THE UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Curriculum Vitae

Balbinder S. Deo, BSc, MSc, PhD (Industrial Engineering),
MBA, PhD (Business Management)

Associate Professor, School of Business, UNBC

BRIEF BIOGRAPHICAL INFORMATION

Dr. Balbinder Deo worked in academic and industrial organizations for more than 20 years. He earned Ph.D. in Industrial Engineering from University of Manitoba, Canada in addition to Ph.D. Degree in Business Management from PAU Ludhiana, Punjab, India. He joined School of Business, UNBC, Prince George campus in 2002. Prior to joining UNBC, Dr. Deo worked at University of Saskatchewan, University of Manitoba, and at Punjab Agricultural University Ludhiana. In addition to his work experience in academic institutions, he also worked on various industry related research projects related to Inco Limited Thomson, NewHolland Canada Limited, Winnipeg, International Tractors Limited, Mollins of India Limited, and Punjab Markfed and Allied Industries. At present he is working on projects such as the development of Prince Rupert Port facility (BC), logistics cluster at Prince Rupert, impact of Prince Rupert Port facility on interior region such as Prince George (BC), and other projects such as operational problems of local retail outlets.

Courses Instructed at UNBC

Undergraduate level
Comm 100 – Introduction to Canadian Business
Comm 251 – Management Science
Comm 350 – Operations Management
Comm 443 – Marketing Research

Graduate level
Comm 650 – Operations Management

Courses taught at other universities

In addition to the courses listed above, Dr. Deo have also worked in other universities and taught courses related to Purchasing and Supply Chain Management, Manufacturing Cost Analysis, Inventory Management, Quality Control and Management, Project Management, Basic Principles of Management, and Agribusiness Management. The background of students and size of the class he taught also varied to a large extent from university to university. He taught MBA and B. Commerce students, and also taught management related courses to M.Sc. Food Science, B.Sc. Agriculture, B.Sc. Agriculture Engineering, and B.Sc. Industrial Engineering students.

INDUSTRIAL WORK EXPERIENCE

Dr. Deo prepared and submitted research reports based on various projects completed with private and public sector corporations.

For NewHolland Canada Limited, Dr. Deo simulated tractor assembly lines, cab assembly lines, run off areas, touch-up & paint shop system, paint lines, tractor specific and general roller test bays, bridge crane system for various production plans for different kinds of tractors (TG, TV, CAT, and 4WD tractors). He also evaluated various production plans for tractor assembly lines, cab assembly lines, and various proposed assembly line layouts. There he helped the shop floor management, in the identification of production bottlenecks and synchronization problems in production system, and also studied traffic flow for various sections of the assembly lines.

For Inco Limited Thompson (Manitoba), Dr. Deo developed computer simulation models of the mining system at Thompson (Manitoba). It included main ore passes, rock passes connecting various levels with the 3600 ft level below the surface, and C1, C2, C3, 351, 361, 372, 379, 385, 395 ore passes with ore and rock outlets located at 3600 ft level below the surface. He also developed simulation models of ore transportation, ore unloading, and ore crushing system operating at 3600 ft below the surface level along with the computer model of ore and rock skipping system (4000 ft below the surface of the mine) that was connected to the surface level for ore skipping. He also developed the simulation models for ore storage system, ore crushing and grinding system, milling system, nickel concentrate storage and filtration system, nickel concentrate roasting system, calcine melting process, nickel converting and nickel ingot formation process located at the surface level for use of operations managers of Inco limited Thompson.

In addition, he also worked on projects with other companies that led to the submission of reports to companies.

A sample of research reports prepared and submitted to companies

1. Deo, Balbinder, “Manpower cost productivity in touch-up area”, November 1999, submitted to New Holland Canada Ltd., Winnipeg, Manitoba, Canada
2. Deo, Balbinder, “A study of the relationship between manpower productivity and manpower cost per unit of output”, October 1999, submitted to New Holland Canada Ltd., Winnipeg, Manitoba, Canada
3. Deo, Balbinder, “Study of vehicular traffic in four segments of the run off path-way connecting to the touch-up area”, October 1999, submitted to New Holland Canada Ltd., Winnipeg, Manitoba, Canada
4. Deo, Balbinder, “Effect of reducing the number of work spaces on front end inventory cost, work-in-process inventory cost, and manpower cost”, September, 1999, submitted to New Holland Canada Ltd., Winnipeg, Manitoba, Canada
5. Deo, Balbinder, “Analysis of assembly line and shop time statistics”, July – August 1999, submitted to New Holland Canada Ltd., Winnipeg, Manitoba, Canada

6. Deo, Balbinder, "Simulation – Model Plan 'C'", May – June 1999. This work was related to the simulation model developed for the total assembly line plant located at Winnipeg, Manitoba and submitted to New Holland Canada Ltd., Winnipeg, Manitoba, Canada.
7. Deo, Balbinder and Strong, Doug, "Outcome of productivity measures at functional levels", 1998, submitted to Inco Ltd., Thompson, Manitoba, Canada.
8. Deo, Balbinder alias Singh, Balbinder, "Market potential of tractor-trailers in Dharwar district of Karnataka state", 1984, submitted to Mahindra & Mahindra Ltd., Bombay, India.
9. Deo, Balbinder alias Singh, Balbinder, "Idle Hours Analysis", 1982, Submitted to Molins of India Ltd., SAS Nagar, Punjab, India

Manual prepared and submitted to INCO Limited, Thomson

10 Deo, Balbinder, "Simulation of 3600 level System", submitted to Inco Limited, Manitoba Division Thompson, Manitoba, March 1997.

RESEARCH INTERESTS

The main thrust of Dr. Deo's research work with industrial organizations is to search the technical and managerial causes of low productivity in manufacturing as well as in service operations. His hands-on experience with industrial organizations enabled him understand a wide variety of production systems, such as: assembly line; ore mining and processing; oil seeds processing; vegetative oil extraction and processing; job-shop type manufacturing systems, and project type work systems. His research interests can be categorized as; Operation Based Costing, Activity Based Costing, Productivity measurement in operations, and of organizations, Audit of operations and systems in primary, secondary, and tertiary organizations in Government and Non-Government sector, Simulation modeling and computer aided cost information system development, Green operations & Materials flow analysis (MFA).

Dr Deo published his work in Industrial Management; Industrial Engineer; Statistical Papers; Model Assisted Statistics & Applications (MASA); Academy of Taiwan Business Management Review; Effective Management, and in peer reviewed proceedings of Institute of Industrial Engineering Research (IERC); Administrative Sciences Association of Canada (ASAC) Conferences; International Conference on Productivity and Quality Research; and Canadian Institute of Forestry and Society of American Foresters. Industrial Management; and Industrial Engineer; are the professional publications of the Institute of Industrial Engineering (USA) and are distributed throughout the world through various chapters of the Institute of Industrial Engineering (IIE). REFA, Germany (Association of Industrial Engineering in Germany) also selected his five papers for inclusion in the publication of text material for master level program (M.Sc.) in Industrial Engineering in Germany.

A sample of recent research work published

1. Ding, Youmin, Strong, Doug, and Deo, Balbinder, "Communicating Cost and Performance", Industrial Management, Norcross, July/August 2009. A

Professional Publication of the Institute of Industrial Engineering (IIE), USA that is received by all members of the Institute of Industrial Engineering (IIE) throughout the world.

2. Youmin Ding, Doug Strong, & Deo, Balbinder, "Function Based Standard Activity Structure (FBSAS) for measuring Productivity in Manufacturing", published in the annual conference proceedings of Administrative Sciences Association of Canada (ASAC), held at Niagara Falls, Ontario, June 06-09, 2009.
3. Salah Elsheikh & Deo, Balbinder, "Identifying Liquid Inventory Related Holes in Retail Sector- A review", published in Industrial Engineering Research Conference (IERC) peer reviewed proceedings, Miami, Florida, May 30-June 03, 2009.
4. Hampe, Kieth, & Deo, Balbinder, "Evaluation of Operations Strategy – A Productivity Measurement approach", published in the annual proceedings of Administrative Sciences Association of Canada (ASAC) conference, held at Halifax, May 24-27, 2008.
5. Deo, Balbinder, "Structure of Work Unit and Work systems", published in the annual conference proceedings of Administrative Sciences Association of Canada (ASAC), held at Ottawa, June 03-06, 2007.
6. Hampe, Kieth, & Deo, Balbinder, "A Model to Evaluate a City for an In-land Port Facility", published in the annual conference proceedings of Administrative Sciences Association of Canada (ASAC), held at Ottawa, June 03-06, 2007.
7. Deo, Balbinder and Strong, Doug (2005), "A Generic Costing Framework for a Simulation Environment", published in Model Assisted Statistics and Applications (MASA) in 2005. MASA is an International Journal (IOS publication) published from The Netherlands.

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