

Professor Stuart Madnick receives Lifetime Achievement Award at CDOIQ Symposium

Professor Stuart Madnick, and his colleague Dr. Richard Wang, received Lifetime Achievement awards at the 20th Annual Chief Data Officer and Information Quality (CDOIQ) symposium on July 22nd.

The awards reads: “Honoring your visionary leadership pioneering contribution and lifelong dedication to advancing information quality data management and the global data leadership community.”

The awards ceremony noted the key roles they played in establishing Data Quality as a recognized academic discipline and helping to establish and advance the Chief Data Officer (CDO) profession. With the rapid advance of Artificial Intelligence (AI), which needs to be trained on data, quality data is now more important than ever.

Some specific events that the honorees initiated were highlighted:

1988: Established the MIT Total Data Quality Management (TDQM) research initiative based on the premise that data is a manufactured product whose quality can be defined, measured, and improved much like done in the Total Quality Management (TQM) movement.

1991: One of the organizers of the first convening of the annual Workshop on Information Technologies and Systems (WITS) which focused on the management issues associated with information technologies and systems.

2003: Established the MIT Information Quality (MIT IQ) research initiative which broadened both the research agenda as well as the impact on management practices regarding information quality.

2007: Established the MIT Chief Data Officer – Information Quality (CDOIQ) research program and the annual CDOIQ Symposium. These activities helped to understand, define, and advance the newly emerging CDO position in corporations and government agencies. The first corporate CDO had not been named until 2002. It is estimated that about 80% of the Fortune 1000 companies now have a CDO position.

2009: Founding Editor-in-Chief of the *ACM Journal of Data and Information Quality* (JDIQ) which is the premier academic journal for research on data and information quality.

2014: The article, “A Cubic Framework for the Chief Data Officer: Succeeding in a World of Big Data,” published in *MIS Quarterly Executive*, identified the three critical dimensions that defined the differences amongst CDO’s.

Many important research theories and principles emerged from these initiatives. A partial list of examples include:

- Data as a Product
- The challenges of Data Semantics
- Corporate Householding
- Framework for Data Quality (DQ)
- Cubic Framework for CDO
- Information Product Approach
- Why not one big database?
- Web Aggregation
- Integrating Disparate Databases
- Context Mediation (patented)
- Temporal & Spatial Locality of Data
- Polygen Data Model
- What XML cannot do
- Assuring DQ
- Data Privacy & Security
- Cross-Border Data Trade Restrictions
- Data Believability

