

# Daewon Sun

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## Education

- Dec. 2004     **Doctor of Philosophy**  
Management Science & Information Systems,  
The Pennsylvania State University, Pennsylvania, USA  
*Dissertation:* "Pricing Strategy and Resource Management in the Digital Era"  
*Advisor:* Hemant K. Bhargava
- May 1999     **Master of Business Administration**  
College of Business, Bowling Green State University, Ohio, USA
- Feb. 1994     **Bachelor of Business Administration**  
College of Business Administration, Korea University, Seoul, Korea

## Academic Affiliation

- August 2005 - Present: Assistant Professor of MIS, Department of Management, Mendoza College of Business, University of Notre Dame.
- August 2004 - May 2005: Instructor, Department of Management, Mendoza College of Business, University of Notre Dame.

## Honors and Awards

### Research Honors and Awards

1. **2004 Operations Research Meritorious Service Award**, Awarded for outstanding service to *Operations Research* (an INFORMS journal)
2. **Finalist**, Third Annual eBRC (eBusiness Research Center) Doctoral Support Award Competition, July 2003, Proposal titled "Broadband Internet Services in the 21st Century: Market Segmentation via Contingency Pricing"
3. **Best Paper Award**, *Americas Conference on Information Systems (AMCIS2003)*, *Digital Economy Track*, Tampa, Florida, August 4-6, 2003, Paper titled "Dual Mechanism in Electronic Retailing"
4. **Best Paper Award**, *eBusiness Workshop* (co-sponsored by the eBusiness Research Center and the Institute for the Study of Business Markets), January 2001, Paper titled "Inventory Management in e-Business: An EOQ Approach with Compensation Policy"

## Other Honors and Awards

1. Nominated and Admitted to the **AMCIS 2003 Doctoral Consortium**, Tampa, FL, August 2003
2. Nominated and Admitted to the **INFORMS 2002 Doctoral Colloquium**, San Jose, CA, November 2002
3. **Graduate Assistantship** (8/1999 - 5/2004), Management Science & Information Systems, Smeal College of Business Administration, Pennsylvania State University, Pennsylvania
4. **Certificate of Appreciation**, Graduate Business Students Association, Bowling Green State University, Ohio, December 1998
5. **Graduate Assistantship** (1/1998 - 5/1999), Department of Finance, College of Business Administration, Bowling Green State University, Ohio
6. **Certificate of Honor**, Republic of Korea Air Force, Korea, 1996

## **Professional Service**

1. **Co-Guest Editor** (2/2003 - 3/2005): *Decision Support Systems* Special Issue on *Web-based Decision Support*
2. **Conference Coordinator and Web Master** (2/2002 - 1/2003), *Eighth INFORMS Computing Society Conference (ICS2003)*, Chandler, Arizona, January 2003
3. **Program Committee Member**
  - *Ninth Bi-Annual International Conference on Decision Support Systems (ISDSS 07)*, Indian Institute of Management, Calcutta, India, January 2-4, 2007
  - *INFORMS Conference on Information Systems and Technology (CIST2006)*, Pittsburg, Pennsylvania, November 4 -5, 2006
  - *Tenth INFORMS Conference on Information Systems and Technology (CIST2005)*, New Orleans, Louisiana, November 12-13, 2005
  - *Ninth INFORMS Conference on Information Systems and Technology (CIST2004)*, Denver, Colorado, October 23-24, 2004
  - *Eighth INFORMS Computing Society Conference (ICS2003)*, Chandler, Arizona, January 2003
4. **Service as Moderator/Advisor of Student Organizations**
  - Advisor (2007- Present): MIS Club, University of Notre Dame
  - Advisor (2006- Present): Korean Graduate Student Association , University of Notre Dame

5. **Research Seminar Coordinator** (2006 – Present): Quantitative Research Seminar Series, University of Notre Dame
6. **Reviewer**
  - Academic Journals: *Management Science, Operations Research, Marketing Science, Production and Operations Management, European Journal of Operational Research, Decision Support Systems, IBM Systems Journal, Electronic Commerce Research and Applications*
  - Refereed Conferences: *37<sup>th</sup> Annual Meeting of the Decision Sciences Institute (DSI2006), Hawaii International Conference on Systems Sciences (HICSS-38), INFORMS Conference on Information Systems and Technology (CIST2006, CIST2005, CIST2004), Workshop on Information Technologies & Systems (WITS2003, WITS2002), International Conference on Electronic Commerce (ICEC2003), INFORMS Computing Society Conference (ICS2003), Workshop on e-Business (WEB2002), International Conference on Information Systems (ICIS2002), Americas Conference on Information Systems (AMCIS2002)*

## Research Interests

- Pricing Strategy and Resource Management in Electronic Commerce
- Pricing Strategy in Telecommunication Industry (Quality of Service Guarantee, Contingency Pricing, and Market Segmentation)
- Interface between Operations Management and Marketing
- Decision Support Techniques (Design of DSS models, Computational Experiments, and Simulations)

## Academic Publications

### Refereed Journal Papers

1. Sun, D., J. Ryan, and H. Shin (2007): “Why Do We Observe Stockless Operations on the Internet? – Stockless Operation under Competition,” Accepted for publication in *Production and Operations Management*
2. Bhargava, H.K., and D. Sun (2007): “Pricing under Quality of Service Uncertainty: Market Segmentation via Statistical QoS Guarantees,” Accepted for publication in *European Journal of Operational Research*
  - Authors contributed equally and are listed in alphabetical order.
3. Sun, D. (2006): “Dual Mechanism for an Online Retailer,” Accepted for publication in *European Journal of Operational Research*

4. Bhargava, H.K., D.J. Power, and D. Sun (2007): "Progress in Web-based Decision Support Technologies," *Decision Support Systems*, 43(4), 1083-1095.
  - Authors contributed equally and are listed in alphabetical order.
5. Bhargava, H.K., D. Sun, and S.H. Xu (2006): "Stockout Compensation: Joint Inventory and Price Optimization in Electronic Retailing," *INFORMS Journal on Computing*, 18(2), 255-266.
  - Authors contributed equally and are listed in alphabetical order.
6. Kim, J.G., D. Sun, X.J. He, and J.C. Hayya (2004): "The  $(s, Q)$  Inventory Model with Erlang Lead Time and Deterministic Demand," *Naval Research Logistics*, 51(6), 906-923.

#### Papers under Review

1. Devaraj, S., C. Porter, and D. Sun, "Sources of Value in Virtual Communities: A Test of Two Models," Working Paper, Submitted to *Management Science*, Under Review
2. Sun, D., Z. Li, and J.C. Hayya, "The Optimal Format to Sell a Product through the Internet: Posted Price, Auction, and Buy-Price Auction," Working Paper, Submitted to *Decision Sciences*, Under Review
3. Hayya, J.C., U. Bagchi, J.G. Kim, and D. Sun, "On Order Crossover," Working Paper, Submitted to *International Journal of Production Economics*, Under Review
4. Devaraj, S., C. Porter, and D. Sun, "An Empirical Assessment of Information Attributes in Virtual Communities," Working Paper, Submitted to *MISQ*, Under Review
5. Hayya, J.C., J.E. Tyworth, J.G. Kim, and D. Sun, "Ordering with Exponential Lead Times," Working Paper, Submitted to *European Journal of Operational Research*, Under Review

#### Refereed Conference Proceedings

1. Bhargava, H.K., and D. Sun (2005): "Performance-Contingent Pricing for Broadband Services," In *Proceedings of the Thirty-Eighth Hawaii International Conference on System Sciences (HICSS-38)*, Big Island, Hawaii, January 3-6, 2005
2. Kim, J.G., J.D. Hong, D. Sun, and J.C. Hayya (2003): "On a Redefinition of Lead Time in Stochastic Lead-Time Inventory Systems," In *Proceedings of the 34<sup>th</sup> Annual Meeting of the Decision Science Institute (DSI2003)*, Washington DC, November 22-25, 2003
3. Sun, D. (2003): "Dual Mechanism in Electronic Retailing," In *Proceedings of the Americas Conference on Information Systems (AMCIS2003)*, Tampa, Florida, August 4-6, 2003 (**Best Paper Award**)

4. Bhargava, H.K. and D. Sun (2003): "Quality-Contingent Differentiated Pricing for Broadband Services," In *Proceedings of the Americas Conference on Information Systems (AMCIS2003)*, Tampa, Florida, August 4-6, 2003
5. Bhargava, H.K., D. Sun, and S.H. Xu (2002): "Stockout Compensation and Inventory Management for an Electronic Retailer," In *Proceedings of the First Workshop on e-Business (WEB2002)*, pp. 217-227, Barcelona, Spain, December 14-15, 2002
6. Sun, D. (2002): "Best Allocation Strategy for an Online Retailer: Posted Price or Auction," In *Proceedings of the Seventh Annual Conference on Information Systems & Technology (CIST2002)*, San Jose, California, November 16-17, 2002

## Academic Presentations

### Refereed Conference Presentations

1. "Performance-Contingent Pricing for Broadband Services," *Thirty-Eighth Hawaii International Conference on System Sciences (HICSS-38)*, Big Island, Hawaii, January 3-6, 2005
2. "Dual Mechanism in Electronic Retailing," *Americas Conference on Information Systems (AMCIS2003)*, Tampa, Florida, August 4-6, 2003 (**Best Paper Award**)
3. "Quality-Contingent Differentiated Pricing for Broadband Services," *Americas Conference on Information Systems (AMCIS2003)*, Tampa, Florida, August 4-6, 2003
4. "Stockout Compensation and Inventory Management for an Electronic Retailer," *First Workshop on e-Business (WEB2002)*, Barcelona, Spain, December 14-15, 2002
5. "Best Allocation Strategy for an Online Retailer: Posted Price or Auction," *Seventh Annual Conference on Information Systems & Technology (CIST2002)*, San Jose, California, November 16-17, 2002
6. "Joint Inventory and Price Optimization for an Electronic Retailer," *Workshop on Information Systems and Economics (WISE2001)*, New Orleans, Louisiana, December 2001

### Invited and Other Presentations

1. "Performance of Single-Unit Auctions," *Eighteenth Annual Conference of POMS*, Dallas, TX, May 4-7, 2007
2. "The Optimal Format to Sell a Product through the Internet: Posted Price, Pure Auction, or Buyout Auction," *37<sup>th</sup> Annual Meeting of the Decision Science Institute (DSI2006)*, San Antonio, Texas, November 18-21, 2006
3. "The Role of Stockless Operations in Electronic Retailing," *INFORMS 2006 Annual Meeting*, Pittsburg, Pennsylvania, November 4-8, 2006

4. "Why Can We Observe Stockless Operations on the Internet? – Stockless Operation under Competition," *Seventeenth Annual Conference of POMS*, Boston, MA, April 28 - May 1, 2006
5. "Dual Mechanism for an Online Retailer," MIS Research Seminar, University of Illinois at Urbana-Champaign, March 11, 2005
6. "Multi-Unit Auction with Buy-It-Now," Notre Dame MIS Research Symposium, University of Notre Dame, Notre Dame, April 23, 2004
7. "Contingency Pricing Enables Versioning of Broadband Internet Access Services," *INFORMS 2003 Annual Meeting*, Atlanta, Georgia, October 2003
8. "Pricing Strategy and Resource Management in the Digital Era," *Americas Conference on Information Systems (AMCIS2003)*, Tampa, Florida, August 4-6, 2003
9. "Quality-Contingent Differentiated Pricing for Broadband Services," *Second Big 10 IS Research Symposium*, Columbus, Ohio, May 2003
10. "Pricing Strategy and Resource Management in the Digital Era," Research Seminar, New Jersey Institute of Technology, Newark, New Jersey, April 2003
11. "Best Allocation Strategy for an Online Retailer: Posted Price, Auction, or Both?" *INFORMS Computing Society Conference (ICS2003)*, Chandler, Arizona, January 2003
12. "Quality-Contingent Differentiated Pricing for Broadband Services," *INFORMS 2002 Annual Meeting*, San Jose, California, November 2002
13. "Stockout Compensation and Contingency Pricing Strategies in IT-enabled Commerce," *DSI Service Workshop*, Bloomington, Indiana, May 2002
14. "Joint Inventory and Price Optimization for an Electronic Retailer," *INFORMS 2001 Annual Meeting*, Miami, Florida, November 2001
15. "Inventory Management in e-business: An EOQ Approach with Compensation Policy," *eBusiness Workshop*, Pennsylvania State University, January 2001 (*Best Paper Award*)

## Research Grant

1. **Research Grant (\$3,000)**, "Why Can We Observe Stockless Operation on the Internet? – Stockless Operation under Competition" Center for Supply Chain Research (CSCR), Pennsylvania State University, May 2006
2. **Research Grant (\$20,500)**, "Value of Virtual Communities" (with Sarv Devaraj and Constance Porter), Mendoza College of Business, University of Notre Dame, January 2006
3. **Research Grant (\$6,000)**, "Best Selling Mechanism for an Online Retailer: Posted Price, Auction, or Dual?" Center for Supply Chain Research (CSCR), Pennsylvania State University, November 2002

4. **Research Grant (\$3,000)**, “Stockout Compensation and Inventory Management for an Electronic Retailer” (with Hemant K. Bhargava and Susan Xu), Center for Supply Chain Research (CSCR), Pennsylvania State University, June 2001
5. **Best Paper Prize (\$500)**, *eBusiness Workshop* co-sponsored by the eBusiness Research Center (eBRC) and the Institute for the Study of Business Markets (ISBM), January 2001, Paper titled “Inventory Management in e-Business: An EOQ Approach with Compensation Policy.”

## Teaching Interests

- Systems Analysis & Modeling
- Database Management Systems
- Introduction to MIS
- Operations Management
- Telecommunications
- Programming Languages
- Emerging Internet Technologies

## Teaching Experience

### University of Notre Dame (8/2004 - Present)

- Average Teaching Evaluation 3.29/4.0.

Year	Course	Teaching Evaluation
2007	Systems Analysis and Design	3.57
2007	Operations and Competitive Enterprises (4 sections)	3.50, 3.27, 3.20, 3.15
2006	Systems Analysis and Design: Section 1 (Offered to MIS majors)	3.33
2006	Systems Analysis and Design: Section 2 (Offered to Non-MIS majors)	3.20
2006	MIS Capstone Project (Taught the class with Prof. Ghiaseddin).	N/A
2005	Systems Analysis and Design (2 sections)	3.27, 3.08

### The Pennsylvania State University (6/2000 – 5/2004)

- Average Teaching Evaluation 5.78/7.0.

Year	Course	Teaching Evaluation
2004	Information Systems Analysis, Design, and Implementation	5.67
2003	Information Systems Analysis, Design, and Implementation	5.38
2002	Information Processing and Database Management Systems	5.76
2002	Lap Instructor: Database Management Systems (3 sections)	N/A
2001	Information Processing and Database Management Systems	6.04
2001	Introduction to Business Information Systems	5.94

2001	Lap Instructor: Database Management Systems (6 sections)	N/A
2000	Introduction to Business Information Systems	5.91

## Work Experience

1. **Conference Coordinator** (2/2002 - 1/2003), *INFORMS Computing Society Conference (ICS2003)*
2. **Graduate Assistant** (8/1999 - 5/2004), Management Science & Information Systems, Smeal College of Business Administration, Pennsylvania State University, Pennsylvania
3. **Graduate Lecturer** (Summer 2000, Summer 2001, Summer 2002), Management Science & Information Systems, Smeal College of Business Administration, Pennsylvania State University, Pennsylvania
4. **Graduate Assistant** (1/1998 - 5/1999), Department of Finance, College of Business Administration, Bowling Green State University, Ohio
5. **First & Second Lieutenant** (7/1994 - 6/1997), Republic of Korea Air Force, Korea

## Extra-Curricular Service

1. **Vice President** (8/2001 - 9/2002), Pennsylvania State University Student Chapter of *INFORMS*
2. **President** (6/1998 - 5/1999), Korean Students Association, Bowling Green State University, Ohio
3. **Committee Member** (8/1998 - 5/1999), Technical Committee, Graduate Business Students Association, Bowling Green State University, Ohio

## References

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