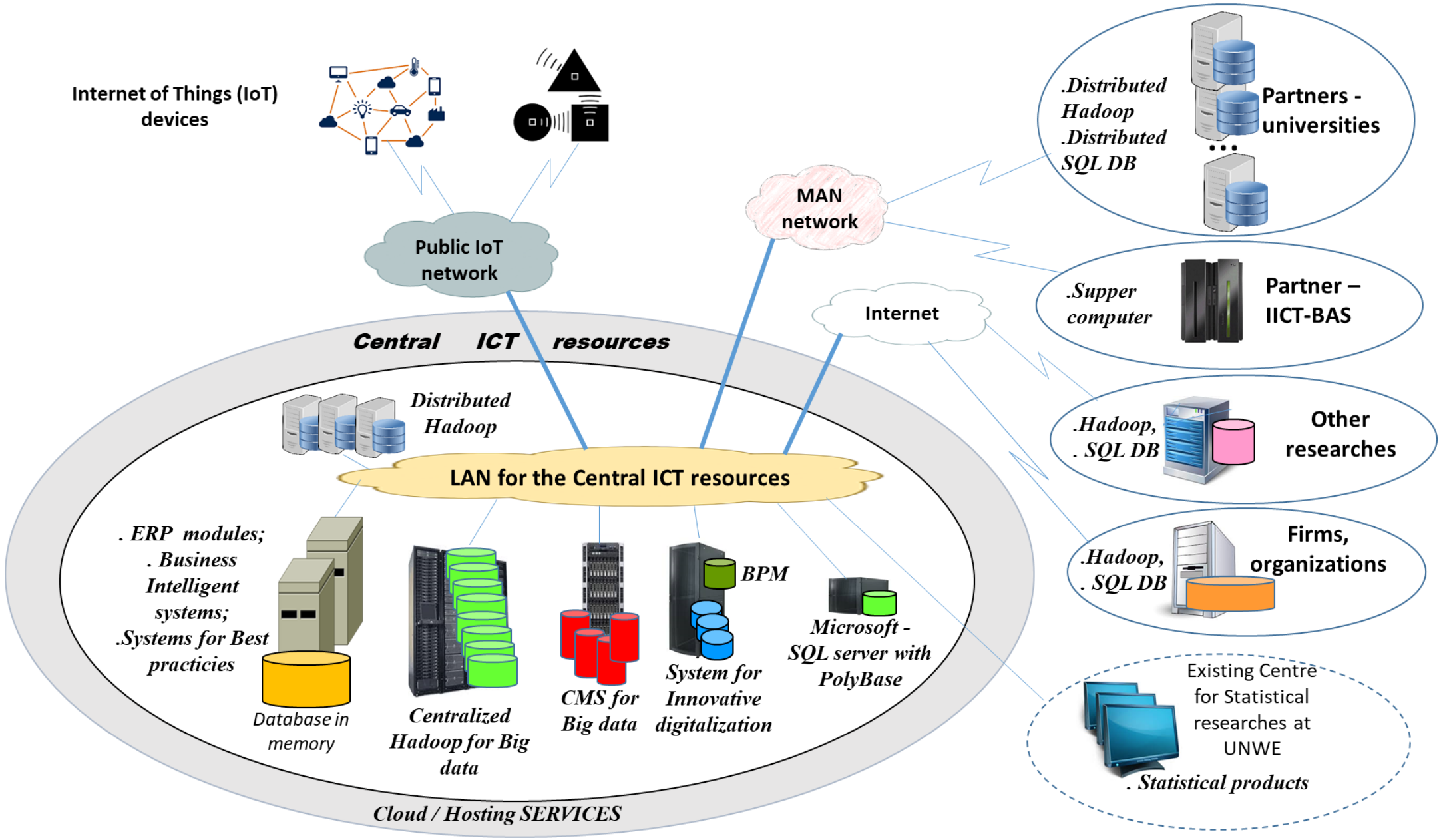
Procedure BG05M2OP001-1.002 „Establishment and development of competence centers"
Operational Program "Science and Education for Smart Growth" 2014 - 2020

## Project BG05M2OP001-1.002-0002
## „Digital transformation of Economy in Big Data environment“

# Functional Architecture of the CoC

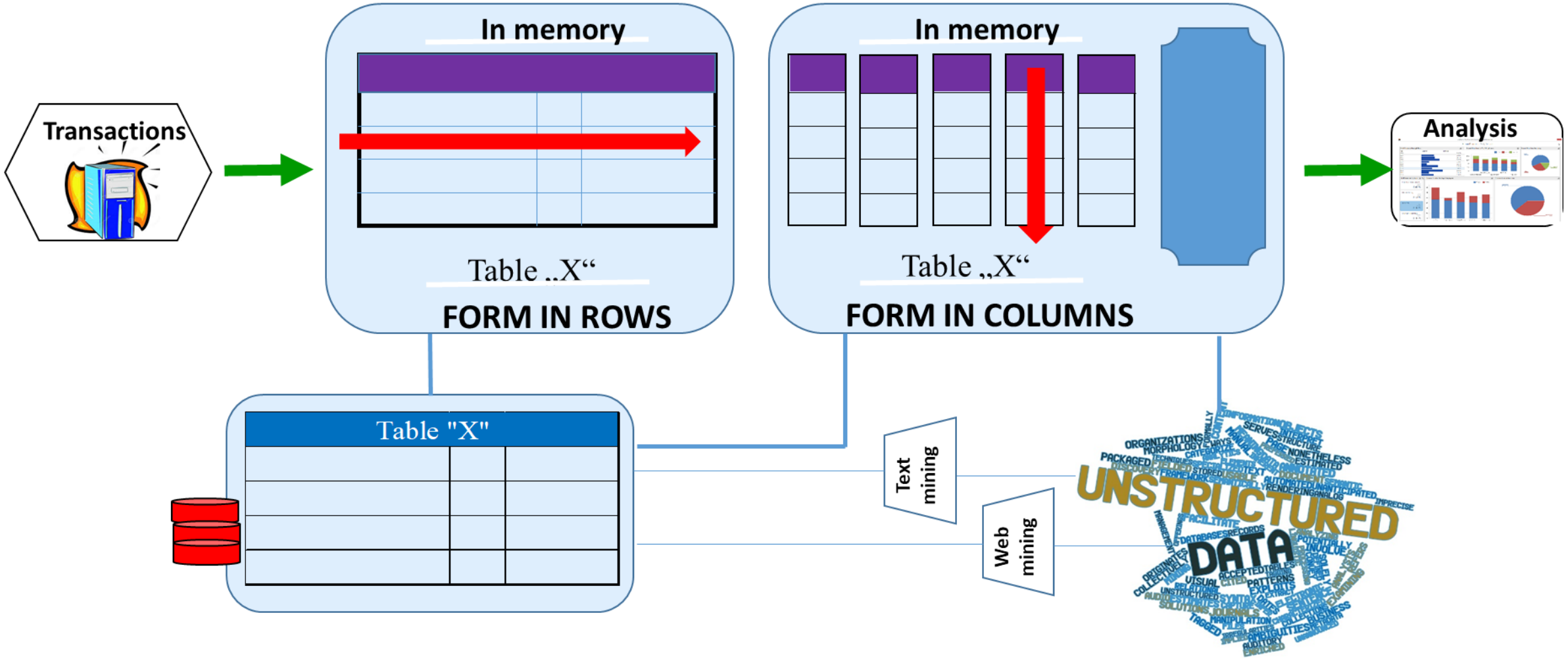


# Conceptual ICT architecture of the CoC

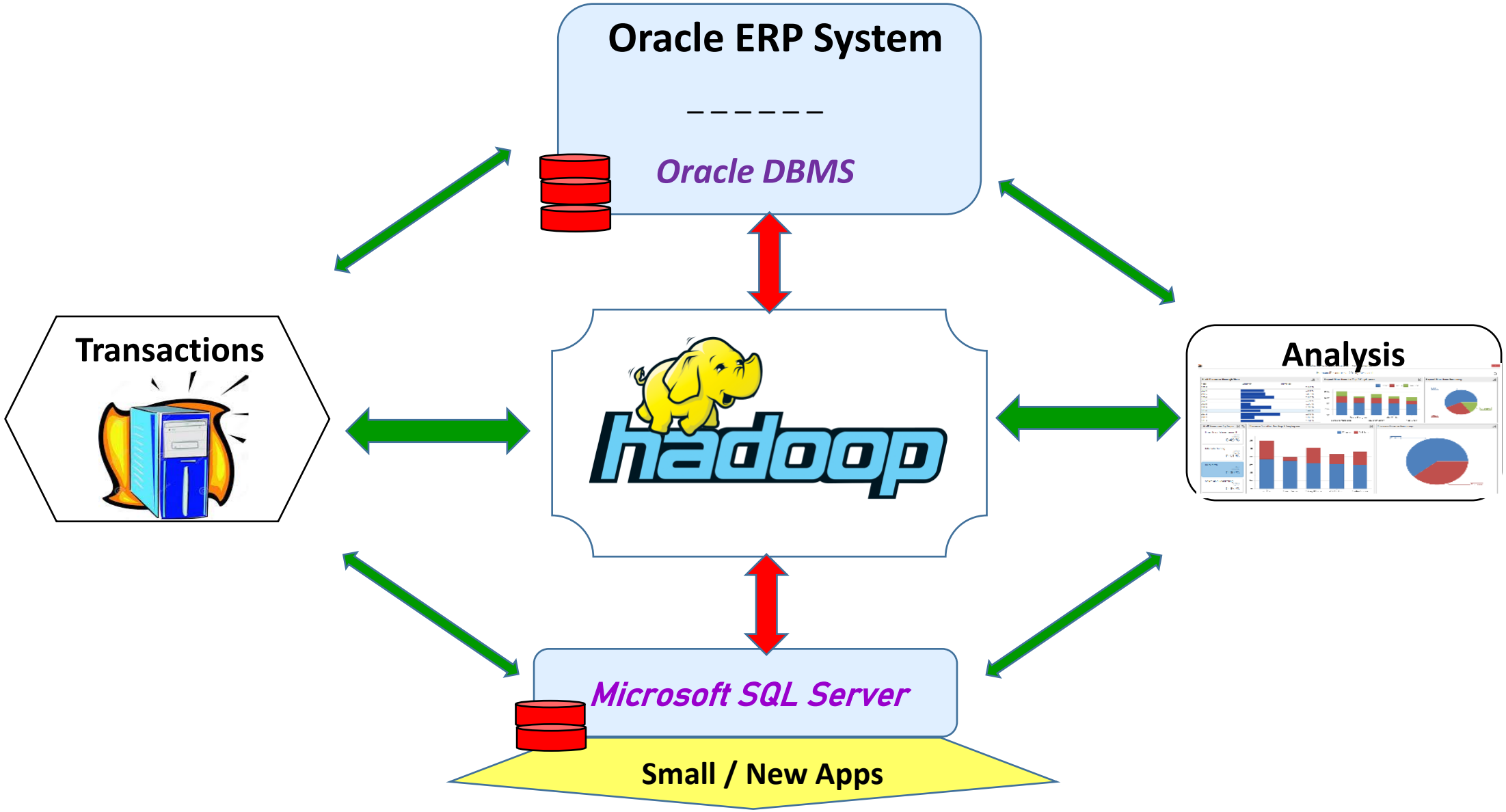


# Central system – Physical layout

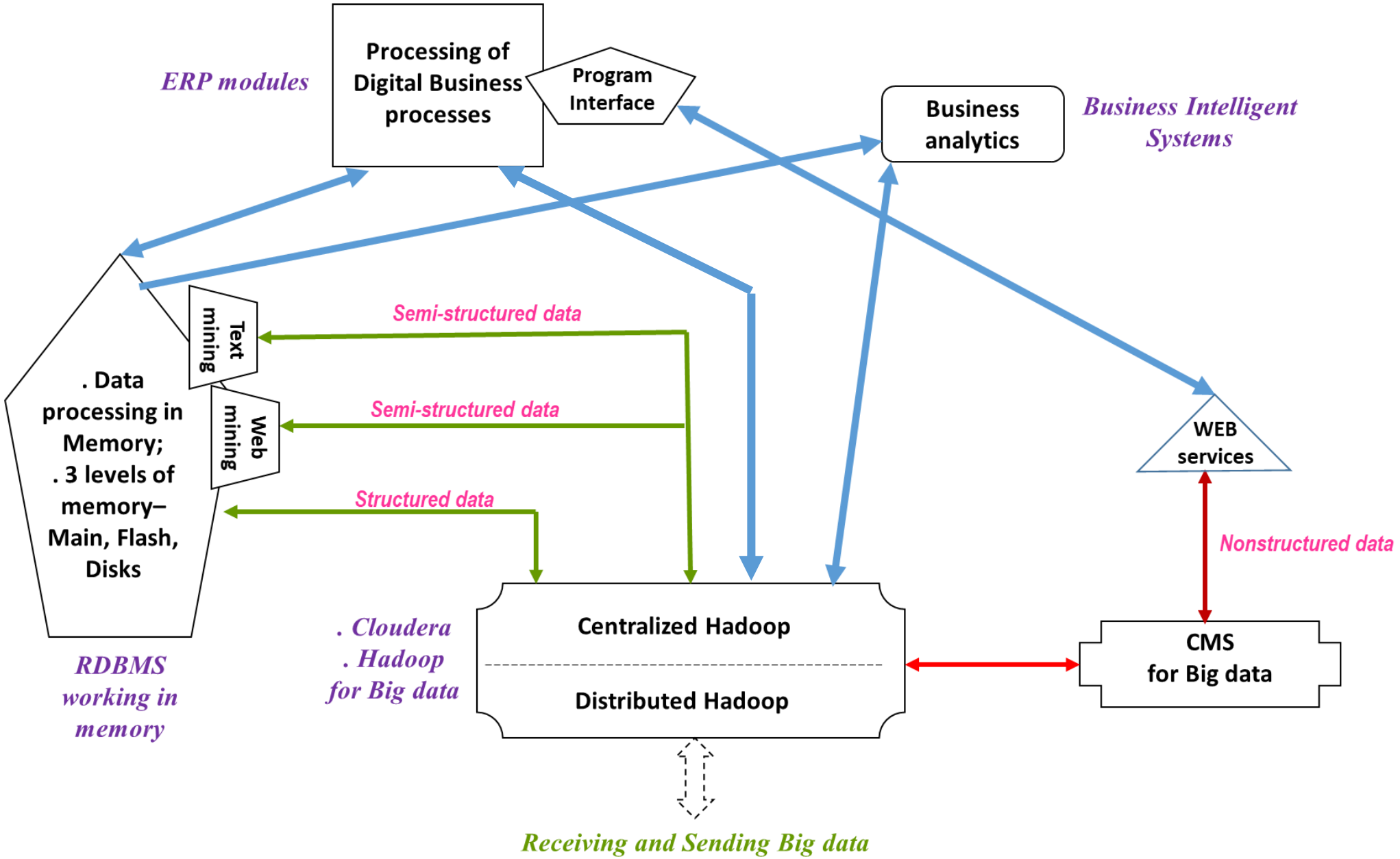
# Application of the Principle of Database / Processing in memory



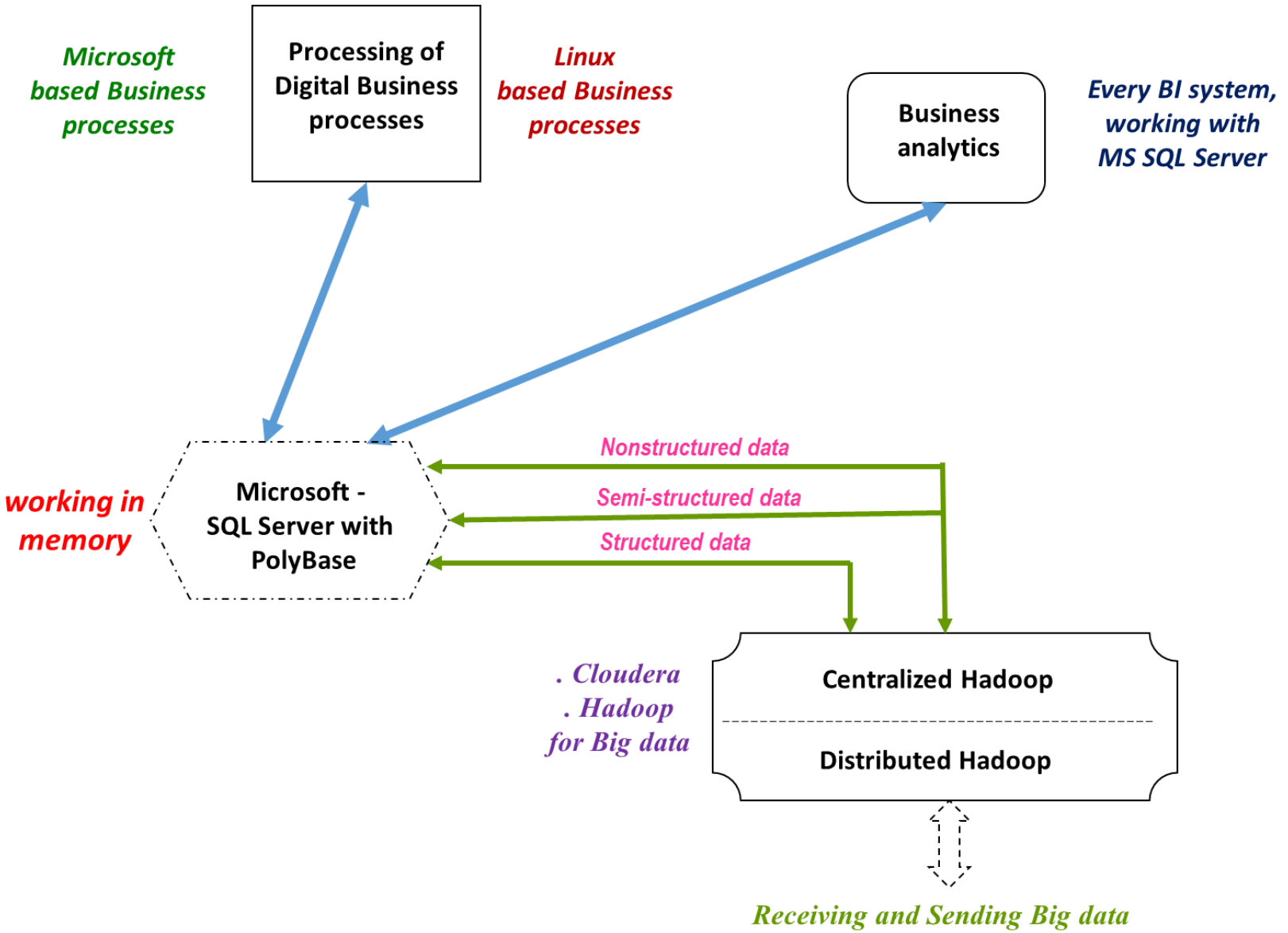
# Business Applications using Big Data



# Conceptual schema for Big data treatment



# Creation of Business processes with Big data for SME, incl. from scratch



# Main business areas on focus

| # | Business / Economical ereas |
|---|---|
| 1 | Accounting and asset management |
| 2 | Financial Management |
| 3 | Logistics, Transport, Supply Chain Management (SCM) |
| 4 | Marketing, sales, order management and customer relationship management (CRM) |
| 5 | Human Resources |
| 6 | Real Estate Management (Building-Construction Management) |
| 7 | Manifacturing |
| 8 | Management and organization of IoT and warehouse management |

| № | Additional functional area - area of impact | |
|---|---|---|
| 1 | Macroeconomics | |

# Offered Research and Development Services

- Services creating digitization strategies
- Process digitization services
- ICT product selection services
- The services for providing the resources of the Center for Competence for conducting research

# Offered System and Applied-Research services

- Design of hardware systems related to big data processing
- Design of methods, models and algorithms for big data processing
- Integrate big data into digitalized business processes
- Design of computer components for big data processing

## Providing of Research and Development Services

**RESULTS**

- *Delivered services*
- *Frameworks*

*Practical execution of the Research and Development Services*

*Basic Research and Development Services*

. Researchers from the CoC
. Researchers using the CoC

. Developers in the CoC

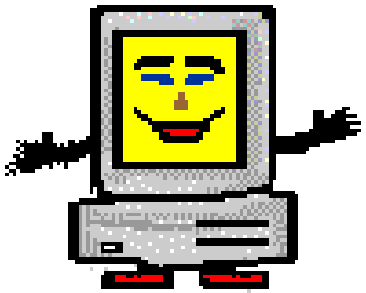
## Providing of Systems and Applied Research Services

- *Delivered services*
- *ICT Products prototypes*

*Personalized applying of the System Research Services*

*Core results from the System and Applied Research Services*

. Researchers from the CoC
. Researchers using the CoC

. Developers in the CoC

# Q & A