

RASHMI MALHOTRA



351, Mandeville Hall
Saint Joseph's University
Phone: (610) 660-3497
E-mail: rmalhotr@sju.edu

AREA OF SPECIALIZATION

Teaching:

Enterprise Data, Management Information Systems, Artificial Intelligence, System Analysis and Design, Expert Systems, Database Management Systems, Telecommunication Systems, Neural Network Systems, Management of Information Through Technology, Decision Support Systems, Simulation and Manufacturing, Internet Tools, Object-oriented programming, Data structures and algorithms.

Research:

Data Envelopment Analysis, Swarm Intelligence, Electronic Commerce, Business Modeling, Neural Networks, Fuzzy Logic, Genetic Algorithms, Machine-Learning, Knowledge-Based Systems and Knowledge Management, Software Engineering, Decision Support Systems, Object-Oriented Paradigm, and Simulation.

PAPERS PUBLISHED

1. "An Empirical Examination of Economies of Scale in Property and Casualty Insurance Industry using Data Envelopment Analysis," Co-authored with D.K. Malhotra. *Review of Management*. (Forthcoming).
2. "An Empirical Examination Of Economies of Scale In Property And Casualty Insurance Industry using Data Envelopment Analysis," Co-authored with D.K. Malhotra. *International Journal of Management Research*. (Forthcoming)
3. "An Analysis of the 2016 United States Presidential Election using Chanakya - A Knowledge Discovery Platform for Text Mining," co-authored with K. Malhotra,

- International Journal of Knowledge Engineering and Data Mining*, Vol. 5. Nos. 1/2, page 17-39.
4. "An Empirical Analysis of the Performance of Residential Real Estate Investment Funds," co-authored with D.K. Malhotra, *Applications of Management Science*, Vol. 19, page 21-35.
 5. "Evaluating The Impact of Advertising on Sales and Profitability in Apparel Industry." co-authored with D.K. Malhotra and Elizabeth Mariotz. *Applications of Management Science*, Vol. 19, pg. 37-55.
 6. "Benchmarking The Operating Efficiency Of U.S. Regional Banks." Co-authored with D.K. Malhotra and Reuben Mendoza, *International Journal of Business Intelligence and Systems Engineering Vol.1, No. 2, pg 121-139, 2017*.
 7. "Evaluating the Health of Life and Health Insurance Companies," Co-authored with D.K. Malhotra and A. Dania, *Applications to Management Science*, Vol. 18, pg 93-108, 2017.
 8. "Identifying Tax Efficient Mutual Funds using Data Envelopment Analysis Model" Co-authored with D.K. Malhotra, Vivek Bhargava, and Reuben Mendoza, *International Journal of Management Research, Vol. 7 No. 1 & 2, December 2016*, pg 33-45.
 9. Editorial, *International Journal of Business Intelligence and Systems Engineering, Vol. 1, No. 1, 2016*, pg 1.
 10. "Loan Evaluation Using Variable Benchmark Data Envelopment Analysis," Co-authored with George Tsetsekos, *International Journal of Business Intelligence and Systems Engineering Vol. 1, No. 1, 2016*, pg 77-98.
 11. Editorial, Special Issue of *International Journal of Data Analysis Techniques and Strategies (IJDATS)* on Business Intelligence, *Volume 7, No. 1, 2015*, Pg 1-2.
 12. "Analyzing the Performance of Pharmaceutical firms using Data Envelopment Analysis." Co-authored with D.K. Malhotra. *International Journal of Management Research*, December 2015, pg 33-47.
 13. "Evaluating Loans Using a Combination of Data Envelopment and Neuro-Fuzzy Systems," Co-authored with D.K. Malhotra. *Journal of Systemics, Cybernetics and Informatics, Volume 12 - Number 7 - Year 2015*, pg 67-77.
 14. "A Frontier Analysis Approach to Analyze the Operating Efficiency of Cable and

- Satellite Companies in the United States.” Co-authored with D.K. Malhotra and Kathleen Campbell. *Applications of Management Science Volume 17*, Pg 107-126, 2015.
15. “Benchmarking Managed Health Care Companies.” Co-authored D.K. Malhotra and Susan Lehrman. *Applications of Management Science Volume 17*, Pg 203, 2015.
 16. “Evaluating the Performance of Home Building Companies.” Co-authored with D.K. Malhotra and Kathleen Campbell. *International Journal of Strategic Management, Volume 14,1, 145-158, 2015.*
 17. “Using Intrinsic Parameters to Evaluate Mutual Funds.” Co-authored with D.K. Malhotra and George Tsetsekos. *Journal of Academy of Business and Economics, Spring 2014,157-175.*
 18. SIDE – A Decision Support System Using A Combination Of Swarm Intelligence And Data Envelopment Analysis, *International Journal of Strategic Decision Sciences, Volume 5, No. 4, 2014, page 39-58.*
 19. A DEA-based multidimensional framework for analysing emerging markets, *International Journal of Information and Decision Sciences, Volume 5, No.2, 204-224, 2013.*
 20. Evaluating Economies of Scale in Indian Commercial Banks Using Data Envelopment Analysis, co-authored with D.K. Malhotra, *International Journal of Business, Marketing, and Decision Sciences, Volume 6, Number 1, Fall 2013.*
 21. Benchmarking the Operating Efficiency of US Airlines, *Applications of Management Science, Volume 15, 41–60, 2012.*
 22. A DEA Based Multidimensional Framework For Analyzing Indian Commercial Banks, co-authored with Raymond R. Poteau and D. K. Malhotra, *Applications of Management Science, Volume 15, 61–84, 2012*
 23. Using Meta-Modeling as a Knowledge Management Tool – A New Approach to Designing the Enterprise Information Architecture. *International Journal of Data Analysis Techniques and Strategies, Vol. 2:4, Pg 307-335, 2010.*

24. "Benchmarking Large U.S. Retailers Using A Data Envelopment Analysis Model," co-authored with D.K. Malhotra and Andy Lafond, *Applications of Management Science Volume 14*, Pg 217-236, 2010.
25. "Analyzing the U.S. Apparel and Accessories Industry Using Data Envelopment Analysis," co-authored with D.K. Malhotra, *International Journal of Business, Marketing, and Decision Sciences*, Volume 3, Number 1, Winter 2010.
26. Using Data Envelopment Analysis to Rate Bonds. Co-authored with D.K. Malhotra and Phillip S. Russel. *Journal of Business and Economics Studies*, Vol. 16:1, Spring 2010, 58-75.
27. Business plus Intelligence plus Technology equals Business Intelligence. Co-authored with Ira Yermish, Virginia Miori, John Yi, and Ron Klimberg. *International Journal of Business Intelligence Research*, Vol 1:1, 48-63, 2010.
28. Using Data Envelopment Analysis to Analyze the Performance of North American Class I Freight Railroads. Co-authored with D.K. Malhotra and Harvey Lermack. *Applications to Management Science*, Vol. 13, Pg 113-132, 2010.
29. Analyzing Financial Services Industry Using Data Envelopment Analysis. Co-authored with D.K. Malhotra and Andrew Lafond, *International Journal of Applied Management Science*, Vol. 1:3, 217-46, 2010.
30. Evaluating The Efficiency Of European Union Integration," co-authored with D.K. Malhotra, *International Journal of Commerce and Management*, Vol. 19:3, Pg 233-51, 2009.
31. Financial Statement Analysis Using Data Envelopment Analysis. Co-authored with D.K. Malhotra, *Commercial Lending Review*, September, 2008, pg 25-31.
32. Using Data Envelopment Analysis to Analyze European Union Nations, *ICFAI Journal of International Business*, Vol. 2:4, November 2007, pg 24-39.
33. Meta-modeling Framework: A New Approach to Manage Meta-Modelbase and Modeling Knowledge , *Knowledge-Based Systems*, **Vol 21:1, 2008, 6-37.**
34. "The Impact of Internet and E-Commerce on the Evolving Business Models of the Finance Industry in a Knowledge-Intensive Economy," Co-authored with D.K. Malhotra, *International Journal of Electronic Business*, Vol.4:1, pg. 56-82.
35. "Benchmarking European Union Nations Using Data Envelopment Analysis," co-authored with D.K. Malhotra and Elizabeth Mariotz, *International Journal of Finance*, Vol.17:4, pg 3764-3787.
36. "Using Data Envelopment Analysis to Evaluate Loans." Co-authored with D.K. Malhotra, *The RMA Journal*, October 2005, Vol. 88, No. 2.

37. "Evaluating Consumer Loans using Neural Networks." Co-authored with D.K. Malhotra. *Omega.- The International Journal of Management Science*, Vol. 31:2, 83-97.
38. "Differentiating between Good Credits and Bad Credits Using Neuro-Fuzzy Systems." Co-authored with D.K. Malhotra, *European Journal of Operational Research*, 136, 1, 190-231.
39. "Analyzing Mutual Fund Rankings: An Application of Backpropagation Model." *International Journal of Finance*, Vol. 14:2, 2002.
40. "Extensible Business Reporting Language: The Future of E-commerce-driven Accounting." Co-authored with F. Garritt., *International Journal of Business*, Vol 9:1, 2004.
41. "Ellipse—An Object-Oriented and Database-Coupled Expert System Development Environment." Co-authored with D.K. Malhotra, *Journal of Intelligent Systems*, Vol. 10:4, 2000, 345-376.
42. "Bar Codes for Financial Information? Introducing XBRL." Co-authored with F. Garritt, *The Risk Management Association Journal*, June 2002, 40-45.
43. "Intelligent Simulation Code Generator—A Relational Database Management Approach." Co-authored with Joseph M. Mellichamp, *Journal of Intelligent Manufacturing*, Volume 8, 2, April 1997, 125-136.
44. "Identifying Potential Loan Defaulters in the Credit Union Environment: A Comparative Analysis of Statistical and Neural Network Models." Co-authored with D.K. Malhotra, *Journal of Information Technology Cases and Applications (JITCA)*, Vol. 2, 2000, 20-48.
45. "PCTS — An Object-Oriented Diagnostic and Trouble Shooting System for Maintenance of Personal Computers." *Journal of Intelligent Systems*, Vol. 8, 3-4, 1998, 357-381.
46. "Fuzzy Systems and Neuro-Computing in Credit Approval." Co-authored with D.K. Malhotra, *Journal of Lending and Credit Risk Management*, Vol. 81, 11, July/August 1999, 24-27.
47. "Preparing the Human Capital for the New Millennium using Information Technology." Co-authored with D.K. Malhotra, *Digital Technology in Teaching International Business*, International Business Press, 2003, 67-71.
48. "Preparing the Human Capital for the New Millennium using Information Technology." Co-authored with D.K. Malhotra, *Journal of Teaching in International Business*, Vol. 14, No. 2/3, 67-78.

49. "Artificial Neural Systems in Commercial Lending." Co-authored with Robert McLeod and D.K. Malhotra, *The Banker's Magazine*, November/December 1994, 40-45. (*Cited in the Business Review published by the Federal Reserve Bank of Philadelphia, 1997*)
50. "Predicting Credit Risk - A Neural Network Approach." Co-authored with Robert McLeod and D.K. Malhotra, *Journal of Retail Banking*, Fall 1993, 37-44.

PROCEEDINGS PUBLICATIONS:

1. "Evaluating the Health Of Public And Private Universities In The United States," Co-authored with D.K. Malhotra. To be presented at the *8th Annual Conference of the Southeast Decision Sciences Institute (SEDSI 2018)* in Savannah, Georgia, Feb 20-22, 2019.
2. "Benchmarking Public And Private Universities In The United States," Co-authored with D.K. Malhotra. Presented at the *International Academy of Business and Public Administration Disciplines' Annual Meetings* in Orlando, Florida, January, 2019. **Recipient of the Research Award.**
3. "Development and Implementation of a Learning Seminar in a Senior Living Facility," Co-authored with George Sillup. Presented at the *45th Annual Northeast Business & Economics Association Conference*, New Jersey, USA, October 25-27, 2018.
4. "An Empirical Examination Of Economies of Scale In Property And Casualty Insurance Industry using Data Envelopment Analysis," Co-authored with D.K. Malhotra. To be presented at the *International Conference on Management Practices and Research (ICMPR) 2018* in New Delhi, India, July, 2018.
5. "An Empirical Examination Of Economies Of Scale In Property And Casualty Insurance Industry Using Data Envelopment Analysis," Co-authored with D.K. Malhotra. To be presented at the *International Academy of Business and Economics* in Munich, Germany, June 14-16, 2018.
6. "Benchmarking the Performance of Residential Real Estate Investment Funds," Co-authored with D.K. Malhotra. To be presented at the *8th Annual Conference of the Southeast Decision Sciences Institute (SEDSI 2018)* in Wilmington, North Carolina, Feb 21-23, 2018.
7. "Evaluating Cost Efficiencies in Investment Management Services using Data Envelopment Analysis." Co-authored with D.K. Malhotra. Presented at the *International Academy of Business and Public Administration Disciplines' Annual Meetings* in Orlando, Florida, January, 2018.

8. "An Empirical Analysis of the Performance of Residential Real Estate Investment Funds." Co-authored with D.K. Malhotra. Presented at the *International Conference on Management Practices and Research (ICMPR) 2017* in New Delhi, India, July, 2017.
9. "Knowledge management system using text mining: An illustration." Co-authored with Kunal Malhotra. To be presented at the *8th Annual Conference of the European Decision Sciences Institute (EDSI 2017)* in Granada, Spain, May 29 - June 1, 2017.
10. "Evaluating Cost Efficiencies in Investment Management Services," Co-authored with D.K. Malhotra. To be presented at the *8th Annual Conference of the European Decision Sciences Institute (EDSI 2017)* in Granada, Spain, May 29 - June 1, 2017.
11. "Chanakya: An Illustration of Knowledge Discovery using Text Mining," Co-authored with Kunal Malhotra. Presented at the *International Academy of Business and Public Administration Disciplines' Annual Meetings* in Orlando, Florida, January, 2017.
12. "Evaluating the Efficiency of Regional Banks in the United States." Co-authored with D.K. Malhotra. Presented at the *International Conference on Management Practices and Research (ICMPR) 2016* in New Delhi, India, July, 2016.
13. "Differentiating Corporate Bond Ratings using DEANFIS Analysis" Co-authored with D.K. Malhotra. Presented at the *International Conference on Multidimensional Finance, Insurance and Investment (ICMFII'2016)*, Alcoi, Spain, on June 26-29, 2016.
14. "Benchmarking The Operating Efficiency Of U.S. Regional Banks." Co-authored with D.K. Malhotra and Reuben Mendoza. To be presented at the *6th International Multi-Conference on Complexity, Informatics and Cybernetics (IMCIC 2016)*, Orlando, USA, on March 8-11, 2016.
15. "Identifying Tax Efficient Mutual Funds Using Data Envelopment Analysis Model." Co-authored with D.K. Malhotra and Vivek Bhargava. Presented at the *International Academy of Business and Public Administration Disciplines' Annual Meetings* in Orlando, Florida, January, 2016. **Recipient of the Research Award.**
16. "Benchmarking Tax Efficient Mutual Funds using Data Envelopment Analysis Model." Co-authored with D.K. Malhotra. To be presented at the *International Conference on Management Practices and Research (ICMPR) 2015* in New Delhi, India, July, 2015.

17. "Evaluating Loans Using a Combination of Data Envelopment and Neuro-Fuzzy Systems." Co-authored with D.K. Malhotra. To be presented at the 6th International Multi-Conference on Complexity, Informatics and Cybernetics (IMCIC 2015), to be held in Orlando, USA, on [March 10-13, 2015](#). ***Adjudged best paper.***
18. "A Frontier Analysis Approach to Analyze the Operating Efficiency of Cable and Satellite Companies in the United States." Co-authored with D.K. Malhotra and Kathleen Campbell. Presented at the *International Academy of Business and Public Administration Disciplines' Annual Meetings* in Orlando, Florida, January, 2015. ***Recipient of the Research Award.***
19. "Evaluating the Performance of Home Building Companies." Co-authored with D.K. Malhotra and Kathleen Campbell. To be presented at *the International Academy of Business and Economics 2014 Orlando – Winter Conference*, March 16-18, 2014.
20. "Using Intrinsic Parameters to Evaluate Mutual Funds." Co-authored with D.K. Malhotra and George Tsetsekos. To be presented at *the International Academy of Business and Economics 2014 Orlando – Winter Conference*, March 16-18, 2014.
21. "Using Data Envelopment Analysis to Benchmark Advertising Dollars, Sales, and Profitability." Presented at the *International Academy of Business and Public Administration Disciplines' Annual Meetings* in Orlando, Florida, January, 2014.
22. "DEANFIS – A Multiple Model Approach to Decision-Making." Presented at the Decision Sciences Institute's Annual Meetings in Baltimore, Maryland, November, 2013.
23. Assessing Mutual Funds Performance Using Data Envelopment Analysis, Co-authored with D.K. Malhotra. Presented at the *International Decision Sciences Institute's Annual Meetings* in Bali, Indonesia, July, 2013.
24. Evaluating The Impact Of Advertising On Sales And Profitability In Apparel Industry, Co-authored with D.K. Malhotra and Elizabeth Mariotz. Presented at the *International Decision Sciences Institute's Annual Meetings* in Bali, Indonesia, July, 2013.
25. "Benchmarking Managed Health Care Organizations," Co-authored with D.K. Malhotra & S. Lehrman. Presented at the *Northeast Decision Sciences Institute's Annual Meetings* in Brooklyn, New York, April, 2013. (recipient of the "***Best Paper Award***")
26. A DEA-Based Returns-to-Scale Framework to assess the Efficiency of Indian Commercial Banks. Presented at the *International Academy of Business and*

- Public Administration Disciplines' Annual Meetings* in Orlando, Florida, January, 2013. (recipient of the "**Research Award**")
27. Loan Evaluation using Variable Benchmark Data Envelopment Analysis, Presented at the *International Academy of Business and Public Administration Disciplines' Annual Meetings* in Las Vegas, Nevada, November 2012.
 28. "Using Data Envelopment Analysis Framework to Evaluate Mutual Fund Efficiency," co-authored with D.K. Malhotra, To be presented at the Northeast Decision Sciences Institute's Annual Meetings in Newport, Rhode Island, March, 2012.
 29. "SIDE - A Decision Support System Using A Combination Of Swarm Intelligence And Data Envelopment Analysis," To be presented at the Northeast Decision Sciences Institute's Annual Meetings in Newport, Rhode Island, March, 2012.
 30. "Evaluating Mutual Fund Efficiency Using Data Envelopment Analysis Models," co-authored with D.K. Malhotra, Presented at the *International Academy of Business and Public Administration Disciplines* annual meeting in Orlando, Florida, January, 2012.
 31. Using Data envelopment analysis to analyze Indian commercial banks, co-authored with D.K. Malhotra, Presented at the *Northeast Business and Economics Association's Annual Conference*, Philadelphia, PA, November, 2011.
 32. Benchmarking The Operating Efficiency Of U.S. Airlines Using DEA, Presented at the *Asia Pacific Decisions Sciences Institute's Annual Meetings*, Taiwan, July, 2011.
 33. DEANFIS – A Fuzzy Multi-Dimensional Approach To Decision-Making Using Data Envelopment Analysis And Neuro-Fuzzy Systems, Presented at the *Asia Pacific Decisions Sciences Institute's Annual Meetings*, Taiwan, July, 2011.
 34. A DEA-Based Multidimensional Framework for Analyzing Commercial Banks, co-authored with Raymond Poteau. Presented at the *Northeast Decision Sciences Institute's Annual Meetings* in Montreal, Canada, April, 2011. (Basic Scholarship).
 35. A DEA Based Multidimensional Framework For Analyzing Emerging Markets, presented at *International Conference on Management, Practices, and Research* in New Delhi, India, December, 2010.
 36. Benchmarking Large US Retailers using Data Envelopment Analysis. To be presented at the *Northeast Decision Sciences Institute's Annual Meetings* in Alexandria, Virginia, March 2010. (Basic Scholarship)

37. Using Data Envelopment Analysis to Analyze the U.S. Apparel and Accessories Industry. Co-authored with D.K. Malhotra. Presented at the *International Academy of Business and Public Administration Disciplines' Annual Meetings* in Orlando, Florida, January, 2010. (recipient of the **“Research Award”**)
38. Decision Support Systems For Evaluating Loan Applications Using Data Envelopment Analysis And Neuro_Fuzzy Systems. Co-authored with D.K. Malhotra. To be presented at the *Northeast Decision Sciences Institute's Annual Meetings* in Alexandria, Virginia, March 2010. (Basic Scholarship).
39. A Comparative Benchmarking Analysis Of The U.S. Apparel And Accessories Industry. Co-authored with D.K. Malhotra. Presented at the *Decision Sciences Institute's Annual Meetings* in New Orleans, November, 2009.
40. Illustrating Meta-Modeling Knowledge Management Layered Enterprise Information Architecture through Mutual Fund Selector and Intelligent Flexible Manufacturing Systems. To be presented at the National Conference on Recent Developments in Computing and its Applications, New Delhi, India, August 12-13, 2009
41. Analyzing The U.S. Apparel And Accessories Industry Using Data Envelopment Analysis. To be presented at the *Asia-Pacific Decision Sciences Institute's Annual Meetings* in Shanghai, China, July 2009.
42. Using Data Envelopment Analysis to Analyze the Performance of North American Class I Freight Railroads. To be presented at the *Northeast Decision Sciences Institute's Annual Meetings* in Connecticut, April 2009. (Basic Scholarship)
43. Analyzing the Performance of the Pharmaceutical Firms Using Data Envelopment Analysis. Presented at the Sixth AIMS International Conference of Management, New Delhi, India, December, 2008, **Won the third Best Paper Award**. (International, Refereed, Volunteered)
44. Developing the Enterprise Information Architecture Using Meta-Modeling Knowledge. To be published in the proceedings of the *Decision Sciences Institute's Annual Meetings* in Maryland, November, 2008.
45. Analyzing Financial Services Industry Using Data Envelopment Analysis. Co-authored with D.K. Malhotra and Andrew Lafond. To be published in To be published in the proceedings of the *Decision Sciences Institute's Annual Meetings* in Maryland, November, 2008.
46. Modeling Financial Services Industry Using Data Envelopment Methodology. Co-authored with D.K. Malhotra and Andrew Lafond. To be published in the

- proceedings of the *Northeast Business and Economics Association's* annual meeting in New York, November, 2008.
47. Analyzing Financial Statements Using Data Envelopment Analysis. Co-authored with D.K. Malhotra. Published in the proceedings of the *International Colloquium on Asian Business* in Bangkok, Thailand, July, 2008.
 48. Financial Statement Analysis Using Data Envelopment Analysis. Co-authored with D.K. Malhotra. To be published in the proceedings of the *Northeast Decision Sciences Institute's Annual Meetings* in Brooklyn, New York, March 2008. (Basic Scholarship)
 49. Using Data Envelopment Analysis to Rate Bonds. Co-authored with D.K. Malhotra & Phillip Russell. To be published in the proceedings of the *Northeast Business and Economics Association's* annual meeting in Connecticut, October, 2007. (Basic Scholarship)
 50. Using a Meta-Modeling Knowledge Management Layer - A New Approach to Designing the Enterprise Information Architecture. Presented at the Asia-Pacific Decision Science Institute meetings at Bangkok, Thailand in July 2007. ((International, Refereed, Volunteered)
 51. Evaluating the Impact Of European Union On The Existing And Newly-Joining Nations Using Data Envelopment Analysis. Co-authored with D.K. Malhotra, presented at the Asia-Pacific Decision Science Institute meetings at Bangkok, Thailand in July 2007. ((International, Refereed, Volunteered)
 52. Where Do European Union Nations Stand? – An Analytical Analysis Using Data Envelopment Analysis. *Northeast Decision Sciences Institute's Annual Meetings* in Washington, D.C., March 2007. (Basic Scholarship)
 53. “How Efficient Are The European Union Nations? – A Study Using Data Envelopment Analysis.” Co-authored with D.K. Malhotra, presented at the *International Conference of Business & Finance* at Hyderabad, India, December, 2006. (Basic Scholarship)
 54. Benchmarking European Union Nations Using Data Envelopment Analysis. Presented at the *Northeast Decision Sciences Institute's Annual Meetings* in Puerto Rico, March 2006. (Basic Scholarship)
 55. “Benchmarking using Data Envelopment Analysis.” Co-authored with D.K. Malhotra, presented at the *Northeast Business and Economics Association's* annual meeting in Long Island, October, 2006. (Basic Scholarship)

56. "Analyzing European Union using Data Envelopment Analysis." Co-authored with D.K. Malhotra, presented at the *Seventh International Conference on Operations and Quantitative Management*, Jaipur, India, August, 2006.
57. "Identifying good loans using Data Envelopment Analysis." Co-authored with D.K. Malhotra, presented at International Conference of Business & Finance at Hyderabad, India, December, 2005.
58. The Impact of Internet and E-Commerce on the Evolving Business Models of the Finance Industry in a Knowledge-Intensive Economy. Published in the proceedings of the Northeast Decision Sciences Institute's Annual Meetings in Philadelphia, April 2005.
59. The Growth and Future of the Financial Services E-Commerce Business Models – An Era of Technical Revolution. Published in the proceedings of Banking and Insurance in Emerging Markets, January, New Delhi, India, 2005.
60. The Electronic and Technical Revolution in the Financial Services Industry – The Developing Knowledge Sector. Published in the proceedings of the AIMS International Conference of Management, Calcutta, India, December, 2004.
61. eFinancial Services – Current and Future Perspective. Presented at the International Conference of Business & Finance at Hyderabad, India, December, 2004
62. Meta-objects – An Illustration of Meta-Modeling Approach to ModelBase Management Systems. Published in the proceedings of the Northeast Decision Sciences Institute's Annual Meetings in Rhode Island, March 2003. (Basic Scholarship, *Won the best finalist paper award*)
63. Extensible Business Reporting Language: The Future of E-commerce-driven Accounting. Published in the proceedings of the International Conference of Business & Finance at Hyderabad, India, December, 2003
64. Meta-Modeling as a Knowledge Management Tool - A New Approach to Designing the Enterprise Information Architecture. Published in the proceedings of the AIMS International Conference of Management, Bangalore, India, December, 2003.
65. "Modelbase Management using Meta-Modeling Approach and Object-Oriented Paradigm" Proceedings of the Decision Sciences Annual Meetings in Washington D.C., November 2003.
66. Meta-objects – An Illustration of Meta-Modeling Approach to ModelBase Management Systems. Presented at the Northeast Decision Sciences Institute's Annual Meetings in Rhode Island, March 2003. (National, Refereed, Volunteered) **(Won the Finalist – Best Paper Award).**

67. "Mutual Fund Ratings Analysis Using Artificially Intelligent Models." Presented at the Asia-Pacific Decision Science Institute meetings at Bangkok, Thailand in July 2002. ((International, Refereed, Volunteered)
68. "Predicting Mutual Fund ratings using Neural Network Models." Presented at the Southern Finance Association Meetings at Key West, Florida in November 2002. (National, Refereed, Volunteered)
69. "Evaluating Consumer Loans Using Neural Networks." Co-authored with D.K. Malhotra, Presented at the European Financial Management Association London in June 2002. (International, Refereed, Volunteered)
70. Meta-objects – An Illustration of Meta-Modeling Approach to ModelBase Management Systems. To be presented at the Northeast Decision Sciences Institute's Annual Meetings in Rhode Island, March 2003. (National, Refereed, Volunteered)
71. "Evaluating Consumer Loans Using Neural Networks." Co-authored with D.K. Malhotra, Presented at the European Financial Management Association London in June 2002.
72. "The New Enterprise Information Architecture - An Integrated Approach in the Era of Electronic Commerce." Presented at the *Decision Sciences Institute* meetings at San Francisco in November 2001.
73. "Evaluating Consumer Loans Using Neural Networks." Co-authored with D.K. Malhotra, Presented at the *Decision Sciences Institute* meetings at San Francisco in November 2001.
74. "Using Intelligent Decision Systems to Invest in Mutual Funds – an Illustration." Co-authored with D.K. Malhotra, presented at the *Decision Sciences Institute* meetings at Orlando in November 2000.
75. "Object-Oriented Model Base – A Basic Building Block of an Intelligent Decision support System." Presented at the *Northeast Decision Sciences Institute* meetings at Atlantic City in March 2000.
76. "Differentiating Between Good Credits & Bad Credits Using Neuro-Fuzzy Systems." Co-authored with D.K. Malhotra, presented at the *Decision Sciences Institute* meetings at New Orleans in November 1999.
77. "Ellipse—An Object-Oriented and Database-Coupled Expert System Development Environment." *Northeast Decision Sciences Institute* meetings at the Rhode Island in March 1999 (**Nominated for the Best Paper Award**).

78. "Neural Fuzzy Systems: A Flexible Tool for Evaluating Consumer Loans." Co-authored with D.K. Malhotra, presented at the *Multinational Finance Conference* at Helsinki in June 1998.
79. "A Multifold Comparison of Statistical and Neural Network Models to Evaluate Consumer Loan Application." Co-authored with D.K. Malhotra, presented at the *Southeast Decision Science Institute* meetings at Roanoke, VA in February 1998. **(Won Best-Applied Paper Award)**
80. "Identifying Potential Loan Defaulters in the Credit Union Environment – A Comparative Analysis of Statistical and Neural Network Models." Co-authored with D.K. Malhotra, presented at the *Southern Finance Association* meetings at Marcos Island in November 1998.
81. "Fuzzy Logic and Neuro-fuzzy Systems: Artificial Intelligence Applications to Evaluate Consumer Loans." Co-authored with D.K. Malhotra, presented at the *Eastern Finance* meetings at Williamsburg, VA in April 1998.
82. "Evaluating Consumer Loan Applications Using Artificial Neural Fuzzy Systems." Co-authored with D.K. Malhotra, presented at the *Southern Finance Association* meetings at Baltimore in November 1997.
83. "PCTS—An Object-Oriented Personal Computer Trouble Shooting System." Presented at the *Northeast Decision Sciences Institute's* meetings to be held at Annapolis in April 1997, **Nominated for the Best Paper Award.**
84. "A Gradient Descent Approach to Analyze Consumer Loan Applications." Co-authored with D.K. Malhotra, presented at the *Northeast Decision Sciences Institute's* meetings to be held at Annapolis in April 1997.
85. "Combining AI, Simulation, and Databases as a Triplet—An Illustration." Presented at the *Northeast Decision Sciences Institute's* meetings at Annapolis in April 1997.
86. "An Object-Oriented Backpropagation Neural Network Simulator for Predicting Default Risk in Consumer lending." Co-authored with D.K. Malhotra, presented at the *Decision Sciences Institute* annual meetings in Orlando, Florida in November 1996.
87. "Intelligent Simulation Code Generator—A Relational Database Management Approach." Co-authored with Joseph M. Mellichamp, Proceedings of the *Decision Sciences Institute annual* meetings at Orlando in 1996.

PROCEEDINGS ABSTRACTS

1. "Benchmarking Using Data Envelopment Analysis - A Tutorial." Presented at the *Seventh International Conference on Operations and Quantitative Management*, Jaipur, India, August, 2006.
2. "Evaluating Consumer Loans Using Neural Networks." Co-authored with D.K. Malhotra, abstracted in the proceedings of the *Decision Sciences Institute* meetings at San Francisco in November 2001.
3. "An Object-Oriented Backpropagation Neural Network Simulator for Predicting Default Risk in Consumer Lending." Co-authored with D.K. Malhotra and Robert McLeod, abstracted in the proceedings of the *Decision Sciences Institute* annual meetings at Orlando in 1996.
4. "Attaining Simulation Task Independence Using a Combination of Databases and Object Orientation: A New Approach to Design a Simulation Environment." Abstracted in the proceedings of the *Decision Sciences Institute annual* meetings at Orlando in 1996.

PAPERS PRESENTED

1. "Evaluating the Health Of Public And Private Universities In The United States," Co-authored with D.K. Malhotra. To be presented at the *8th Annual Conference of the Southeast Decision Sciences Institute (SEDSI 2018)* in Savannah, Georgia, Feb 20-22, 2019.
2. "Benchmarking Public And Private Universities In The United States," Co-authored with D.K. Malhotra. To be presented at the *International Academy of Business and Public Administration Disciplines' Annual Meetings* in Orlando, Florida, January, 2019.
3. "Development and Implementation of a Learning Seminar in a Senior Living Facility," Co-authored with George Sillup. To be presented at the *45th Annual Northeast Business & Economics Association Conference*, , New Jersey, USA, October 25-27, 2018.
4. "Assessment of Academic and Community Service Learning in an Ethics Intensive, Service-Learning Course about Healthcare Delivery," Co-authored with George Sillup and Anthony Delconte. Presented at the *24th IAJBS World Forum and the 2018 CJBE Annual Meeting*, July 22-25, 2018 in Seattle, USA.
5. "An Empirical Examination Of Economies Of Scale In Property And Casualty Insurance Industry Using Data Envelopment Analysis," Co-authored with D.K. Malhotra. To be presented at the *International Conference on Management Practices and Research (ICMPR) 2018* in New Delhi, India, July, 2018.

6. "An Empirical Examination Of Economies Of Scale In Property And Casualty Insurance Industry Using Data Envelopment Analysis," Co-authored with D.K. Malhotra. To be presented at the *International Academy of Business and Economics* in Munich, Germany, June 14-16, 2018.
7. "Benchmarking the Performance of Residential Real Estate Investment Funds," Co-authored with D.K. Malhotra. To be presented at the *8th Annual Conference of the Southeast Decision Sciences Institute (SEDSI 2018)* in Wilmington, North Carolina, Feb 21-23, 2018.
8. "Evaluating Cost Efficiencies in Investment Management Services using Data Envelopment Analysis." Co-authored with D.K. Malhotra. Presented at the *International Academy of Business and Public Administration Disciplines' Annual Meetings* in Orlando, Florida, January, 2018.
9. "Big Data and Financial Innovation," Keynote speaker at the *International Seminar on Changing Dynamics of Financial Markets*, New Delhi, India, July, 2017.
10. "An Empirical Analysis of the Performance of Residential Real Estate Investment Funds." Co-authored with D.K. Malhotra. Presented at the *International Conference on Management Practices and Research (ICMPR) 2017* in New Delhi, India, July, 2017.
11. "Knowledge management system using text mining: An illustration." Co-authored with Kunal Malhotra. To be presented at the *8th Annual Conference of the European Decision Sciences Institute (EDSI 2017)* in Granada, Spain, May 29 - June 1, 2017.
12. "Evaluating Cost Efficiencies in Investment Management Services," Co-authored with D.K. Malhotra. To be presented at the *8th Annual Conference of the European Decision Sciences Institute (EDSI 2017)* in Granada, Spain, May 29 - June 1, 2017.
13. "Chanakya: An Illustration of Knowledge Discovery using Text Mining," Co-authored with Kunal Malhotra. Presented at the *International Academy of Business and Public Administration Disciplines' Annual Meetings* in Orlando, Florida, January, 2017.
14. "Business Intelligence and Big Data – A New Dimension of the Coming of Age Business Organization," Key Note speaker at the *International Conference on Management Practices & Research*, New Delhi, India, July, 2016.
15. "Evaluating the Efficiency of Regional Banks in the United States." Presented at the *International Conference on Management Practices and Research (ICMPR) 2016* in New Delhi, India, July, 2016.

16. "Differentiating Corporate Bond Ratings using DEANFIS Analysis" Presented at the International Conference on *Multidimensional Finance, Insurance and Investment (ICMFII'2016)*, Alcoi, Spain, on June 26-29, 2016.
17. "Benchmarking The Operating Efficiency Of U.S. Regional Banks." Co-authored with D.K. Malhotra and Reuben Mendoza. To be presented at the *6th International Multi-Conference on Complexity, Informatics and Cybernetics (IMCIC 2016)*, Orlando, USA, on March 8-11, 2016.
18. "Identifying Tax Efficient Mutual Funds Using Data Envelopment Analysis Model." Co-authored with D.K. Malhotra and Vivek Bhargava. Presented at the *International Academy of Business and Public Administration Disciplines' Annual Meetings* in Orlando, Florida, January, 2016. **Recipient of the Research Award.**
19. "Rating Corporate Bonds Using DEANFIS Analysis – A Multi-Modeling Approach." Co-authored with D.K. Malhotra. Presented at the *Institute for Operations Research and the Management Sciences (INFORMS) Annual Meetings* in Philadelphia, Pennsylvania, USA on November 1-4, 2015.
20. "Benchmarking Tax Efficient Mutual Funds using Data Envelopment Analysis Model." Co-authored with D.K. Malhotra. Presented at the *International Conference on Management Practices and Research (ICMPR) 2015* in New Delhi, India, July, 2015.
21. "Evaluating Loans Using a Combination of Data Envelopment and Neuro-Fuzzy Systems." Co-authored with D.K. Malhotra. Presented at the *6th International Multi-Conference on Complexity, Informatics and Cybernetics (IMCIC 2015)*, Orlando, USA, on [March 10-13](#), 2015.
22. "A Frontier Analysis Approach to Analyze the Operating Efficiency of Cable and Satellite Companies in the United States." Co-authored with D.K. Malhotra and Kathleen Campbell. Presented at the *International Academy of Business and Public Administration Disciplines' Annual Meetings* in Orlando, Florida, January, 2015. Recipient of the Research Award.
23. "Evaluating The Performance of Home Building Companies." Co-authored with D.K. Malhotra and Kathleen Campbell. To be presented at the *International Academy of Business and Economics 2014 Orlando – Winter Conference*, March 16-18, 2014.
24. "Using Intrinsic Parameters to Evaluate Mutual Funds." Co-authored with D.K. Malhotra and George Tsetsekos. To be presented at the *International Academy of Business and Economics 2014 Orlando – Winter Conference*, March 16-18, 2014.

25. "Using Data Envelopment Analysis to Benchmark Advertising Dollars, Sales, and Profitability." Presented at the *International Academy of Business and Public Administration Disciplines' Annual Meetings* in Orlando, Florida, January, 2014.
26. Role Of Disruptive Technologies In The Global Economy, Invited speaker at *the 3rd International Conference on Management Practices & Research*, New Delhi, India, July, 2013.
27. DEANFIS – A Multiple Model Approach To Decision-Making, To be presented at the Decision Sciences Institute's Annual Meetings in Baltimore, Maryland, November, 2013.
28. Assessing Mutual Funds Performance Using Data Envelopment Analysis, Co-authored with D.K. Malhotra. Presented at the *International Decision Sciences Institute's Annual Meetings* in Bali, Indonesia, July, 2013.
29. Evaluating The Impact Of Advertising On Sales And Profitability In Apparel Industry, Co-authored with D.K. Malhotra and Elizabeth Mariotz. Presented at the *International Decision Sciences Institute's Annual Meetings* in Bali, Indonesia, July, 2013.
30. "Benchmarking Managed Health Care Organizations," Co-authored with D.K. Malhotra & S. Lehrman. To be presented at the *Northeast Decision Sciences Institute's Annual Meetings* in Brooklyn, New York, April, 2013. (recipient of the "**Best Application Award**")
31. "A DEA-Based Returns-to-Scale Framework to assess the Efficiency of Indian Commercial Banks," Co-authored with D.K. Malhotra. Presented at the *International Academy of Business and Public Administration Disciplines' Annual Meetings* in Orlando, Florida, January, 2013. (recipient of the "**Research Award**")
32. Loan Evaluation using Variable Benchmark Data Envelopment Analysis, Presented at the *International Academy of Business and Public Administration Disciplines' Annual Meetings* in Las Vegas, Nevada, November 2012.
33. "Using Data Envelopment Analysis Framework to Evaluate Mutual Fund Efficiency," co-authored with D.K. Malhotra, To be presented at the Northeast Decision Sciences Institute's Annual Meetings in Newport, Rhode Island, March, 2012.
34. "SIDE - A Decision Support System Using A Combination Of Swarm Intelligence And Data Envelopment Analysis," To be presented at the Northeast Decision Sciences Institute's Annual Meetings in Newport, Rhode Island, March, 2012.

35. "Evaluating Mutual Fund Efficiency Using Data Envelopment Analysis Models," co-authored with D.K. Malhotra, Presented at the *International Academy of Business and Public Administration Disciplines* annual meeting in Orlando, Florida, January, 2012.
36. Using Data envelopment analysis to analyze Indian commercial banks, co-authored with D.K. Malhotra, Presented at the *Northeast Business and Economics Association's* Annual Conference, Philadelphia, PA, November, 2011.
37. Benchmarking The Operating Efficiency Of U.S. Airlines Using DEA, Presented at the *Asia Pacific Decisions Sciences Institute's Annual Meetings*, Taiwan, July, 2011.
38. DEANFIS – A Fuzzy Multi-Dimensional Approach To Decision-Making Using Data Envelopment Analysis And Neuro-Fuzzy Systems, Presented at the *Asia Pacific Decisions Sciences Institute's Annual Meetings*, Taiwan, July, 2011.
39. A DEA-Based Multidimensional Framework For Analyzing Commercial Banks, co-authored with Raymond Poteau. To be presented at the *Northeast Decision Sciences Institute's Annual Meetings* in Montreal, Canada, April, 2011. (Basic Scholarship).
40. A DEA Based Multidimensional Framework For Analyzing Emerging Markets, presented at *International Conference on Management, Practices, and Research* in New Delhi, India, December, 2010.
41. Benchmarking Large US Retailers using Data Envelopment Analysis. To be presented at the *Northeast Decision Sciences Institute's Annual Meetings* in Alexandria, Virginia, March 2010. (Basic Scholarship)
42. Using Data Envelopment Analysis to Analyze the U.S. Apparel and Accessories Industry. Co-authored with D.K. Malhotra. Presented at the *International Academy of Business and Public Administration Disciplines' Annual Meetings* in Orlando, Florida, January, 2010. (recipient of the "**Research Award**")
43. Decision Support Systems For Evaluating Loan Applications Using Data Envelopment Analysis And Neuro_Fuzzy Systems. Co-authored with D.K. Malhotra. To be presented at the *Northeast Decision Sciences Institute's Annual Meetings* in Alexandria, Virginia, March 2010. (Basic Scholarship).
44. A Comparative Benchmarking Analysis Of The U.S. Apparel And Accessories Industry. Co-authored with D.K. Malhotra. To be presented at the *Decision Sciences Institute's Annual Meetings* in New Orleans, November, 2009.
45. Illustrating Meta-Modeling Knowledge Management Layered Enterprise Information Architecture through Mutual Fund Selector and Intelligent Flexible

- Manufacturing Systems. To be presented at the National Conference on Recent Developments in Computing and its Applications, New Delhi, India, August 12-13, 2009
46. Analyzing The U.S. Apparel And Accessories Industry Using Data Envelopment Analysis. To be presented at the *Asia-Pacific Decision Sciences Institute's Annual Meetings* in Shanghai, China, July 2009.
 47. Using Data Envelopment Analysis to Analyze the Performance of North American Class I Freight Railroads. To be presented at the *Northeast Decision Sciences Institute's Annual Meetings* in Connecticut, April 2009. (Basic Scholarship)
 48. Analyzing the Performance of the Pharmaceutical Firms Using Data Envelopment Analysis. Presented at the Sixth AIMS International Conference of Management, New Delhi, India, December, 2008, **Won the third Best Paper Award.** (International, Refereed, Volunteered)
 49. Developing the Enterprise Information Architecture Using Meta-Modeling Knowledge. Presented at the *Decision Sciences Institute's Annual Meetings* in Maryland, November, 2008.
 50. Analyzing Financial Services Industry Using Data Envelopment Analysis. Co-authored with D.K. Malhotra and Andrew Lafond. Presented at the *Decision Sciences Institute's Annual Meetings* in Maryland, November, 2008.
 51. Modeling Financial Services Industry Using Data Envelopment Methodology. Co-authored with D.K. Malhotra and Andrew Lafond. Presented at the *Northeast Business and Economics Association's* annual meeting in New York, November, 2008.
 52. Analyzing Financial Statements Using Data Envelopment Analysis. Co-authored with D.K. Malhotra. Published in the proceedings of the *International Colloquium on Asian Business* in Bangkok, Thailand, July, 2008.
 53. Financial Statement Analysis Using Data Envelopment Analysis. Co-authored with D.K. Malhotra. Presented at the *Northeast Decision Sciences Institute's Annual Meetings* in Brooklyn, New York, March 2008. (Basic Scholarship)
 54. Using Data Envelopment Analysis to Rate Bonds. Co-authored with D.K. Malhotra & Phillip Russell. To be published in the proceedings of the *Northeast Business and Economics Association's* annual meeting in Connecticut, October, 2007. (Basic Scholarship)
 55. Using a Meta-Modeling Knowledge Management Layer - A New Approach to Designing the Enterprise Information Architecture. Presented at the *Asia-Pacific*

- Decision Science Institute meetings at Bangkok, Thailand in July 2007.
((International, Refereed, Volunteered)
56. Evaluating the Impact of European Union On The Existing And Newly-Joining Nations Using Data Envelopment Analysis. Co-authored with D.K. Malhotra, presented at the Asia-Pacific Decision Science Institute meetings at Bangkok, Thailand in July 2007. ((International, Refereed, Volunteered)
 57. Where Do European Union Nations Stand? – An Analytical Analysis Using Data Envelopment Analysis. *Northeast Decision Sciences Institute's Annual Meetings* in Washington, D.C., March 2007. (Basic Scholarship)
 58. “How Efficient Are The European Union Nations? – A Study Using Data Envelopment Analysis.” Co-authored with D.K. Malhotra, presented at the *International Conference of Business & Finance* at Hyderabad, India, December, 2006. (Basic Scholarship)
 59. Benchmarking European Union Nations Using Data Envelopment Analysis. Co-authored with D.K. Malhotra, presented at the *Northeast Decision Sciences Institute's Annual Meetings* in Puerto Rico, March 2006. (Basic Scholarship)
 60. “Benchmarking using Data Envelopment Analysis.” Co-authored with D.K. Malhotra, presented at the proceedings of the *Northeast Business and Economics Association's* annual meeting in Long Island, October, 2006. (Basic Scholarship)
 61. “Analyzing European Union using Data Envelopment Analysis.” Co-authored with D.K. Malhotra, presented at the *Seventh International Conference on Operations and Quantitative Management*, Jaipur, India, August, 2006.
 62. “Benchmarking Using Data Envelopment Analysis - A Tutorial” Presented at the *Seventh International Conference on Operations and Quantitative Management*, Jaipur, India, August, 2006.
 63. The Evolving E-Commerce Models of the Financial Services Industry. Published in the proceedings of *Banking and Insurance in Emerging Markets*, January, New Delhi, India, 2005.
 64. “Benchmarking loans using Data Envelopment Analysis.” Co-authored with D.K. Malhotra, presented at *International Conference of Business & Finance* at Hyderabad, India, December, 2005.
 65. “Using Data Envelopment Analysis to Evaluate Loans.” Co-authored with D.K. Malhotra, presented at the *Northeast Business and Economics Association's* annual meeting in Rhode Island, October, 2005.

66. "Technology Triggers e-Financial Services Explosion." Co-authored with D.K. Malhotra, presented at the proceedings of the Northeast Business and Economics Association's annual meeting in Rhode Island, October, 2005.
67. "Evaluating performance of European Union Trading Bloc using Data Envelopment Analysis." Co-authored with D.K. Malhotra and Elizabeth Mariotz, presented at Global Finance Conference, Dublin, Ireland, June, 2005.
68. The Impact of Internet and E-Commerce on the Evolving Business Models of the Finance Industry in a Knowledge-Intensive Economy. Published in the proceedings of the Northeast Decision Sciences Institute's Annual Meetings in Philadelphia, April 2005.
69. The Enterprise Information Architecture Using Meta-Knowledge Management. Presented at Northeast Decision Sciences Institute's annual meeting at Atlantic City, New Jersey, March, 2004, (National, Refereed, Volunteered)
70. Extensible Business Reporting Language: The Future of E-commerce-driven Accounting. Presented at the International Conference of Business, Finance, and Banking at Trinidad, West Indies, May, 2004, (International, Refereed, Volunteered).
71. The Electronic and Technical Revolution in the Financial Services Industry – The Developing Knowledge Sector. Presented at the proceedings of the Second AIMS International Conference of Management, Calcutta, India, December, 2004, (International, Refereed, Volunteered)
72. eFinancial Services – Current and Future Perspective. Presented at the International Conference of Business & Finance at Hyderabad, India, December, 2004, (International, Refereed, Volunteered)
73. Extensible Business Reporting Language: The Future of E-commerce-driven Accounting. Presented at the International Conference of Business & Finance at Hyderabad, India, December, 2003, (International, Refereed, Volunteered)
74. Meta-Modeling as a Knowledge Management Tool - A New Approach to Designing the Enterprise Information Architecture. Presented at the AIMS International Conference of Management, Bangalore, India, December, 2003, (International, Refereed, Volunteered)
75. "Modelbase Management using Meta-Modeling Approach and Object-Oriented Paradigm" To be presented at Decision Sciences Annual Meetings in Washington D.C., November 2003.
76. Meta-objects – An Illustration of Meta-Modeling Approach to ModelBase Management Systems. Presented at the Northeast Decision Sciences Institute's

- Annual Meetings in Rhode Island, March 2003. (National, Refereed, Volunteered)
(Won the Finalist – Best Paper Award).
77. “Mutual Fund Ratings Analysis Using Artificially Intelligent Models.” Presented at the Asia-Pacific Decision Science Institute meetings at Bangkok, Thailand in July 2002. ((International, Refereed, Volunteered)
 78. “Predicting Mutual Fund ratings using Neural Network Models.” Presented at the Southern Finance Association Meetings at Keywest, Florida in November 2002. (National, Refereed, Volunteered)
 79. “Evaluating Consumer Loans Using Neural Networks.” Co-authored with D.K. Malhotra, Presented at the European Financial Management Association London in June 2002. (International, Refereed, Volunteered)
 80. Meta-objects – An Illustration of Meta-Modeling Approach to ModelBase Management Systems. To be presented at the Northeast Decision Sciences Institute’s Annual Meetings in Rhode Island, March 2003. (National, Refereed, Volunteered)
 81. “Evaluating Consumer Loans Using Neural Networks.” Co-authored with D.K. Malhotra, Presented at the European Financial Management Association London in June 2002.
 82. “Mutual Fund Ratings Analysis Using Artificially Intelligent Models.” Presented at the Asia-Pacific Decision Science Institute meetings at Bangkok, Thailand in July 2002.
 83. “The New Enterprise Information Architecture - An Integrated Approach in the Era of Electronic Commerce.” Presented at the *Decision Sciences Institute* meetings at San Francisco in November 2001.
 84. “Evaluating Consumer Loans Using Neural Networks.” Co-authored with D.K. Malhotra, Presented at the *Decision Sciences Institute* meetings at San Francisco in November 2001.
 85. “Using Intelligent Decision Systems to Invest in Mutual Funds – an Illustration.” Co-authored with D.K. Malhotra, presented at the *Decision Sciences Institute* meetings at Orlando in November 2000.
 86. “Mutual Funds Selector – An Intelligent Object-Oriented Decision Environment.” Co-authored with D.K. Malhotra, presented at the Fifth International Conference, *Asia-Pacific Region of Decisions Sciences Institute* meetings at Tokyo in July, 2000.

87. "Object-Oriented Model Base – A Basic Building Block of an Intelligent Decision support System." Presented at the *Northeast Decision Sciences Institute* meetings at Atlantic City in March 2000.
88. "Differentiating Between Good Credits & Bad Credits Using Neuro-Fuzzy Systems." Co-authored with D.K. Malhotra, presented at the *Decision Sciences Institute* meetings at New Orleans in November 1999.
89. "An Intelligent Employee Performance Appraisal Writer: An Illustration of Knowledge-Based Group Decision-Making" Co-authored with D.K. Malhotra, Elmore Alexander to be presented at the *INFORMS National Meeting* Philadelphia, PA, Nov 1999
90. "Intelligent Data Mining Using Object-Oriented Paradigm." Presented at the *INFORMS National Meeting* Philadelphia, PA, Nov 1999
91. "An Object-Oriented Model-Base: A Basic Building Block of Intelligent Decision Support Systems." Presented at the *INFORMS National Meeting* Philadelphia, PA, Nov 1999
92. "Applying Object-Orientation & Databases to Design Expert System Development Environment: An Illustration." Presented at the *INFORMS National Meeting* Cincinnati, Ohio, May 1999
93. "Ellipse—An Object-Oriented and Database-Coupled Expert System Development Environment." *Northeast Decision Sciences Institute* meetings at the Rhode Island in March 1999 (**Nominated for the Best Paper Award**).
94. "Neural Fuzzy Systems: A Flexible Tool for Evaluating Consumer Loans." Co-authored with D.K. Malhotra, presented at the *Multinational Finance Conference* at Helsinki in June 1998.
95. "A Multifold Comparison of Statistical and Neural Network Models to Evaluate Consumer Loan Application." Co-authored with D.K. Malhotra, presented at the *Southeast Decision Science Institute* meetings at Roanoke, VA in February 1998. (**Won Best-Applied Paper Award**)
96. "Identifying Potential Loan Defaulters in the Credit Union Environment – A Comparative Analysis of Statistical and Neural Network Models." Co-authored with D.K. Malhotra, presented at the *Southern Finance Association* meetings at Marcos Island in November 1998. (*Cited 1 time*)
97. "Fuzzy Logic and Neuro-fuzzy Systems: Artificial Intelligence Applications to Evaluate Consumer Loans." Co-authored with D.K. Malhotra, presented at the *Eastern Finance* meetings at Williamsburg, VA in April 1998.

98. "Evaluating Consumer Loan Applications Using Artificial Neural Fuzzy Systems." Co-authored with D.K. Malhotra, presented at the *Southern Finance Association* meetings at Baltimore in November 1997.
99. "PCTS—An Object-Oriented Personal Computer Trouble Shooting System." Presented at the *Northeast Decision Sciences Institute's* meetings to be held at Annapolis in April 1997, ***Nominated for the Best Paper Award.***
100. "A Gradient Descent Approach to Analyze Consumer Loan Applications." Co-authored with D.K. Malhotra, presented at the *Northeast Decision Sciences Institute's* meetings to be held at Annapolis in April 1997.
101. "Combining AI, Simulation, and Databases as a Triplet—An Illustration." Presented at the *Northeast Decision Sciences Institute's* meetings at Annapolis in April 1997.
102. "An Object-Oriented Backpropagation Neural Network Simulator for Predicting Default Risk in Consumer lending." Co-authored with D.K. Malhotra, presented at the *Decision Sciences Institute* annual meetings in Orlando, Florida in November 1996.
103. "An Intelligent Simulation Code Generator—A Relational Database Management Approach." Co-authored with Joseph M. Mellichamp, presented at the *Decision Sciences Institute* annual meetings in Orlando, Florida in November 1996.
104. "Attaining Simulation Task Independence Using a Combination of Databases and Object Orientation: A New Approach to Simulation Environment." Presented at the *Decision Sciences Institute* annual meetings in Orlando, Florida in November 1996.

GRANTS

Received a grant of \$15,000 from the ***Lindback Foundation*** for the project entitled "Ellipse--An Object-Oriented Expert Systems Development Tool."

Awarded summer research grant at Saint Joseph's University for the year 2000.

COMPUTING SKILLS

Languages: Ada, Assembly Languages, BASIC, Visual Basic, C, C++, Visual C++, Java, COBOL, FORTRAN, GPSS, LISP, Pascal, PROLOG, SIMAN, and Web-Authoring.

Packages: Dbase/SQL, PLANET Simulator, Spreadsheets, Minitab, MATLAB, NEXPERT, SAS, SPSS, RATS, Power Builder, Lotus Notes, Neuralware, Crystal Ball, and Commander ES, Oracle

Operating Systems: DOS, UNIX, MS Windows, IBM MVS, and RS 6000.

EXPERIENCE

Professor of Decision and Systems Sciences

Fall 2016- Present

Saint Joseph's University

Associate Professor of Management Information Systems

Fall 2003- Summer 2016

Saint Joseph's University

Assistant Professor of Management Information Systems

Fall 1999 – Summer 2003.

Saint Joseph's University

Assistant Professor of Management/Computer Information Systems Fall 1997 – Spring 1999.

Division of Business and Computer Information Systems

Cabrini College

Philadelphia, PA 19087

Instructor of Information Systems

January 1994-Summer 1997

School of Business Administration

Philadelphia College of Textiles and Science

Graduate Teaching Assistant, The University of Alabama,

January 1991-December 1993.

Research Analyst, Defense Research and Development Organization

(DRDO),

INDIA, July 1989-July 1990.

INDUSTRY EXPERIENCE

1. Developed an Office Automation System for James River Inc., Virginia.
 - This system was a customized employee appraisal writer. The user can appraise an employee using a set of phrases, classified under various categories in the system's knowledge base.
2. Developed an Expert System Building Tool for Defense Purposes at the Defense Research and Development Organization, INDIA.

- The expert system shell was developed, using frame-based methodology. The system was used to develop a Gynae expert system for the Gynecology department of Lok Nayak hospital, Delhi.

EDUCATION

1. Ph.D., University of Alabama, August 1995
Major: Management Information Systems
Minor: Computer Science
GPA: 4.0
2. MS in Computer Science
University of Delhi, July 1990
Concentration: Artificial Intelligence
3. BS in Physics (Honors), University of Delhi, India, July 1987.

DISSERTATION TOPIC

Masters' Thesis: PCDAG – A Frame-based Expert System for P.C. Diagnosis

Doctoral Dissertation: Intelligent Simulation Code Generator – A Relational Database Management Approach

OTHER PROFESSIONAL DEVELOPMENT ACTIVITIES

I. Editor-in-Chief

International Journal of Business Intelligence and Systems Engineering (IJBISE) (Inderscience Publishers) since July, 2014.

II. Editorial Board

- Beginning with October 2007, I am serving on the *editorial board* of *International Journal of Applied Management Science*
- Beginning with October 2007, I am serving on the *editorial board* of *International Journal of Data Analysis Techniques and Strategies*.
- Also, beginning with July 2008, I am also serving on the editorial review board of *International Journal of Strategic Decision Sciences (IJSDS)*.
- Beginning with May 2009, I am also serving on the *editorial board* of *International Journal of Management Research*.
- Beginning with February 2014, I am serving on the *editorial board* of *Journal of Management Systems*
 - Beginning with April 2015, I am serving on the editorial advisory board of *Collaborative Filtering Using Data Mining and Analysis*

- Beginning with June, 2016, I am serving on the editorial committee for *International Journal of Distributed Sensor Networks for the special issue "Business Analytics, Big Data and Knowledge Management"*.

II. Special Issues Editor

I am the **Editor of the Special Issue of International Journal of Data Analysis Techniques and Strategies (IJDATS) on Business Intelligence, Volume 7, No. 1, 2015**, <http://www.inderscience.com/browse/callpaper.php?callID=1870>.

III. Reviewer

- I also serve as a reviewer for *Decision Sciences Institute, Northeast Decision Sciences Institute, Asia-Pacific Decision Sciences Institute, Decision Support Systems Journal - Special Issue on Collaborative Work and Knowledge Management in Electronic Business, Annals of Operations Research, International Journal of Internet and Enterprise Management, IEEE Transactions, Management Research Review, International Journal of Software and Knowledge Engineering, Journal of Intelligent and Fuzzy Systems, Journal of Global Optimization, and European Journal of Operations & Research*.

IV. Track Chair

- **MIS/IS/DSS/AI/Info Security/Expert Systems Track**, *International Decision Sciences Institute's Annual Meetings* in Bali, Indonesia, July, 2013.
- **MIS/IS/DSS/AI/Info Security/Expert Systems Track**, *Northeast Decision Sciences Institute's Annual Meetings* in Newport, Rhode Island, March, 2012.
- **MIS/IS/DSS/AI/Info Security/Expert Systems Track**, *Northeast Decision Sciences Institute's Annual Meetings* in Montreal, Canada, April, 2011.

HONORS

1. Awarded the *University award for Teaching* for the academic year 2014-2015.
2. Role Of Disruptive Technologies In The Global Economy, Invited speaker at *the 3rd International Conference on Management Practices & Research*, New Delhi, India, July, 2013.
3. "Benchmarking Managed Health Care Organizations," Co-authored with D.K. Malhotra & S. Lehrman. To be presented at the *Northeast Decision Sciences Institute's Annual Meetings* in Brooklyn, New York, April, 2013. (recipient of the "**Best Application Award**")
4. "A DEA-Based Returns-to-Scale Framework to assess the Efficiency of Indian Commercial Banks," Co-authored with D.K. Malhotra. Presented at the *International Academy of Business and Public Administration Disciplines' Annual Meetings* in Orlando, Florida, January, 2013. (recipient of the "**Research Award**")
5. Using Data Envelopment Analysis to Analyze the U.S. Apparel and Accessories Industry. Co-authored with D.K. Malhotra. Presented at the *International*

Academy of Business and Public Administration Disciplines' Annual Meetings in Orlando, Florida, January, 2010. (recipient of the "**Research Award**")

6. Analyzing the Performance of the Pharmaceutical Firms Using Data Envelopment Analysis. Presented at the Sixth AIMS International Conference of Management, New Delhi, India, December, 2008, **Won the third Best Paper Award**. (International, Refereed, Volunteered)
7. Awarded the **University award for Research** for the academic year 2007-2008.
8. Won the **Finalist – Best Paper Award** at the Northeast Decision Sciences Institute's Annual Meetings in Rhode Island, March 2003.
9. Awarded the **University College award for Instructional Excellence** for the academic year 2000-2001.
10. Received a grant of \$15,000 from the **Lindback Foundation** for the project entitled "Ellipse--An Object-Oriented Expert Systems Development Tool."
11. Nominated for the **Best paper award** at the *Northeast Decision Sciences* meeting 1999.
12. **Won Best-Applied Paper Award** at the *Southeast Decision Sciences* meeting at Roanoke, Virginia.
13. Nominated for **the best paper award** at the *Northeast Decision Sciences Institute's* meetings at Annapolis, April 1997.
14. Third Position in the University of Delhi at the Master's Level.
15. Second Position in the College at the baccalaureate Level.