John McCarthy was a visionary in computer science; in the early 1960s he formulated the idea that

computation may be organized as a public utility, like water and electricity. In 1992 Gordon Bell was

invited to and delivered an address at a conference on parallel computations with the provocative title

Massively parallel computers: why not parallel computers for themasses? [45]; he argued that one-of-akind

systems are not only expensive to build, but the cost of rewriting applications for them is prohibitive.

Google Inc. was founded by Page and Brin, two graduate students in computer science at Stanford

University; in 1998 the company was incorporated in California after receiving a contribution of

$100, 000 from the co-founder and chief hardware designer of Sun Microsystems, Andy Bechtolsheim.

Amazon EC2 was initially released as a limited public beta cloud computing service on August 25,

2006. The system was developed by a team from Cape Town, South Africa. In October 2008 Microsoft

announced the Windows Azure platform; in June 2010 the platform became commercially available.

iCloud, a cloud storage and cloud computing service from Apple Inc., stores content such as music,

photos, calendars, and documents and allows users to access it from Apple devices. The system was

announced on June 6, 2011. In 2012 the Oracle Cloud was announced (see www.oracle.com/us/

corporate/features/oracle-cloud/index.html )