

# Cities in the Cognitive Era

Dr. Alexey Ershov

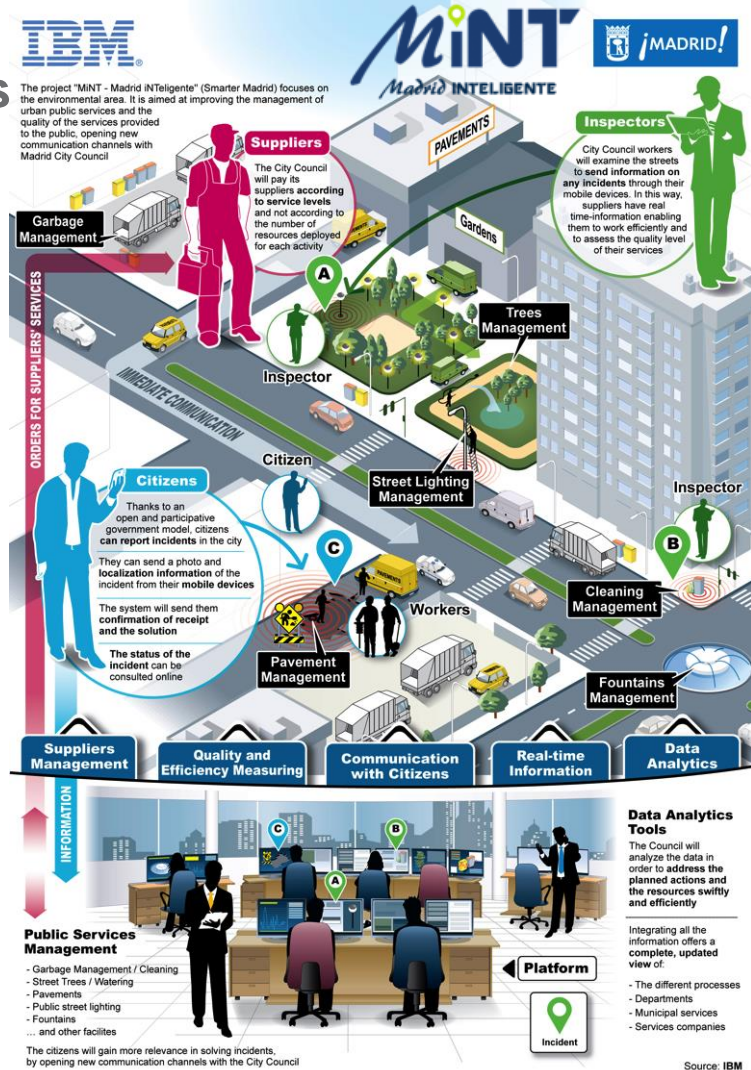
Vice President, Smarter Cities Europe, IBM Corporation

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# Madrid uses analytics to cut costs and support outcome-based maintenance contracts

- Service providers paid for quality, not activities
- 1,500 daily inspections tracking 300 KPIs
- Incentive to innovate and optimize resource deployment
- 6% reduction in cost of city services
- 10-20% reduction in IT costs
- Citizen collaboration

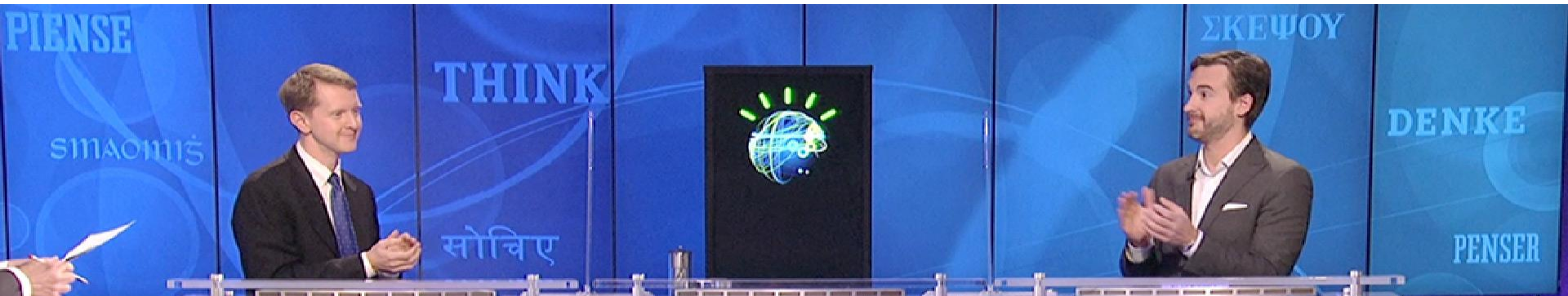




In 1997 IBM Deep Blue made history by defeating Garry Kasparov in chess



In 2011 IBM Watson made history by defeating two best players in *Jeopardy!*



**\$300,000**

Who is Stoker?  
(FOR ONE WELCOME OUR  
NEW COMPUTER OVERLORDS)  
\$ 1,000

Ken Jennings

**\$1,000,000**

Who is Bram  
Stoker?  
\$ 17,973

Watson

**\$200,000**

WHO IS  
BRAM STOKER?  
\$5600

Brad Rutter

ENSE

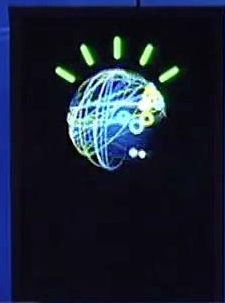
ΣΚΕΨΟΥ

THINK

DENKE

ΣΙΜΑΟΜΙΣ

PENSE



सोचिए

**\$300,000**

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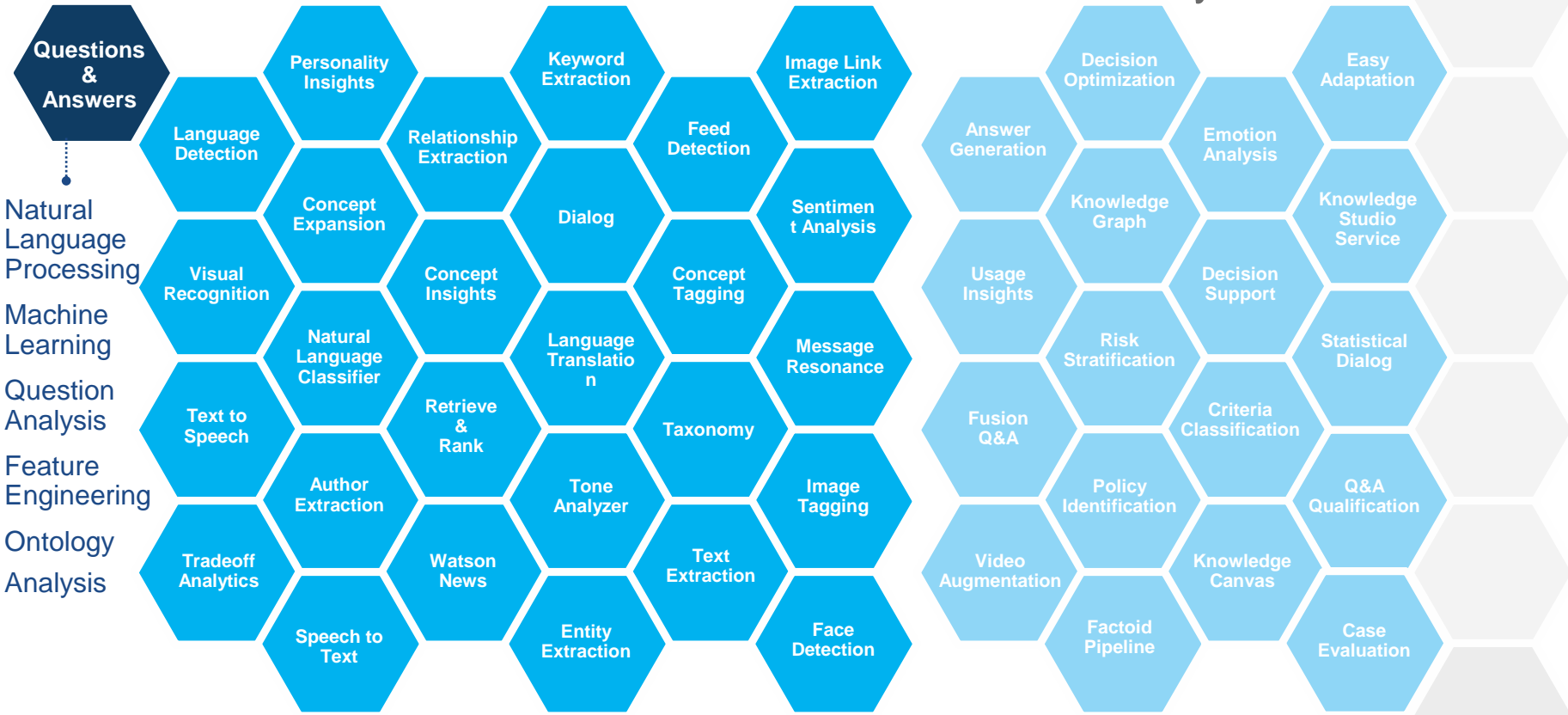
WHO IS  
BRAM STOKER?  
\$5600

# Watson has grown since winning *Jeopardy!* in 2011

2011

28 APIs now

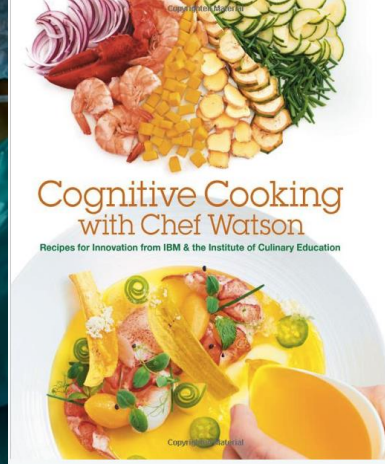
50 APIs by end of 2016



A man in a suit, Ken Jennings, is seated at a white circular table in a modern library or study. He is looking at a laptop. The room features curved bookshelves filled with books and two other identical setups on either side, suggesting a multi-person environment. The lighting is dim, with a bright light source from above. The text 'Ken Jennings + IBM Watson on competition' is overlaid in the upper center of the image.

**Ken Jennings +  
IBM Watson  
on competition**






*“In fact, the business plans of the next 10,000 startups are easy to forecast:*

***Take X and add AI.***

*This is a big deal, and now it's here”*

- Kevin Kelly (founding executive editor of [Wired](#) magazine)

A man in a dark suit is walking from right to left, playing an acoustic guitar. He is in a modern lounge area with a long, tufted brown leather sofa and a white, pedestal-style table. On the table sits a laptop. Behind the sofa is a large, dark wood bookshelf filled with books. The room has large windows in the background, showing a modern building exterior. The overall atmosphere is professional and intellectual.

**Bob Dylan +  
IBM Watson  
on language**

**outthink**