



Why „Business Intelligence“ ?

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Point of Start



Business intelligence was defined in an October 1958 IBM Journal article by [Hans Peter Luhn](#).

Hans Peter Luhn

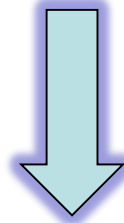
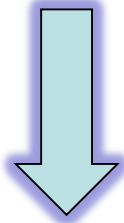
Born	1 July 1896 Barmen , German Empire
Died	19 August 1964 (aged 68)
Residence	United States
Nationality	German
Fields	Computer science
Institutions	IBM
Known for	KWIC (Key Words In Context)

https://en.wikipedia.org/w/index.php?title=Hans_Peter_Luhn&oldid=730888359

57 years later



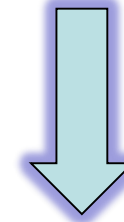
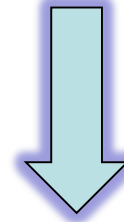
„Business Intelligence“



about 33 000 000
results (2015)

about 52 000 000
results (2016)

"هوش تجاری"



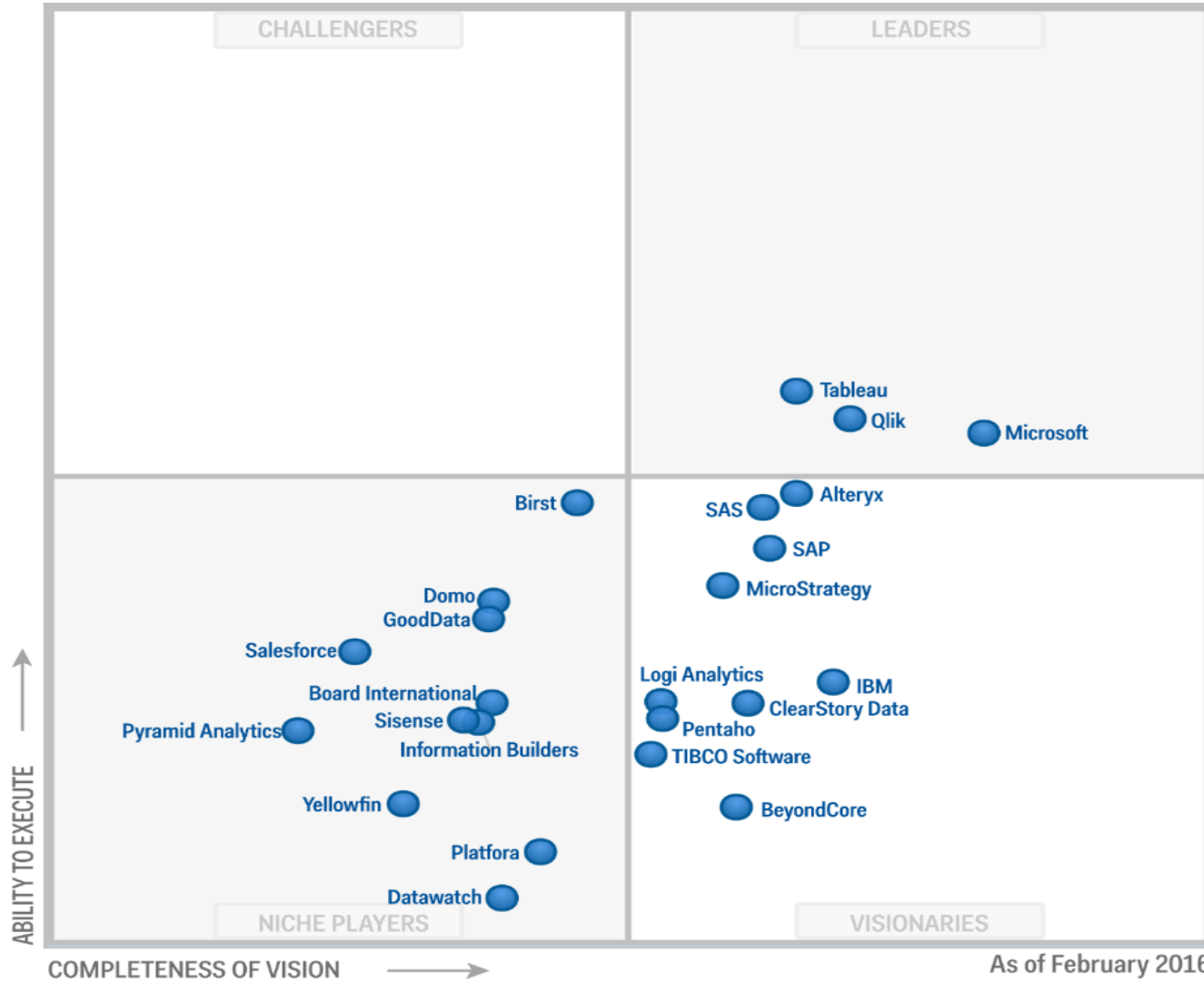
about 133,000
Results (2015)

about 368,000
results (2016)

57 years later Gartner Magic Quadrant for Business Intelligence Platforms 2015



Gartner Magic Quadrant for Business Intelligence Platforms 2016



As of February 2016



What is the main reason of this rapid development ?

Recognition of the importance of the **Facts Based Decision Making**

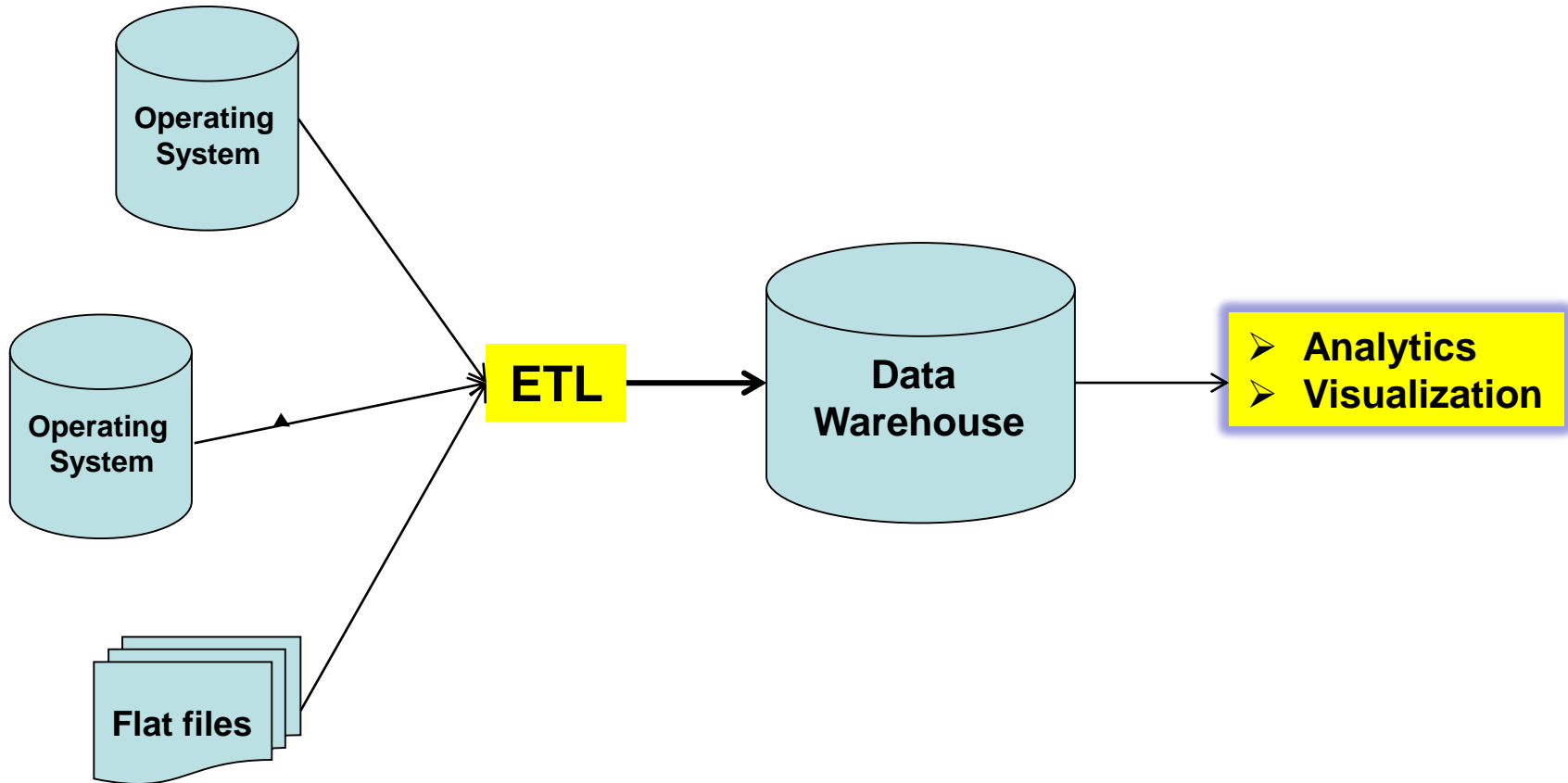
Definition

- **BI** is a broad category of **Management Information Systems**, applications and technologies for gathering, storing, analyzing, and providing access to data to help enterprise users **make better business. decisions**
- An effective BI system provides corporations with **“one version of the truth”**



Main Components of a BI-System

Architecture



Beyond Terabyte



Kilobyte (kB)	$10^3 = 1000$
Megabyte (MB)	$10^6 = 1000\ 000$
Gigabyte (GB)	$10^9 = 1000\ 000\ 000$
Terabyte (TB)	$10^{12} = 1000\ 000\ 000\ 000$
Petabyte (PB)	$10^{15} = 1000\ 000\ 000\ 000\ 000$
Exabyte (EB)	$10^{18} = 1000\ 000\ 000\ 000\ 000\ 000$
Zettabyte (ZB)	$10^{21} = 1000\ 000\ 000\ 000\ 000\ 000\ 000$
Yottabyte (YB)	$10^{24} = 1000\ 000\ 000\ 000\ 000\ 000\ 000\ 000$

“Boeing 747 generates in a domestic flight up to 240 TB Data” (Mckinsey)

Challenges



Which are the best ways for gathering, storage , processing , visualizing and analyzing of the data?