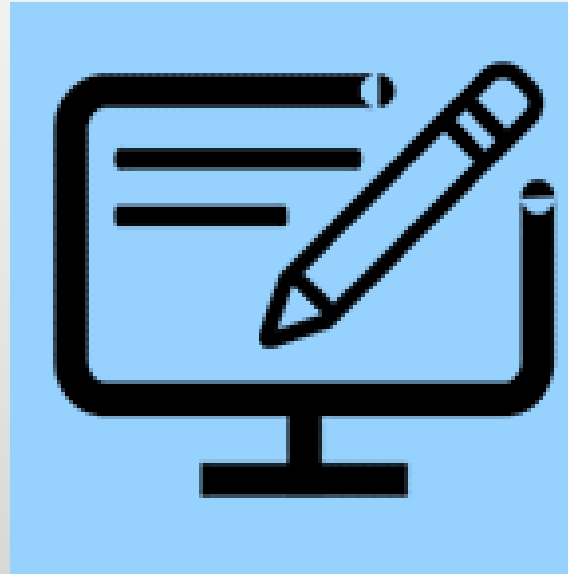


HFBI INTRODUCTORY WORKSHOP SERIES 16.6. – 10.11.2021



WS 3 – BI AND (X)OLAP



TERMINOLOGY

BI (Business Intelligence)

Collection, integration, analysis and presentation of business information and use of related technologies and applications, in order to support decision making.

OLAP (Online Analytical Processing)

Analysis of large volumes of business data on-line.

MOLAP (Multidimensional Online Analytical Processing)

Uses multidimensional cube approach and structures in analysis.

XOLAP (X-dimensional Online Analytical Processing)

ROLAP (Relational Online Analytical Processing)

Uses relational tables and structures in analysis.

HOLAP (Hybrid Online Analytical Processing)

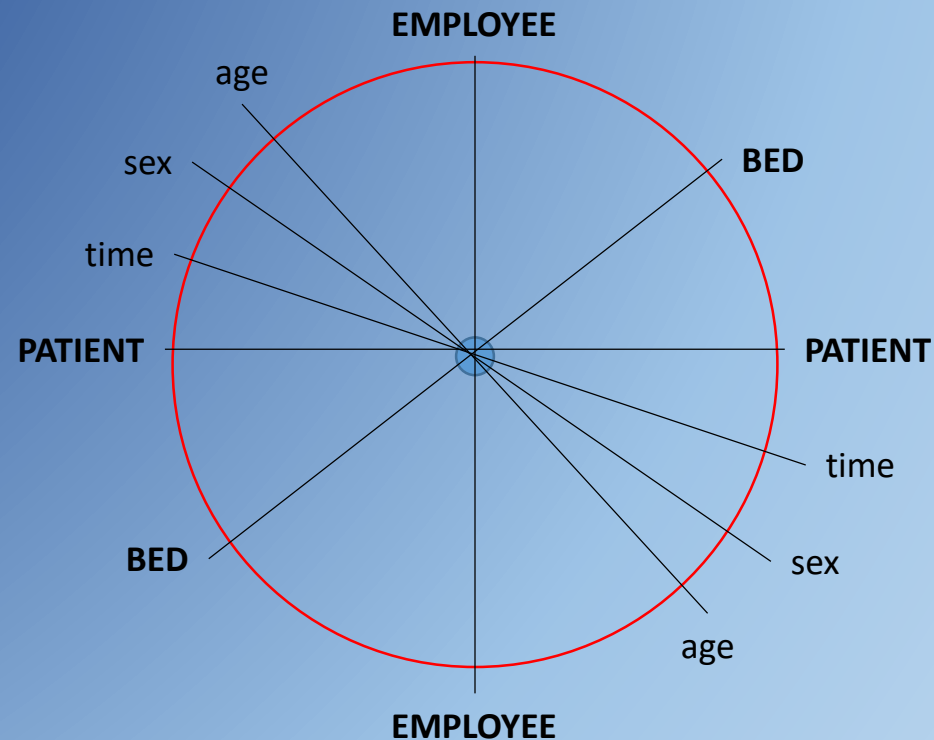
Mixture of MOLAP and ROLAP.

DIMENSIONS

KEY HFBI ENTITIES AND ATTRIBUTES CAN BE VIEWED AS
MULTIPLE INTERSECTING DIMENSIONS

6-DIMENSIONAL ENTITY-ATTRIBUTE SPACE

(difficult to represent graphically)



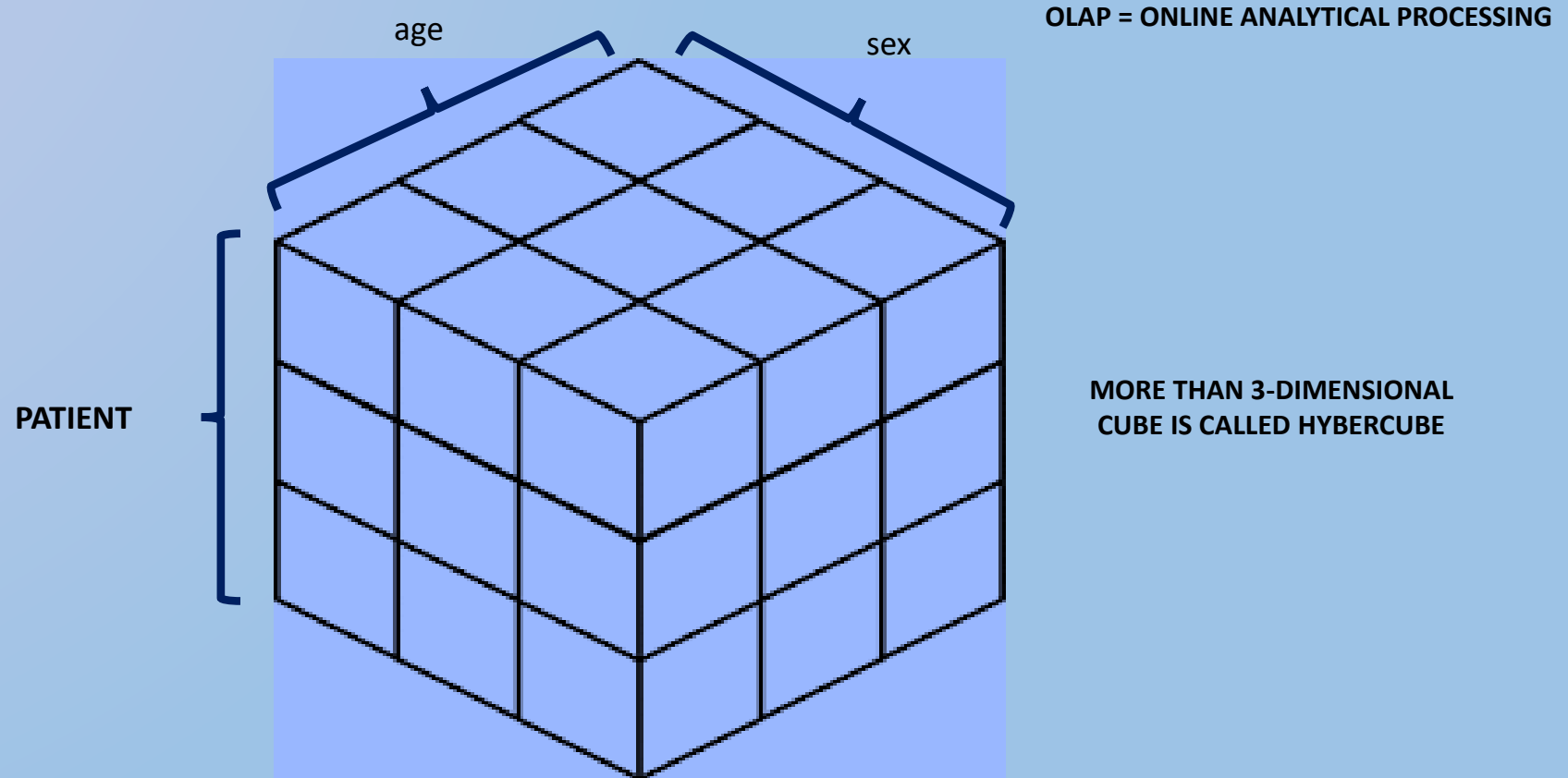
(TECHNOLOGY INDEPENDENT)

IF YOU TRAVEL ALONG ONE
OF THE DIMENSIONS,
YOU ENCOUNTER OTHER
INTERSECTING DIMENSIONS
WITH A VALUE

IN THE EXAMPLE DIAGRAM,
IF THERE IS AN INPATIENT
WHO IS AS WELL AN EMPLOYEE,
ALL SIX DIMENSIONS INTERSECT

CUBE-VIEW

3-DIMENSIONAL SPACE IS TRADITIONALLY REPRESENTED AS AN OLAP CUBE



OLAP = ONLINE ANALYTICAL PROCESSING

PATIENT

MORE THAN 3-DIMENSIONAL
CUBE IS CALLED HYBERCUBE

(TECHNOLOGY INDEPENDENT)