Prof Les Carr interviews Bebo White about the Early Web and the Future Web – the Internet of Things



Bebo White is a Departmental Associate (Emeritus) at the SLAC National Accelerator Laboratory, the U.S. national laboratory for high-energy physics and basic energy science at Stanford University. Working as a computational physicist, he first became involved with the emerging Web technology while on sabbatical at CERN in 1989. Upon his return he was part of the team that established the first non-European Web site at SLAC (the fifth site in the world). Ever since, his academic research interests have evolved in parallel with Web technology and he has become internationally recognized as a WWW pioneer and visionary. He is often considered to be the "first American Webmaster" and one of the founders of the discipline of Web Engineering.



In this interview, Les discusses the emergence of the early Web, and how the environment of the inventors shaped the nature of the Web. Refer to Tim B-L's original design document at the CERN website http://info.cern.ch/images/proposal.gif which includes the services referred to in the early part of the interview.

- 1. [0:00] Introduction
- 2. [0:50] Bebo explains his background and his relationship to CERN and TBL
- 3. [2:40] The early ideas for the Web including Group Talk, instant messaging, usenet for social networking.
- 4. [4:30] Bebo's sabbatical at CERN, his role as webmaster and his promotion of the web once back at SLAC
- 5. [6:00] The role of the library database as distributor of information, how important was for physicists
- 6. [8:50] The early SLAC site and its purposes
- 7. [9:50] The unusual global collaboration environment that spawned the Web: scale, global reach, comparison with SLAC.

- 8. [12:20] The need for the Web in such a huge collaboration centre: the use of computers for communicating without the need to learn computing
- 9. [14:25] The problem of the variety of hardware/software
- 10. [15:50] The WWW was the proposed solution for collaboration
- 11. [18:00] How the web started, and moved on from CERN and the physics community
- 12. [19:35] The future of the web: different kinds of human activity
- 13. **[20:10]** Internet of Things
- 14. [20:51] The Web of things as a logical extension of the technology.
- 15. [21:40] Stages of the web: documents, people, data, things
- 16. [23:50] The web of things built on top of the internet of things
- 17. [24:40] CERN collaborative environment allowed the Web to happen
- 18. [26:55] What is the equivalent for the internet/web of things? Smart cities?
- 19. [27:30] The importance of security in the IoT: privacy, crime, cyberwars
- 20. [28:00] Internet of things and Semantic Web: no killer app that everybody will use and understand
- 21. [29:30] Parallel with the Web in SLAC: purpose built for something specific, but other people find other uses (*i.e.* social construction).
- 22. [30:00] Will monetisation be the key to adoption of the IoT?