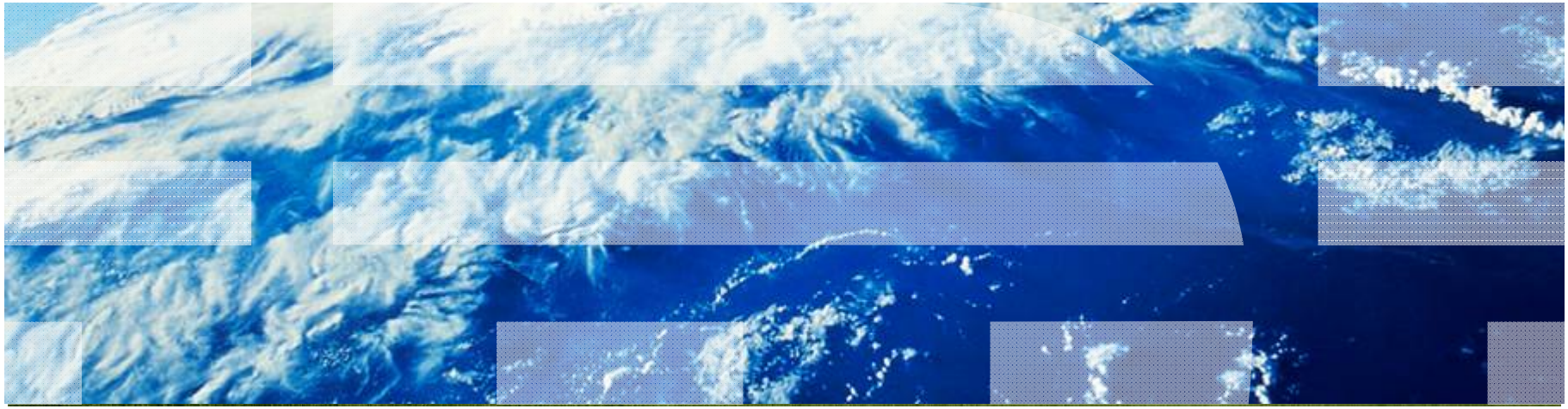
Dr. Marcel Schlatter
IBM Distinguished Engineer
Member of the IBM Academy of Technology

University of Zurich IBM

Enterprise IT Architectures

Introduction
Part 1 (Day 3 & 4) & Part 2 (Day 5 & 6)



© 2011 IBM Corporation

Marcel Schlatter, IBM Distinguished Engineer
Member of the IBM Academy of Technology

2006	Elected to the IBM Academy of Technology
2006	Appointed as Distinguished Engineer
2002 - 2005	Member IT Architect Senior Certification Board
2004	IBM Academy of Technology Study “Assessing and Managing Technical Risk in Client Solutions”
2002	ADS V2 Architecture Description Standard
2001	Senior Certified IT Architect (Executive IT Architect)
2001	IBM Academy of Technology Study “Analysis of Resources for Architectural Work”
1999	Elected to the IBM Europe Technical Expert Council
1998 - 2003	Founded and led Swiss IT Architect Circle
1997	Certified IT Architect
1982	IBM Associate System Engineer
1981	Dr. sc. techn. ETH
1974	M Sc Electrical Engineering, ETH (Abt. IIIB, Elektrotechnik)

What makes Marcel’s career special?

I have a curiosity, and a desire to know and to understand.

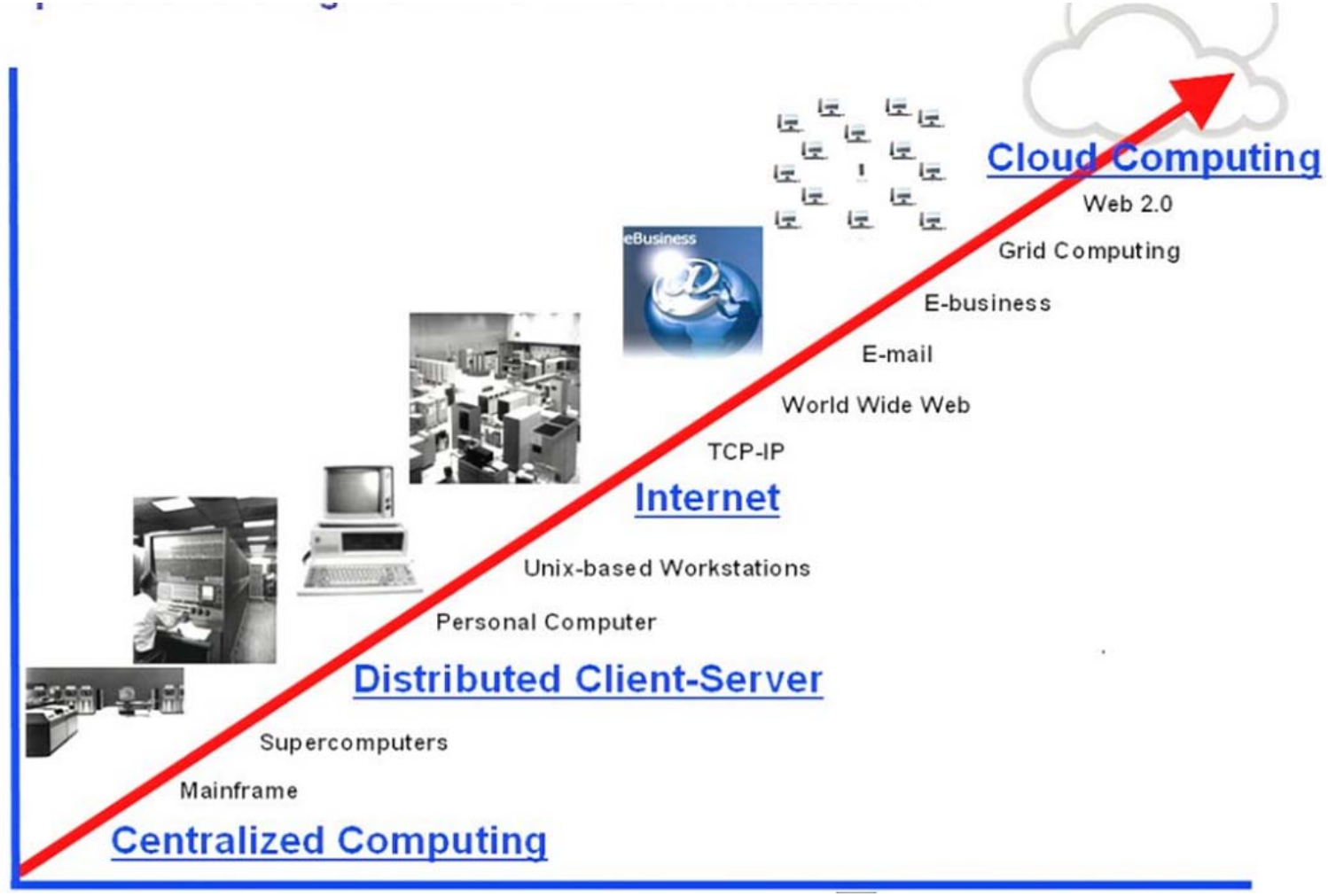
This combined with my will to achieve has helped me to grow and develop my career.

I often don’t succeed immediately, but I do not give up easily.

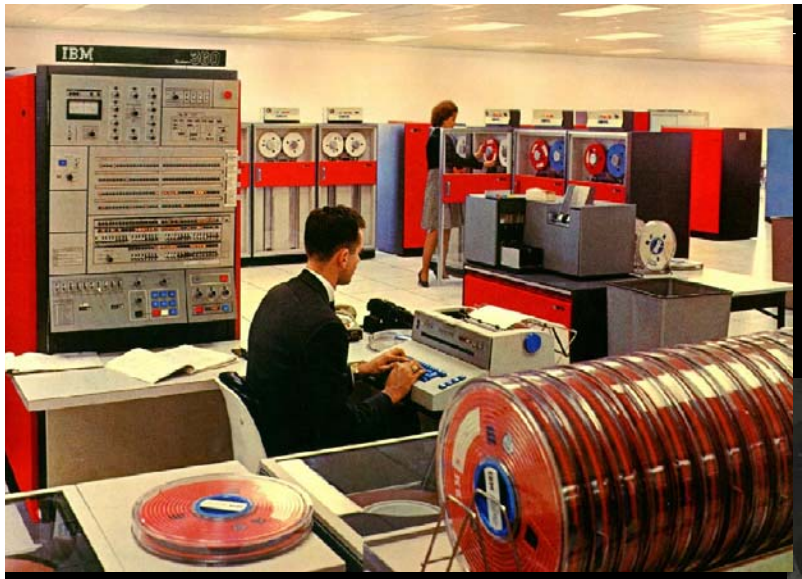
I am used to listening and learning from what doesn’t work.

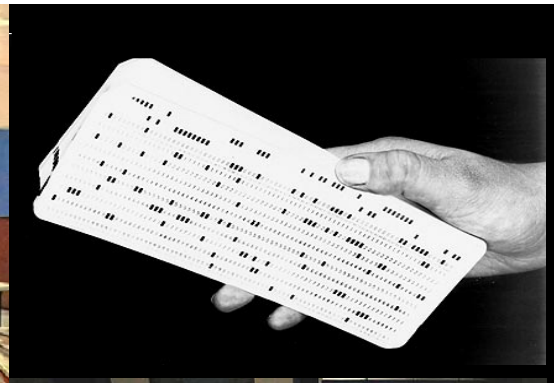
© 2011 IBM Corporation

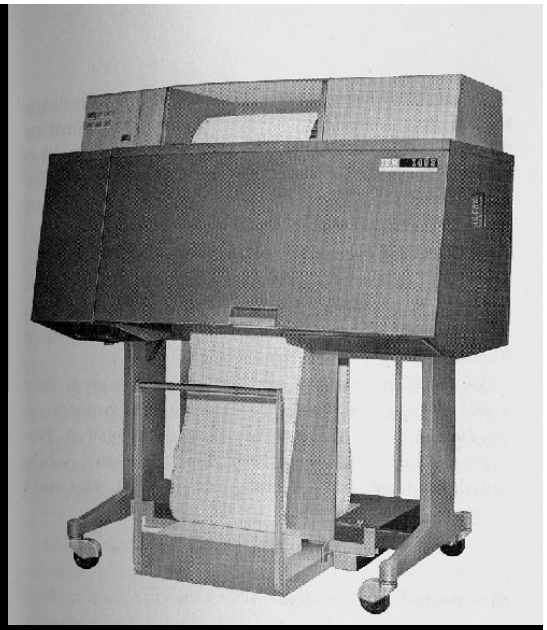
How things changed

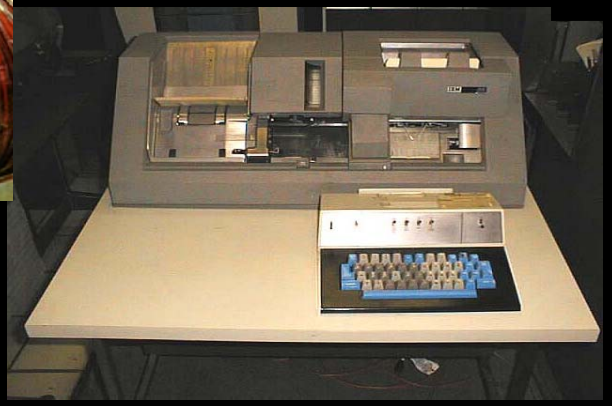


© 2011 IBM Corporation









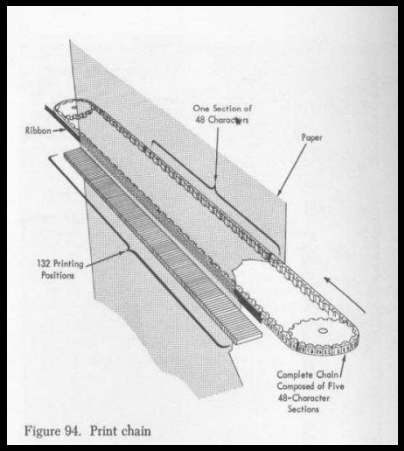
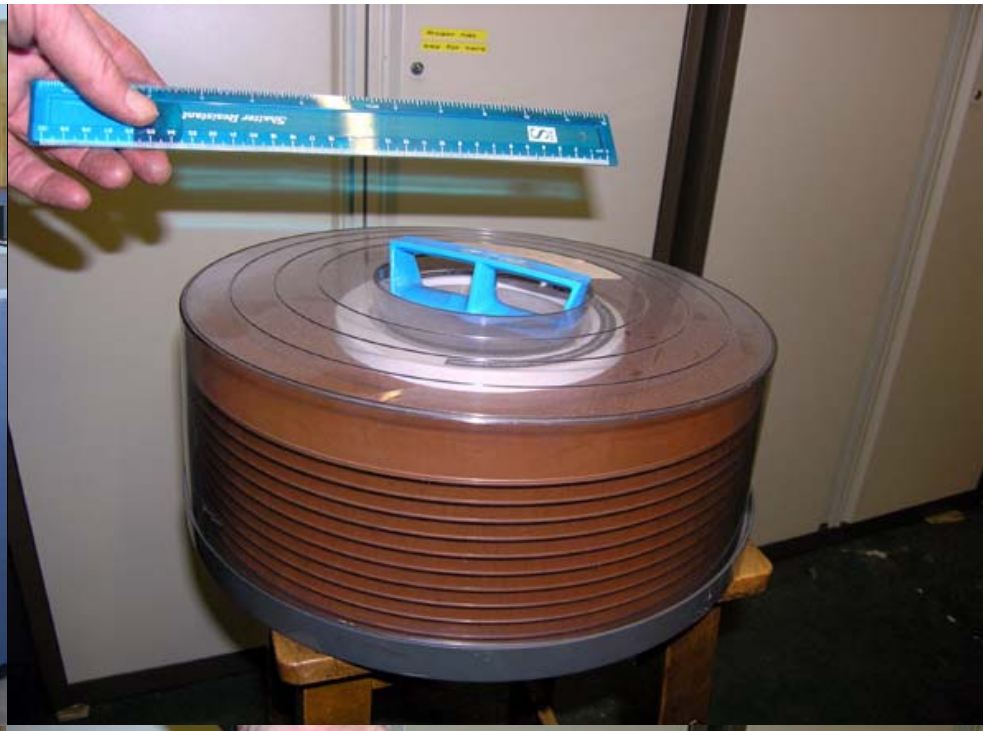
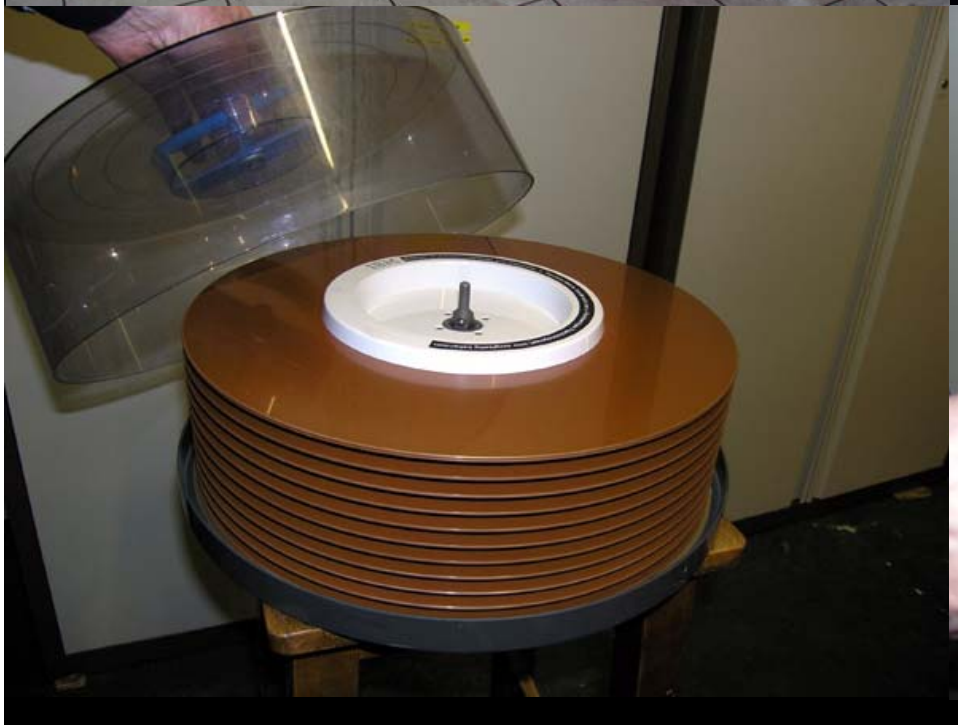


Figure 94. Print chain





Systems
Software
Services

Course Agenda

IT Architecture - Course Agenda

Day			Type	Name	Start	Finish	Duration
3	7.10	Friday	Lecture	Uebersicht über die Vorlesung	12:15 PM	12:30 PM	00:15
			Lecture	What is IT Systems Architecture	12:30 PM	12:55 PM	00:25
			Lecture	What do IT Architects do all day	12:55 PM	1:20 PM	00:25
			Lecture	Why Architecture	1:20 PM	1:45 PM	00:25
4	14.10.	Friday	Lecture	Qualities and Constraints	12:15 PM	1:00 PM	00:45
			Lecture	Developing a solution's IT Architecture	1:00 PM	1:45 PM	00:45
5	21.10.	Friday	Case Study	Introduction; Scenario and Business Problem	12:15 PM	12:30 PM	00:15
			Case Study	Part 1: Functional Requirements	12:30 PM	1:30 PM	01:00
			Case Study	Part 2: Architecture Overview	1:30 PM	1:45 PM	00:15
6	28.10.	Friday	Case Study	Part 3: Functional Aspect	12:15 PM	1:00 PM	00:45
			Case Study	Part 4: Operational Aspect	1:00 PM	1:45 PM	00:45

© 2011 IBM Corporation

IT Architecture

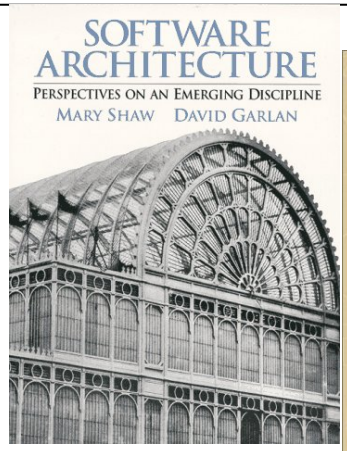
Required and recommended reading

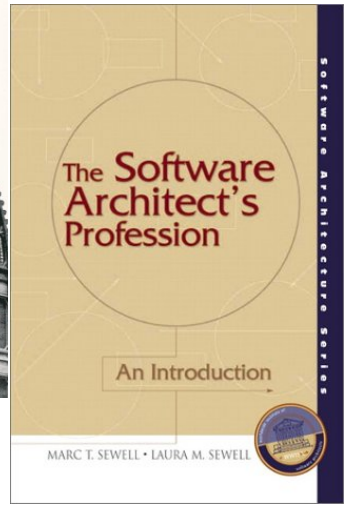
Dr. Marcel Schlatter
IBM Distinguished Engineer
Member of the IBM Academy of Technology
marcel.schlatter@ch.ibm.com

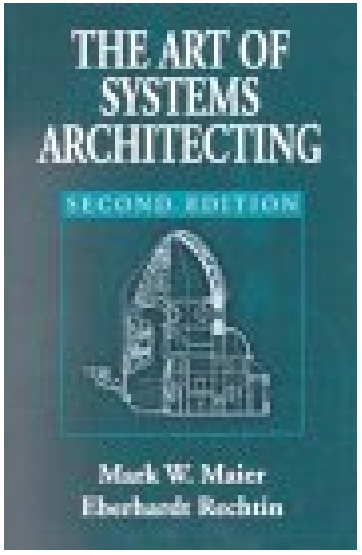
© 2011 IBM Corporation

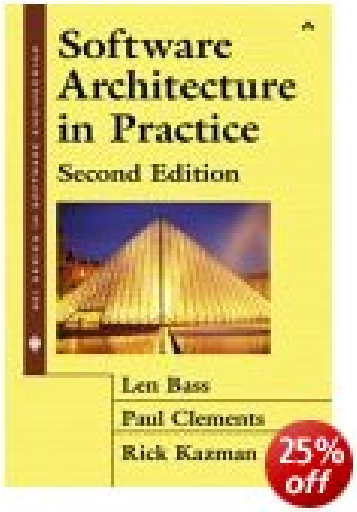
Books

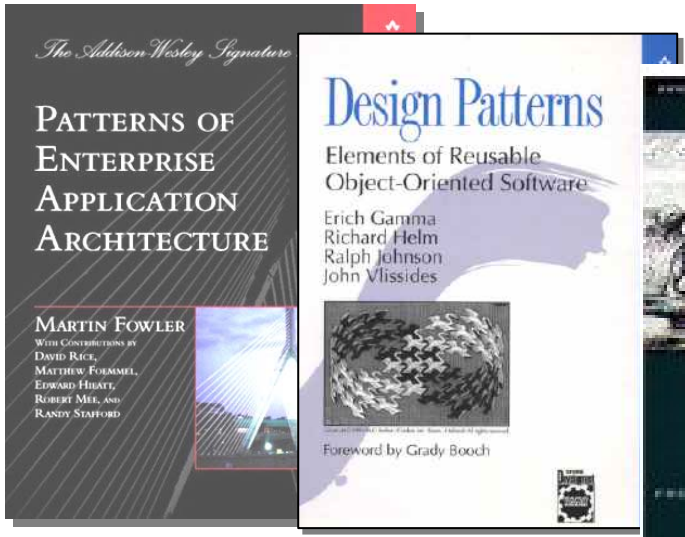
- Be selective
- No single best source

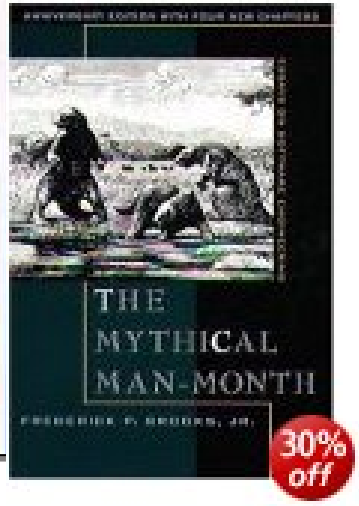












© 2011 IBM Corporation

Reading (ZIP File)

- J.A. Zachman, A framework for information systems architecture, IBM Systems Journal, 1987
- What do IT Architects do all day?
- L. Cherbakov, G. Galambos, R.Harishankar, S. Kalyana, G. Rackham: Impact of service orientation at the business level, IBM Systems Journal, 2005
- R. Schulte, Clarifying the Terms "Event-Driven" and "Service-Oriented Architecture", Gartner Research, 2005
- M. Maier, D. Emery, R. Hilliard: Software Architecture - Introducing IEEE Standard 1471
- IEEE Recommended Practice for Architectural Description of Software-Intensive Systems: IEEE Standard 1471
- The Open Group Architecture Framework (TOGAF) → Management Overview only
- The Open Group IT Architect Certification Program
- Rechtin, The art of systems architecting, IEEE Spectrum 1992
- Rechtin, Appendix A: Heuristics for systems level architecting
- R. Youngs et al., A standard for architecture description, IBM Systems Journal, 1999
- M. R. McBride, The software architect, Comm. ACM, May 2007
- David E. Emery, Architectural Frameworks: Defining the contents of architectural desriptions
- R. Schulte, Architecture and Planning for Modern Application Styles, Gartner Strategic Analysis Report, 1997

© 2011 IBM Corporation

Extended Reading List

- Alexander, Christopher (1979) , The Timeless Way of Building New York: Oxford University Press
- Applegate, Lynda.M. (1995) Designing and managing the information age IT architecture, Harvard Business School Publishing Teaching case 9-196-005
- Applegate, Lynda.M. (1995b) Managing in an Information Age: IT challenges and Opportunities, Harvard Business School Publishing Teaching case 9-196-004
- Bass, L., Clements, P and Kazman, R. (2003) Software Architecture in Practice (2-ed), Reading, Massachusetts: Addison-Wesley / Pearson.
- Dewang, Arjan (2003) Face-off. Computer Bulletin Jan 03 26-27
- Earl MJ (1989) , Management Strategies for information Technologies, Prentice Hall Ch5, 95-116
- Ince, DC & Hekmatpar, S (March 1988) An Approach to automated software design based on product metrics. Software Engineering Jnl: 53-56
- Lloyd PTL, Galambos GM (1999) Technical Reference Architectures. IBM Systems Journal 38 (1) 51-75.
- Ross JW (2003) Creating a Strategic IT Architecture Competency: Learning in stages. MIS Quarterly Executive (2) 1 March 2003: 31-43
- Rozanski, N (2005) The qualities that define an IT Architect, Computing 24 Nov 2005 p22.
- Sauer C and Willcocks LP (2002) The evolution of the Organizational Architect, Sloan Management Review 43(3) 41-49
- Seger, K and Stoddard, DB (1993) Managing Information: the IY Architecture, Harvard Business School Publishing: teaching case 9-193-059.
- Sewell MT, Sewell LM (2002) The Software Architect's Profession: An Introduction. Upper Saddle River NJ: Prentice Hall PTR.
- Shaw, M. and Garlan, D. (2003) Software Architecture: perspectives on an emerging discipline. New Jersey: Prentice Hall.
- Wexelblat, R.L. and Srinivasan, N. (1999) Planning for information technology in a federated organization. Information and Management, 35 (5), 3 May 1999, 265-282
- Willcocks, L; Feeny, D and Islei, G (1997) Managing IT as a Strategic Resource, McGraw-Hill
- Yadav (Jan1990), IEE transactions on software engineering

© 2011 IBM Corporation