

# The Influence of Industries and Practice on the IS Field: A Recount of History

Panel

**Ping Zhang**  
Syracuse University  
pzhang@syr.edu

**Jerry Luftman**  
Global Institute for IT Management LLC  
[jluftman@globaliim.com](mailto:jluftman@globaliim.com)

**Ephraim McLean**  
Georgia State University  
emclean@gsu.edu

**Hugh Watson**  
University of Georgia  
[hwatson@terry.uga.edu](mailto:hwatson@terry.uga.edu)

## Abstract

The history of any academic discipline plays an important role in shaping the discipline, giving the discipline its unique identity, and establishing the foundation for the future. AIS is initiating an effort to collect, preserve, interpret, write and disseminate the history of the IS field. As part of the initiatives, the AIS History task force has organized panels at all major IS conferences, including ECIS, PACIS, AMCIS, and ICIS in 2013 on various aspects of the IS field. This is one type of activity that will help collect as well as disseminate the IS history with the community. More info on the IS history project can be found at <http://history.aisnet.org>.

At AMCIS 2014, the theme of the panel is: The historical development of industries' influence on the future of IS. We hope to recollect some major events, decision points, milestones, and critical thoughts over the many decades on how industry and practice has influenced the IS discipline in terms of its topical focus, education emphasis and curricula, philosophical positions, research approaches, and other aspects. The ultimate goal is to gain insight on the future roles of industry and practice in the IS discipline.

## Keywords

IS Practice, IS Industry, IS discipline, IS history, IS future.

## Introduction

The targeted audience is scholars who are interested in the IS discipline, its history, and implications to its future. They may benefit from the memories and opinions of panelists as well as of other members of the audience on issues related to the panel theme. They may become engaged in contributing to the preservation, collection, and dissemination of IS history in the future.

At the panel, the panelists present personal recollections on the following topics. Each panelist will cover both Topics 1 and 2; then along with the audience participation, all panelists will address Topic 3.

- Topic 1. Major events or milestones where industry and practice have significantly influence the IS field (research and education)
- Topic 2. Major events or occasions where IS research and education significantly influenced the industry or practice
- Topic 3. Possible trajectories from the history: How history helps us prepare for the future

## Position Statements by the Panelists

### ***Jerry Luftman***

I was in the first graduating class of Information Management at NYU which combined Computer Science and Management. We learned how to wire boards from 1<sup>st</sup> generation equipment, to machine language and assembler language (we thought it almost like English) of 2<sup>nd</sup> generation computers, to IBM's systems that used COBOL, FORTRAN, and PL-I. More importantly, even in the late "60s, having a combination of technical skills and business/management skills was fundamental to my career at IBM. At IBM I owned products that included several mainframe computers, the MVS operating systems, AI (the precursor to Watson), was a CIO, lecturer at their Advanced Business Institute (where we brought in C level executives from around the globe), to being a key member of the team that initiated IBM's management consulting group. The later part of my career helped in supporting initiatives that contributed to grants that helped begin AIS, SIM, and research that is fundamental today.

The 21<sup>st</sup> Century is marked by the continued penetration of IT into all facets of the organization. Businesses, regardless of their size, cannot function without IT enabling/driving every activity, from traditional back-office systems to strategic services that interact with customers/clients and external partners. With the global business environment, organizations, and technology continuing to experience dramatic change at an accelerated pace, the role of IT has become increasingly more complex and challenging. Hence, as IT has become mission critical, it is imperative for IT and business leaders to work effectively and efficiently (the alignment of IT and business which has been pervasive and persistent for over 30 years) together to ensure that they are leveraging IT across their organization to attain enterprise wide transformation; not just using IT as a digital extension. The success of the business depends on the success of IT.

IT remains (and will remain for the foreseeable future) one of the most promising and rewarding careers. There is an increasing demand for skilled IT professionals (internal and outsourced/service provider staff, and vendors). Today geeks are gods. Leaders that are applying IT like business intelligence, mobile, social networking, and Cloud are reinventing the ways in which organizations communicate, market, manage, source, read, play, shop and live. IT organizations, with effective leaders have a fine opportunity to place themselves at the heart of corporate strategy. The key is people having the appropriate balance of technical, business/management, industry, and interpersonal skills.

### ***Eph McLean***

In 1962, I began my work in computing as a Systems Analyst for Procter & Gamble, first in corporate headquarters in Cincinnati, Ohio and then for the next three years at P&G's manufacturing facility on Staten Island, New York. In this latter phase, I was one of the first departmental "end user," a term that was not introduced in the literature (by me) until 1979. I assisted in programming and installing a 1200-man factory payroll on a 4K card machine. The IBM 1401 computer on which I worked cost a quarter of a million (1963) dollars – in contrast to a 16 gigabit (!) USB drive that I received last year as a free gift while visiting a Samsung facility in Korea. Also while at P&G, we launched the first commercial disk drive, the IBM 305 RAMAC, with a grand total of 3M characters of storage! Later, I sat in an IBM sales office in April 1965 when the IBM 360 architecture was launched; and I was at UCLA in 1973 when the first Internet (then called ARPAnet) transmission from UCLA to Stanford took place. I mention these things to provide a perspective of how far we come in the last half century in the development of information technology as it is applied to business and organization needs. But as they say in show business, "you ain't seen nothing yet. What is ahead of us will pale everything that has been done in the past.

### ***Hugh Watson***

For many years, vendors provided very limited support for IS program. A milestone event was IBM's multimillion grant program in the mid-1980s to support teaching and research on the management of information systems. The grants given to 13 IS programs did much to legitimize the IS field in the minds of university administrators, provide resources to build and strengthen programs, and bring leaders in the field together to work on projects important to the field. The roots for the creation of AIS can even be traced to IBM's grant program. Since then, vendors have become much more supportive of IS programs,

especially through university alliance programs offered by companies such as IBM, Microsoft, Oracle, SAP, SAS, and Teradata. Companies have also become much more involved with IS programs, often through industry advisory boards, and driven by their need to find and hire top IS talent.

### ***Jerry Luftman***

I was in the first graduating class of Information Management at NYU which combined Computer Science and Management. We learned how to wire boards from 1<sup>st</sup> generation equipment, to machine language and assembler language (we thought it almost like English) of 2<sup>nd</sup> generation computers, to IBM's systems that used COBOL, FORTRAN, and PL-I. More importantly, even in the late '60s, having a combination of technical skills and business/management skills was fundamental to my career at IBM. At IBM I owned products that included several mainframe computers, the MVS operating systems, AI (the precursor to Watson), was a CIO, lecturer at their Advanced Business Institute (where we brought in C level executives from around the globe), to being a key member of the team that initiated IBM's management consulting group. The later part of my career helped in supporting initiatives that contributed to grants that helped begin AIS, SIM, and research that is fundamental today.

## **Bio Sketches of the Moderator and the Panelists**

**Ping Zhang** was one of the key developers of the very first MIS ever custom built in China (1984-1986). After researching and practicing on developing MIS for three different organizations in China for five years (Nanjing Automobile Manufacture, Beijing TV Factory, and Beijing Insurance Company), she decided to pursue a PhD on MIS. She is the author of the first article published in the AIS research flagship journal JAIS. She is co-author (with Dov Te'eni and Jane Carey) of the first HCI textbook for non-CS students. She is co-editor (with Dennis Galletta) of two edited books on HCI and MIS of the Advances in MIS series. She and Dennis Galletta are founding EICs of the first AIS Transactions journal, AIS THCI. In addition, she is a guest SE for MISQ, former SE for JAIS, former AE for IJHCS and CAIS, on the editorial board of JMIS, and a guest editor of eight special issues. Ping co-founded and chaired one of the first six AIS Special Interest Groups, SIGHCI. In 2013, she was appointed the first AIS Historian, leading an important effort to preserve the heritage and legacy of the IS field. Since 2004, she has been visiting professor/scholar of the following universities: The Hong Kong University of Science and Technology, City University of Hong Kong, Fu Dan University, Abu Dhabi University, National Sun Yat-Sen University (Taiwan), Tsinghua University, Australia National University, University of Technology Sydney, Australia, and University of Surrey in UK. She holds multi-year guest professor appointments with the Inner Mongolia University, Renmin University, and Xi'An Jiao Tong University in China. To learn more about Ping, visit <http://melody.syr.edu/pzhang>.

**Jerry Luftman's** experience combines the strengths of practitioner, consultant, and academic. His proficiency in business-IT alignment and IT trends, eighteen books, published research, consulting, mentoring, and teaching/speaking engagements exemplify Dr. Luftman's expertise and leadership. After a notable twenty-two year career with IBM, he had an exemplary career for almost twenty years as Distinguished Professor, and Founder and Associate Dean of the Stevens Institute of Technology Information Systems Programs; one of the largest in the world. Driven by the strong demand for a global executive education program focusing on managing information technology, Dr. Luftman has leveraged his experience as a CIO, IT management consultant, and leading academic, with his strong network of IT management associations, and prominent IT practitioners and academics, to provide a valuable and innovative offering via the Global Institute for IT Management. Dr Luftman's project experience ranges from senior management issues through tactical implementation. Dr. Luftman most recently pioneered the vehicle for assessing the maturity of IT-business alignment; where he has a benchmark repository of over one-third of the Global 1,000 companies. He also serves on the Executive Board of several companies, associations, and publications. Dr. Luftman's last responsibility at IBM, after being a CIO, was a key speaker at their Customer Executive Conference Center in Palisades, N.Y. While responsible for management research, he played a significant role in defining and introducing the IT Strategy and Planning, and Business Process Re-engineering practice methods for the IBM Management Consulting Group. His framework for applying the strategic alignment model is fundamental in helping clients understand, define, and scope the appropriate strategic planning approach to pursue. Dr. Luftman's

annual international IT trends survey sponsored by SIM, CIONet, and other CIO associations is recognized internationally as an industry barometer. For more info, visit <http://www.globaliim.com/>.

**Eph McLean** is the Chair of the Computer Information Systems Department, a Regents' Professor, the G.E. Smith Eminent Scholar's Chair in Information Systems, and the Director of the Center for Research in Information Systems and the Center for Health IT, all in the Robinson College of Business at Georgia State University in Atlanta, Georgia. Prior to joining GSU in 1987, he was on the faculty at UCLA for 18 years; and before that he worked in industry for Procter & Gamble, first as a manufacturing manager and later, starting in 1962, as a computer systems analyst. This is his 51<sup>st</sup> year in the computer field. He has published over 130 articles in such publications as the *Harvard Business Review*, *Sloan Management Review*, *California Management Review*, *MIS Quarterly*, *Information Systems Research*, *Management Science*, *Journal of MIS*, *European Journal of Information Systems*, and others. He is the co-author or co-editor of seven books, including *Strategic Planning for MIS*, *Management of Information Systems*, and *Information Technology for Management*. He was a founding Associate Editor for Research of the *MIS Quarterly* and for seven years was the Co-Editor-in-Chief of *DATABASE*. In 1980, Dr. McLean co-chaired the organizing committee for the International Conference on Information Systems and was three times ICIS Conference Chair or Co-chair. He is also one of the founders of the Association for Information Systems and served as the AIS Executive Director for nine years. In 1999, he was named as one of the first AIS Fellow and in 2007 was recognized with the LEO Lifetime Achievement Award. He earned his B.M.E. and M.E. degrees at Cornell University and his S.M. and Ph.D. degrees at M.I.T.'s Sloan School of Management.

**Hugh J. Watson** is one of the world's leading scholars and authorities on decision support. He is the author of 24 books and over 150 scholarly journal articles. He helped develop much of the conceptual foundation for decision support systems in the 1970's and applied his knowledge and expertise to executive information systems in the 1980's. Alan Paller, Editor of the EIS Conference Report, described Hugh as "the nation's foremost EIS researcher...a walking encyclopedia of what works and what doesn't." Over the past 20 years, Dr. Watson has specialized in data warehousing, BI, and analytics. Dr. Watson is a multiple winner of the Society for Information Management's Paper Competition. This is the field's most prestigious award for applied information systems work. In 1986, he was awarded second place for the EIS at Lockheed-Georgia. In 1993 he won first place in the SIM competition for the methodology used to assess the benefits of the EIS at Conoco, and in 1999 he won the SIM competition for the customer-oriented data warehouse at the First American Corporation. In 2000, he won honorable mention for the business to business intelligent extranet at Owens&Minor. Dr. Watson has consulted with numerous global organizations, including the World Bank, Intel, IBM, Arthur Andersen, Conoco, and Glaxo. He has also conducted hundreds of executive development programs. Dr. Watson is a Fellow of AIS and The Data Warehousing Institute, the leading professional organization for BI professionals. He is a regular speaker at their conferences, serves as the Senior Editor of the *Business Intelligence Journal*, helps run TDWI's Best Practices and Leadership Competitions, and conducts TDWI sponsored research. For 20 years Dr. Watson was the Consulting Editor for John Wiley & Sons Computing and Information Processing series. He was also the Founding Director of the Teradata University Network, a free portal for faculty and students with interests in data warehousing, database, BI, and analytics. He is a holder of the C. Herman and Mary Virginia Terry Chair of Business Administration in the Terry College of Business at the University of Georgia.