how much information

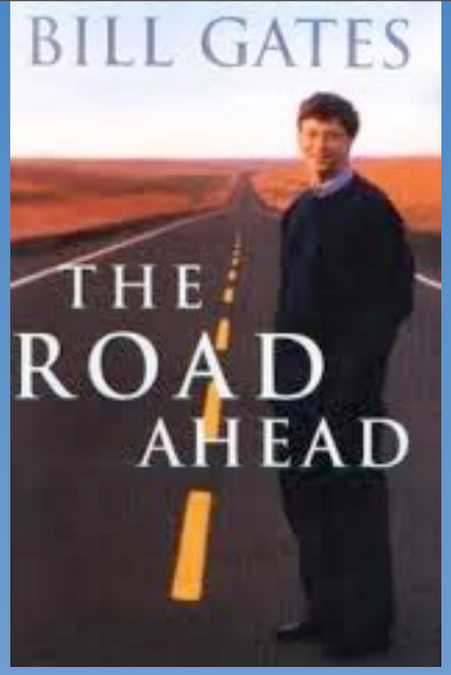
what kind of question?

what counts?

when counting began?

Concepts of Information

Tues, Jan 31 2012



down the road

Ann Blair
forth and back

Feb 2 & 7 - GN: History of Information

Feb 9 & 14: - Public Sphere, 18-19c
readers wanted

rear view mirror

"And it is there, in the ruck of history, that they are able to locate an information explosion that means something substantive and which has discernible origins and contexts: that *these* types of information, for *those* purposes, for *those* sorts of groups, with *those* sorts of interest are developing ...

--Frank Webster,

Theories of the Information Society, 2009

the recent ruck

Year	# sci journal	# books, Johns Hopkins
mid 17c	2	
mid 18c	10	
1800	100	
1850	1000	
1900		100,000
1950	30-100,000	
1970		1,500,000

1945 Bush, "As We May Think"

1960 Toffler, "The Quantity of Culture"

1962 Machlup - information/knowledge economy

1963 de Solla Price, *Little Science, Big Science*

1973, 1979 Bell - post-industrial society

1977 Porat - *The Information Economy: Sources and Methods for Measuring the Primary Information Sector*

Fortune July 1977

of an age

IBM Reports

Information: there's growing agreement that it's the name of the age we live in.

Human history has long been described in terms of Ages whose names reflect the stages of development through which mankind has passed: the Stone Age, the Bronze Age, the Iron Age and so on—down to the Industrial Age, which established the foundations of our modern society.

Today, there is growing agreement that we have entered a new era: a post-industrial stage of development in which the ability to put information to use has become critical, not only to the essential production of goods, but to efforts to provide a better life for the individual, as well.

This new era is being referred to with increasing frequency as the Information Age.

Information in the Information Age

Changes in our perception of information itself—its nature as well as its scope—have accompanied this profound shift of emphasis in our society.

Much has been written about the so-called "information explosion." It has been pointed out, for example, that the number of technical journals published throughout the world today exceeds 100,000, and that the total body of technical information is now doubling every ten years.

At the same time as the volume of information has been increasing dramatically, our understanding of the meaning of the term information itself has also broadened—to encompass a wide variety of timely data relating to "how things really are" across the whole spectrum of human activity.

A heartbeat, for example, can be extremely meaningful information when recorded and analyzed on sophisticated electrocardiogram equipment. So can electrical impulses reflecting the load level in a power network, or numeric digits representing the availability of a seat for you on an airplane—when processed by a modern computer.

These and a wide range of similar types of data are clearly recognized today as information, the kind of information on which we increasingly depend for the growth and health of our economy, the smooth functioning of our institutions—and, even more important, for the quality of our individual lives.

Information—an inexhaustible resource

Information is one of the few resources not in danger of exhaustion on this shrinking planet. It is unique because the supply is limitless, because it actually becomes more valuable with use and because—when properly managed and applied—it can greatly enhance our use of all our other resources, natural, human and economic.

One reason, of course, that information has proved to be such a dynamic resource is the fact that there exists today a remarkable technological capacity for dealing with it rapidly and effectively.

Through a vast array of electronic tools and techniques, mankind is able to accumulate, organize, store, interpret, retrieve and transmit information on a worldwide scale, in a volume, at a speed, and with an accuracy that would have been impossible barely two decades ago.

It is also a technology that continues to grow and that has proved to be amazingly efficient in economic terms. As advance has followed advance, the cost of processing information has steadily declined. Since the 1950's, the cost of performing 100,000 calculations on an IBM computer has fallen from $1.26 to less than one cent—and the downward trend continues.

Putting information to work for people

IBM makes many different products—from computers to copiers—but clearly, the essence of our business is information.

As a company, we are committed to exploring the limits of technology to find better, more imaginative and more productive ways to help put the benefits of this uniquely valuable resource to work for people.

IBM

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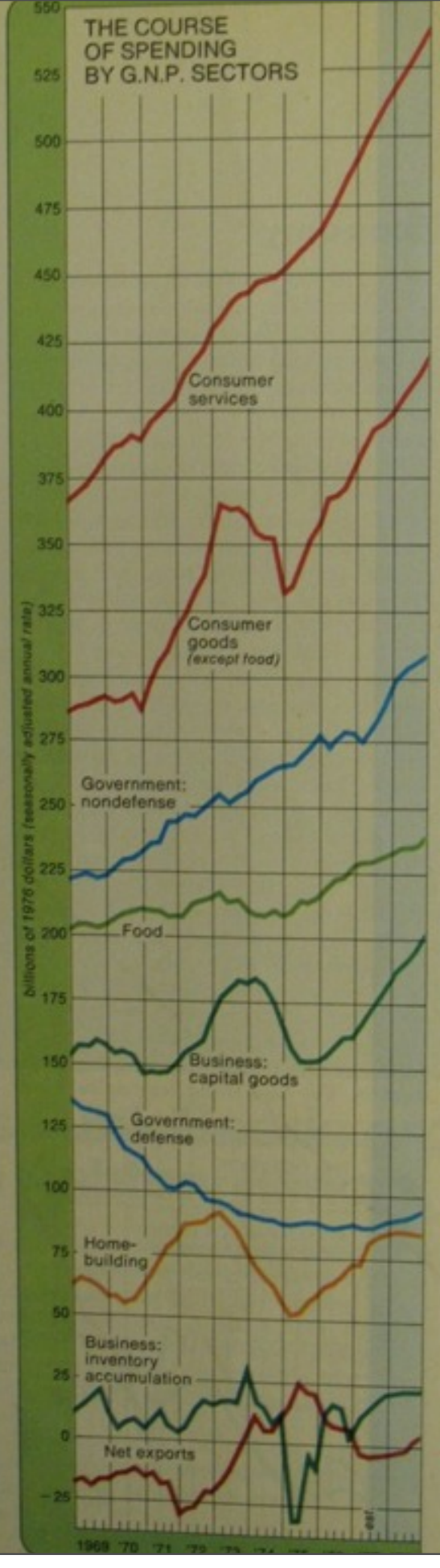

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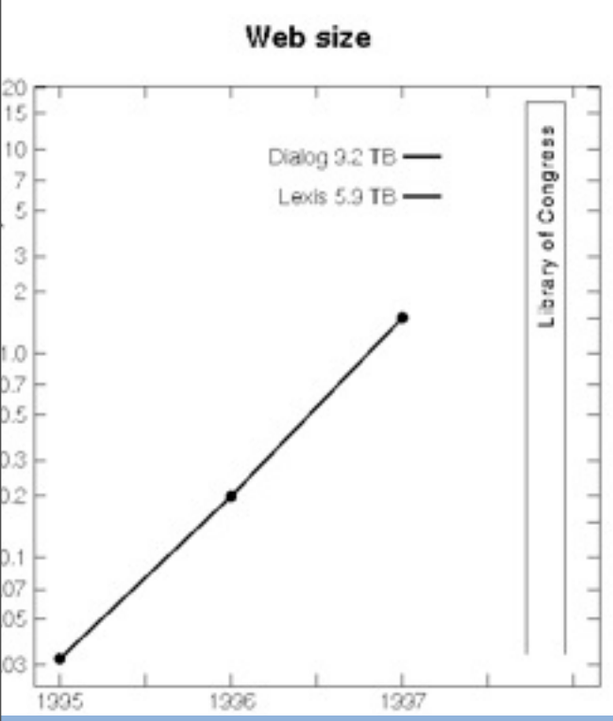


1996 Lesk - How Much Information in the World

1999, 2003 Lyman & Varian - *HMI*

2009, 2011 Bohn & Short &c - *HMI*

2009 Mayer-Schönberger, *Delete*

http://hmi.ucsd.edu/pdf/HMI_2010_EnterpriseReport_Jan_2011.pdf

HMI 2011

Three years ago, the world's 27 million business servers processed 9.57 zettabytes, or 9,570,000,000,000,000,000,000 bytes of information.

Researchers at the School of International Relations and Pacific Studies and the San Diego Supercomputer Center estimate that the total is equivalent to a 5.6-billion-mile-high stack of books stretching from Earth to Neptune and back to Earth, repeated about 20 times. By 2024, business servers worldwide will annually process the digital equivalent of a stack of books extending more than 4.37 light-years to Alpha Centauri, the scientists say."

Can I have that in LoCs (Score:5, Funny)

by Bob the Super Hamste (1152367) on Tuesday June 28 2011, @08:09AM (#36595944) Homepage

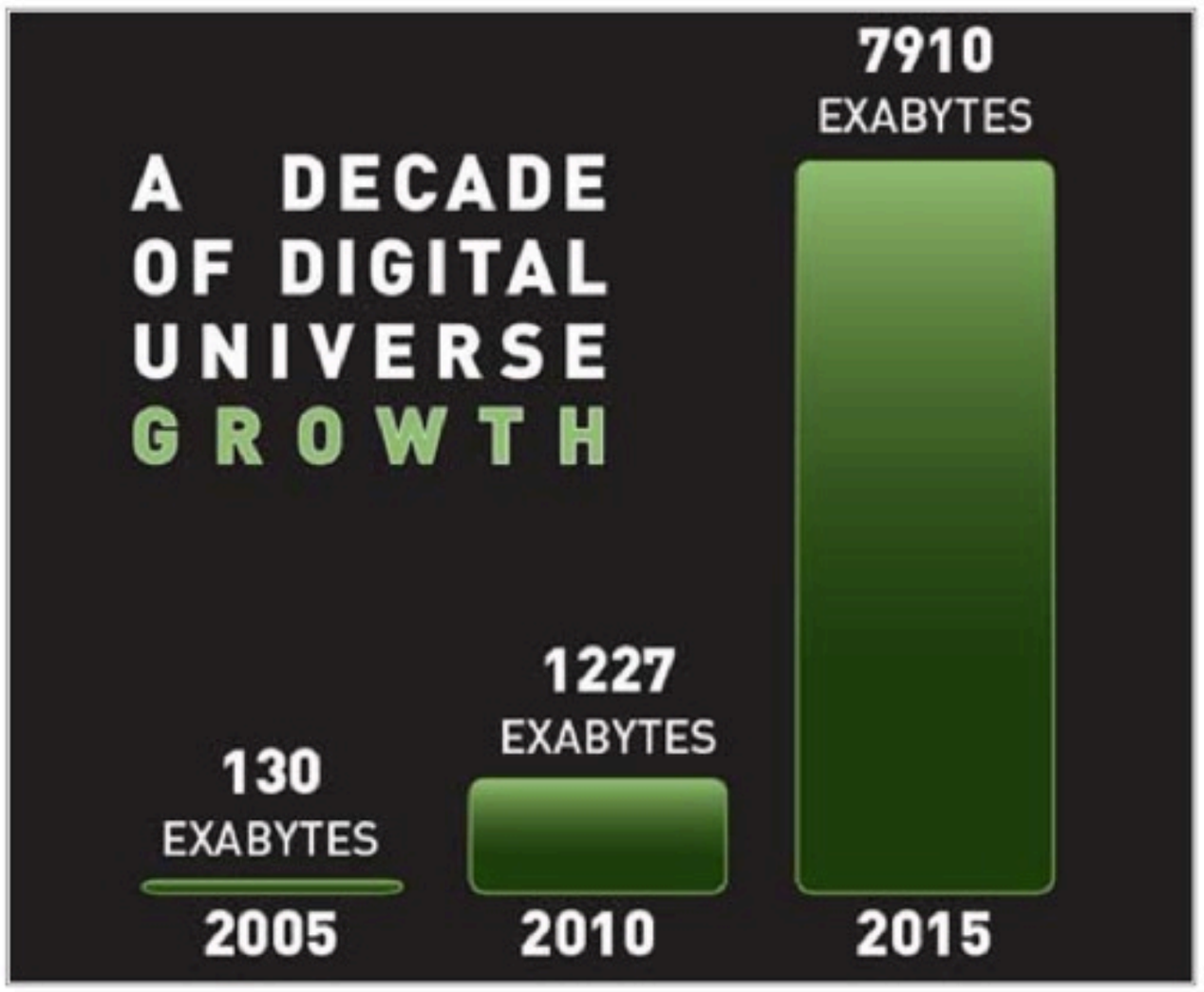
Can we get that in a proper measurement like Libraries of Congress.

still climbing

'Digital Universe' to Add 1.8 Zettabytes in 2011

By: Rich Miller
June 28th, 2011

Like 68 Tweet +1 Share Print



scare quotes

"All claims of this sort have their historical specificity, and one must always ask: who has to gain from assertions that information is chaotic, overwhelming, and out of control? The answer is usually found in the expert groups who offered solutions."

--John Agar,

Government Machine, 2003

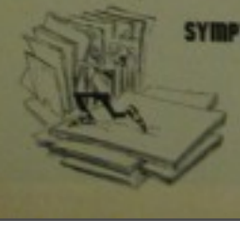
PAPERALYSIS

The business pain Pitney Bowes can remove.

"Fold all these, stuff all those, stamp them all, then take a letter?? Mr. Smith...I just got Paperalysis!"

SYMPTOM: FOLDING AND STUFFING BY HAND. Treatment: Do it by Pitney Bowes Folder-Inserter, instead. Folds completely flat and makes even multiple insertions at high speeds.

SYMPTOMS: LICKING AND STICKING STAMPS. Treatment: Meter stamp with a Pitney Bowes postage meter mailing machine. It's faster. And you can't lose a meter stamp.



SYMPTOMS: COPYING AND THEN COLLATING BY HAND. Treatment: Make 37 clean sharp plain bond copies a minute with a Pitney Bowes PBC® Copier. Then collate the copies many times faster than you could by hand with a Pitney Bowes automatic collator.

For complete information on how paperalysis slows your business down, and how Pitney Bowes paperhandling products and systems, including the new Pitney Bowes PBC plain bond copier, can help speed it up, write us: Pitney Bowes, 1183 Pacific Street, Stamford, Conn. 06904, or call toll free anytime 800-243-5676. (In Conn. 1-800-882-5577.) Over 400 sales or service points throughout the U.S. and Canada. Postage Meters, Mailing Systems, Copiers, Counters and Imprinters, Collators and Finishing Systems, Addresser-printers, Labeling and Marking Systems.

Pitney Bowes

Because business travels at the speed of paper.

who's counting?

cp
IM savvy team
Seriosity
Atent ...
Hemp, *HBR*, 2009

toxic terabytes

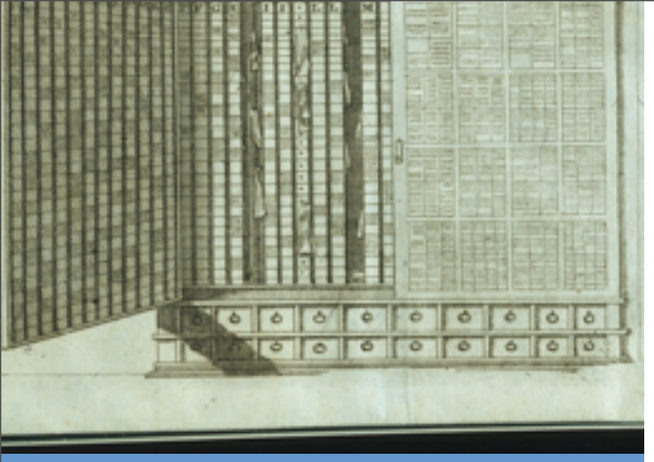
"This year [2006], electronics manufacturers will produce more transistors ... than the world's farmers grow grains of rice ... four years from now, the world's information base will be doubling in size every 11 hours. ... kilobytes .. megabytes ... gigabytes ... terabyte .. petabyte .. exabyte ... zettabyte .. yottabyte ... when terabytes turn toxic ... no amount of disks will be enough to soak up the deluge ... taming the data beast ... data detox"

counting

"whether accurate ... the [population counts] were usually precise."

--Andrea Rusnock

Vital Accounts: Quantifying Health and Population in England and France, 2002



Vincentius Placcius
1642-1699
scrinium

the longer view

Blair and the ruck of history ...