

## Selected papers from 9th Canadian Quality Congress

This special issue of *Business Process Management Journal* contains selected papers that were presented at the 9th Canadian Quality Congress held at the University of Toronto, Toronto, Ontario, Canada, September 7–8, 2017. The theme of the Congress was: “Quality and innovation in the 21st century: challenges and opportunities.”

The special issue has eight papers on many interesting topics related to TQM, business process improvement and innovation applicable to many areas of businesses. The volume contains a mixture of theoretical, practical and conceptual framework analytical thought-provoking articles that are aimed at improving the culture and the bottom line of organizations. The first paper is a three-year multi-site case study conducted in collaboration with three manufacturing companies in Sweden. The study design was based on a collaborative, iterative model using the Stanford Design thinking framework in which data were collected through a series of workshops using a variety of sources including: leadership survey; interviews with three general directors; focus groups with middle- and top-level managers; observations and cultural analysis, survey; storytelling and appreciative inquiry; and an employee questionnaire. Respondents in the study represented leadership teams in three manufacturing companies and their employees. The study demonstrates that leaders can benefit immensely from innovative approaches used here to identify and build work culture to achieve value-based leadership.

In the second paper, two specific management innovations were analyzed in detail: strategic management accounting and ISO 9000-related quality management system. Starting with a literature review on both frameworks, it describes the identification of benefits associated with their simultaneous application, and the design of a comprehensive model integrating their individual principles. The conclusion is that these management schemes are compatible and complementary from a theoretical standpoint and that their combined implementation holds the valuable key in helping organizations improve their overall performance.

The next paper is about establishing a theoretically sound foundation for many important excellence models that are in existence today, such as the Shingo Operational Excellence Model, Baldrige Award Excellence Model, the EFQM Business Excellence Model helping enterprise's quests for sustained superior performance. There is evidence of huge benefits that already exists; however, according to author, a sound theoretical basis behind these models has been generally lacking. The research shows that the understanding of the theoretical underpinnings of all excellence models, their elements and the interactions together with synergies of these elements enables a much better adaptation of such models in all enterprise contexts. The fourth paper is concerned about designing a model for the satisfaction index measuring the contribution of biodiesel production and consumption to the sustainability of the Cowichan Valley located in British Columbia, Canada. The methodology was qualitative as well as quantitative. In-depth interviews were held and the data were analyzed to learn the opinion of both the active and non-active consumers. A structural equation model including sustainability variables was designed using partial least squares (statistical technique). The results show that at the sustainable consumption at the community level is statistically significant and that there is a direct cause of the variable in sustainability study which in turn affects the sustainability of the community with a significant impact on user loyalty.

The purpose of the fifth paper was to find out dimensions of organizational citizenship behavior (OCB) and to examine the role of OCB that impacts employees' intention to stay at job. The study was carried out with a view to draw on the understanding of deeper



influences it carries on the quality of work that employees perform in the long run. Probability sampling method was used to collect data and they were analyzed for factor analysis which revealed five factors of OCB, namely: sportsmanship, altruism, courtesy, civic virtues and conscientiousness. Findings using Pearson's correlation, regression and structural equation modeling revealed unequivocally the larger influence of OCB over employees' intention to stay, suggesting a maneuvering capability of OCB over employees' intention to stay. This is a research conducted in industries in India. This research is valuable for all businesses facing problems in retaining their employees that undoubtedly affects their efficiency, productivity and profitability. The next paper explores an integrated approach for harnessing the power of many of the quality tools and methodologies in designing successful systems. Interviewing domain experts from manufacturing and service organizations were identified and employed in different operational phases. The repertory grid technique was chosen as the method for gaining insight into the research questions. RepGrid technique helped investigate further the personal constructs that users and managers can employ to interpret and select which quality tools or methodologies to use for different phases of lean transformational system.

The seventh paper examines the factors influencing the effectiveness of classroom teaching. A general sustainable development model was developed and used to comparatively analyze the education process. A principle of "equal opportunities in education" is the basis of this formulation. The paper addresses the main challenges related to the educational process that can be considered a primary prerequisite for successfully implementing the sustainable development in education. The micro-project system allows for the personalization of the teaching process by use of the capacity reserve contributed by the students.

The last paper explores and identifies the areas that are common in strategic quality management (SQM) and corporate social responsibility (CSR). Studying those areas was important to develop further construct and connection between SQM and CSR because of both areas have potential for benefitting the organizations and society. Synergies between SQM and CSR are shown in further to offer many attractive opportunities to capitalize on learning to enhance the value-added benefits to an organization and the society at-large.

The 9th Canadian Quality Congress was once again too good an opportunity to be missed. I am grateful to my team of volunteers, editorial review and technical program committee members for their dedication and support.

Special thanks are extended to Ms Emily Mitchelson, the Content Editor of *Business Process Management Journal* along with her technical staff at Emerald Publishing Group and to Dr Majed Al-Mashari, the Editor, without whose help and guidance it would not have been possible to publish this special issue on time.

I look forward welcoming everyone at the 10th Canadian Quality Congress, September 24–25, 2018, to be held at the campus of the Simon Fraser University, in Vancouver, British Columbia, Canada.

**Madhav N. Sinha**

*Engineering and Management Consultant, Winnipeg, Canada*

**About the guest editor**

Madhav N. Sinha is a major contributor to the theory and practice of quality control and total quality management (TQM) in Canada and known internationally as an expert and a pioneer in the field. He has a varied career experience of 45 years as research scientist, plant engineer, quality manager, university professor and government administrator. A prolific writer, Dr Sinha has authored, co-authored and edited 10 books, including a textbook (*The Management of Quality Assurance*, Wiley, NY, 1985) and over 45 research papers published internationally, some translated into foreign languages. He is the recipient of over 35 medals, honors, awards and testimonials for his outstanding contributions in the field of modern quality management, including the Distinguished Service Gold medal, the highest award accorded by American Society for Quality and its Grant medal (for leadership in developing quality educational programs), Edwards medal (for contributions in application of quality control methodologies), Lancaster medal (for work in the international fraternity of quality, the Leadership Award from the Association of Professional Engineers and Geoscientists of the Province of Manitoba for his pioneering contributions in developing quality control sciences in engineering disciplines. He is listed in the *International Who's Who in Quality and International Who's Who in Public Service* as an outstanding Canadian making significant contributions to the economy and society's well-being. Dr Sinha is an elected Academician Emeritus of the International Academy for Quality and the Founding President of Canadian Society for Quality and Canadian Quality Congress. He was recently recognized by Her Majesty Queen Elizabeth II and awarded with the Queen's Diamond Jubilee Medal for his more than three decades of outstanding contributions in the field of total quality management and for spearheading many unique initiatives to promote and elevate the quality profession in Canada and contributing to build its caring society through his excellent services and achievements.