Programación paralela

Big Data: El reto del presente, el reto del futuro

José María Cecilia

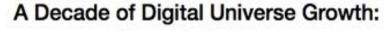


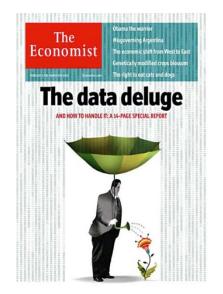
Next "Big" Market by hipeac

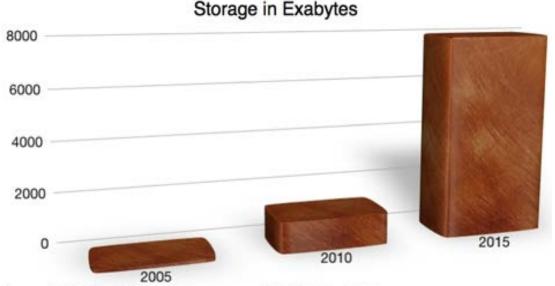
- "The Internet of Things for us is about the sale of microcontrollers. We think it is likely to follow a similar path to mobile phones,"
 - Warren East, CEO of processor intellectual property licensor ARM
- "It will be bigger than the cloud"
- "IoE Creates \$14.4 Trillion of Value at Stake for Companies and Industries"
 - CISCO

Data Deluge: flooding by information

✓ Our world is creating more bits than ever: in 2011, more than 1.8 zettabytes (1.8 x1021), growing by a factor of 9 in 5 years

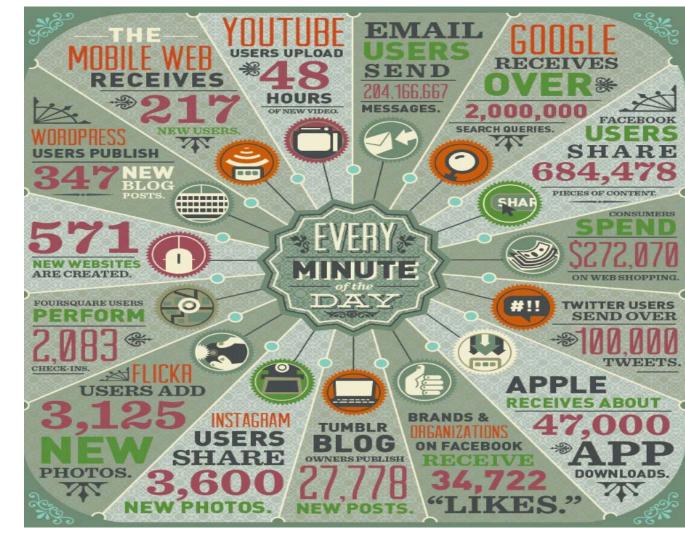






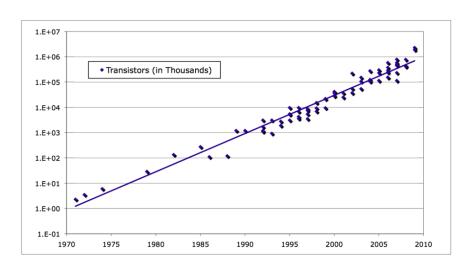
Source: IDC's Digital Universe Study, sponsored by EMC, June 2011

What are the main sources of data?



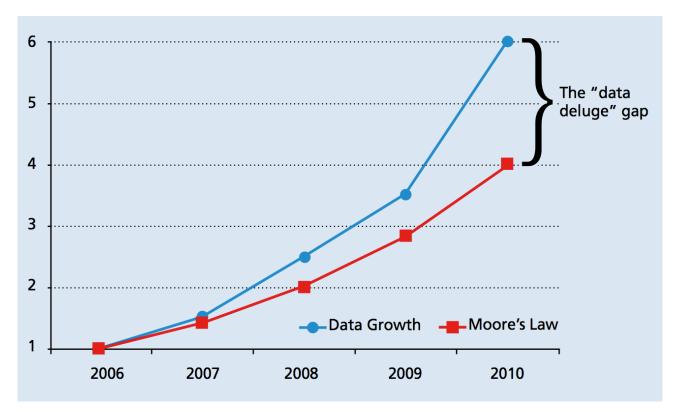
La Ley de Moore

- ✓ Ley empírica que ha trazado el desarrollo de microprocesadores en las últimas décadas.
- ✓ El número de transistores por unidad de superfice en circuitos integrados se duplica aprox. cada 2 años (18 meses).
- ✓ Se habla del fin de la ley de Moore (...)



Fuente Kunle Olukotun, Lance Hammond, Herb Sutter, Burton Smith, Chris Batten, and Krste Asanovic (HiPEAC Roadmap 2013)

Data Deluge Gap



Gracias