Challenges in Economic Massive Content Storage and Management (MCSAM) in the Era of Self-Organizing, Self-Expanding and Self-Linking Data Clusters

Kenan Şahin TIAX. USA

ABSTRACT

Rapid spread of social networks, global on-line shopping, post 9/11 security oriented linking of data bases and foremost the global adoption of smart phones/devices, among other phenomena, are transforming data clusters into dynamic and almost uncontrollable entities that have their own local intelligence, clients and objectives. The scale and rapidity of change is such that large scale innovations in content storage and management are urgently needed if the diseconomies of scale and complexity are to be mitigated. The field needs to reinvent itself.

Istanbul, a city that has reinvented itself many times is an excellent venue to engage in such a discussion and for me to offer suggestions and proposals that derive from personal experiences that span academia, start ups, R&D firms and Bell Labs as well my early years spent in Istanbul.

1. BIOGRAPHICAL SKETCH

Dr. Kenan Şahin is a highly successful entrepreneur, as well as a scientist, educator and philanthropist. Born in Turkey, Şahin earned science and management degrees at the Massachusetts Institute of Technology (MIT) in the 1960s. His doctoral research led to worldwide patents in areas relating to computer communication networks and massively parallel computation. He taught at Harvard, MIT and the University of Massachusetts before he started his own company, Kenan



Systems, with \$1,000 of his own money in 1982. Kenan Systems soon became the leading provider of software for billing and customer service. In 1999, Sahin sold his company to Lucent Technologies for \$1.5 billion, but rather than resting on his laurels, he signed on with Lucent as president of the new subsidiary, and as a vice president of software technology for Bell Labs. In 2002, Dr. Şahin took over the Technology and Innovation division of Arthur D. Little company, and transformed it into TIAX, a laboratory-based technology development company with headquarters in Lexington, Massachusetts and offices in both Northern and Southern California. As Şahin's business ventures have prospered, he has contributed generously to education, making a recordsetting \$100 million contribution to MIT, where he has continued to teach, and to serve on the board of trustees. Sahin has published widely on the technology and practice of management. He is in constant demand as a lecturer at universities and as a speaker at industry conferences, where he is well known for his energy, insight, charisma and down-toearth style.

Permission to make digital or hard copies of all or part of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and the full citation on the first page. To copy otherwise, to republish, to post on servers or to redistribute to lists, requires prior specific permission and/or a fee. Articles from this volume were invited to present their results at The 38th International Conference on Very Large Data Bases, August 27th - 31st 2012, Istanbul, Turkey.

Proceedings of the VLDB Endowment, Vol. 5, No. 12 Copyright 2012 VLDB Endowment 2150-8097/12/08... \$ 10.00.