World Wide Web:  
its creation - its lessons – its future

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“Vague but exciting”

(reaction of Mike Sendall to the 1st proposal by Tim Berners-Lee, March 1989)
One man’s dream…

“People just need to agree on a few simple things…”

*Tim Berners-Lee to present speaker - 1989*
What is WWW?

"HTML": Hypertext Markup Language
"HTTP": HyperText Transport Protocol
"URL": Uniform Resource Locator

plus a CLIENT ("Browser") and a SERVER.

Entirely developed and programmed by

Tim Berners-Lee

(prototyped from September to December, 1990)
So what else was needed?

- his manager’s tolerance and interest
- CERN spirit: “hands-on” plus pragmatism
- Internet technology: just accepted at CERN
- Open Source movement gaining strength
- the NexT machine and NextStep OS
- “underground” spirit of the project
- “just enough” space to work in…
- the “KISS” principle: Keep It Simple, Stupid…
Inside CERN : 1980-90

The Political Order:

• Physics
• Accelerators
• THE REST ( ...... Computing)

Order in Computing:

• Big mainframes (IBM, etc)
• Big peripherals (Tape robots, etc)
• THE REST ( ...... Networking)

Order in Networking:

• External (X.25, DECnet, SNA)
• Internal (CERNET, Ethernet)

=====> (Internet + Distributed Computing) <=<<<
WWW was “accidentally” created at CERN:

from within its *weakest* part
and using "*underground*" resources,

but in fact its “weakness” helped, because:

it had to be kept simple
and:

it had to use existing standards and outside resources

( *thus spreading it faster* )
Black Swans…

“History does not crawl, it jumps…”

Nassim Nicolas Taleb, 2007

“Black Swan: The Impact of the Highly Improbable”
The future

after …

WWW, Google, Facebook, YouTube …
+

Wikileaks, Fake News, Dark Web …

… what’s next ??

*We can only prepare the ground …

… and defend the “Web We Want”!*