

International Conference on Business Research

2nd ICBR 2019

June 26, 2019

Organized by the Business Research Unit
Faculty of Business
University of Moratuwa, Sri Lanka

Conference Proceedings



BUSINESS RESEARCH UNIT
FACULTY OF BUSINESS
UNIVERSITY OF MORATUWA

International Conference on Business Research (ICBR)

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2nd ICBR 2019, June 26, 2019

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International Conference on Business Research

International Conference on Business Research (ICBR) 2019 is organized by the Business Research Unit (BRU) of the Faculty of Business, University of Moratuwa, Sri Lanka. Purely dedicated to the advancement of knowledge, the BRU intends to hold the ICBR annually.

International Conference on Business Research aims to provide a platform for both local/international researchers and industry experts and to share their knowledge, experiences, perspectives and insights. The conference welcomes high quality empirical research papers, conceptual papers, and testing of alternative methodologies and theories that have significant contributions to the body of knowledge covering all areas of research in business while encouraging critical analysis of policy and practice.

The conference welcomes cultural and geographic diversity in submissions to better conceptualize how businesses are conducted world-wide and gather a spectrum of knowledge. The papers published in the proceedings are judged as original works of the authors and has gone through double-blind peer-review. Business Research Unit supports the development and practical application of consistent ethical standards in its publications.

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Message from the Chief Guest

Professor K. Kapila C. K. Perera
Vice-Chancellor, University of Moratuwa



Felicitations to the 2nd International Conference on Business Research (ICBR) organized by the Faculty of Business are sent with immense satisfaction and pride. It is important to highlight that Business Research (BRU) laid its foundation by purely dedicating to the advancement of knowledge since its inception in 2018 to exchange vast spectrum of insights and innovative ideas to revamp the landscape of modern-day businesses.

On the same lines, the following extracts from the BRU website caught my attention and rephrased in this message as I consider it is worth echoing for the benefit of all. Also to acknowledge the driving forces behind all who have and are working hard to make this important event a success.

“As an oasis to strengthen future research collaborations, BRU urges to assist the development and practical application off consistent ethical standards in its all activities. With paramount coherence to uplift the status of contemporary business world, International Conference on Business Research (ICBR) will be held in June every year which began from 2018. This conference provides a platform for both local/international researchers and industry experts to share their knowledge, experiences, perspectives and insights on all areas of business.”

I am hopeful that this conference will help to stamp the relevance and importance of business research in all spheres of activity, with special emphasis on calibrating business through analytics and business information systems in emerging economies.

I wish you all the very best for future endeavours.

Message from the Conference Chair

Professor Niranjan Gunawardena
Dean, Faculty of Business



It is with immense pleasure, I welcome you to the 2nd International Conference on Business Research (ICBR) 2019. As an aspiring faculty that is envisioned to transform the world of business through innovation, it is important to promote research based teaching and learning.

In a world powered by data, investing in analytics is not just an imperative, but a need. Thus, research on data analytics and business information systems should be strategized in all spheres of business to harmonize all layers of management. Understanding the key role played by data analytics in modern day businesses, this year's conference was thoughtfully themed as "Calibrating modern day businesses through data analytics and business information systems in emerging markets".

The success of ICBR 2019 is exclusively depending on the capabilities and utmost dedication of the staff of the Faculty of Business, University of Moratuwa. As the Conference Chair of this event, I sincerely acknowledge all arduous chores borne by the organizing committee. I am grateful for the yeoman services rendered by Prof. S.W.S.B. Dasanayaka (Programme Chair) and Dr. Darshana Mudalige (Programme Co-Chair). Further, I extend my special tribute to conference secretaries, panel of reviewers, session chairs, editors and the members of the organizing committee for their efforts and contributions.

On behalf of the organizing committee, we offer our sincere gratitude to our keynote speaker, Mr. Hiranya Samarasekera, Vice President – Engineering, Sysco LABS for his insightful contributions. We gratefully acknowledge the

financial assistance and sponsorship from Hayleys Aventura (Private) LTD and University of Moratuwa towards making ICBR 2019 a success.

Last but not least, I offer my profound thanks to all authors for their submissions, whilst encouraging to keep up the momentum in accelerating their hard work in terms of valuable contributions to the existing body of knowledge. ICBR 2019 wouldn't have been successful without the contributions of your valuable work. We hope that you gather more insights and knowledge from the deliberations at the ICBR 2019.

Message from the Programme Chair

Professor S. W. S. B. Dasanayaka

Director, Business Research Unit, Faculty of Business



It is with profound pleasure that I welcome all of you to the 2nd International Conference on Business Research (ICBR) - 2019 of the Faculty of Business in the University of Moratuwa, Sri Lanka. ICBR is one of the major annual event of research dissemination of the Business Research Unit (BRU) of the Faculty of Business of the University of Moratuwa. This event serves as an international forum for researchers and practitioners to exchange their knowledge, experiences, perspectives, insights, and the latest research results on all areas of research in business.

As usual in many indexed international conferences, ICBR 2019 also followed a very rigorous double blind peer review procedure with similarity checks and real contribution to the advancement of the body of the knowledge and the innovativeness of the papers submitted. Altogether 20 papers are selected for this conference ranging from various business disciplines. Not only the Sri Lankan authors but also foreign authors from countries such as India, Finland and Australia submitted papers for this conference. This ICBR - 2019 gave opportunity for foreign paper presenters to use on-line option also. I am immensely grateful to all of the reviewers of ICBR 2019 on behalf of the ICBR 2019 Organizing Committee for their expert knowledge and time committed for this course without financial or other gains. These experts' names are recorded in the front matter of the conference proceedings.

The programme of ICBR 2019 is organized into two technical sessions and an inauguration with keynote presentation from the Sri Lanka's well-known speaker from the business analytics and process management industry. The technical programme includes papers that represent exciting areas of research in business. Big data, information system applications, financial management,

human resource management, leadership, labor productivity, power and energy, open innovation, entrepreneurship and fashion marketing. We expect these paper presentations will enable attendees to get an exposure into the recent development of business analytics and other business disciplines.

I would like to thank for keynote speaker and other delegates for accepting our invitation by sacrificing their valuable time and energy to be with us and support for this ICBR - 2019. BRU's sincere gratitude goes to the Vice Chancellor, Senior Professor, Kapila Perera, Dean, Faculty of Business, Senior Professor Niranjana Gunawardena (Conference Chair) for their continuous support, guidance and encouragement since the planning stages of this conference. Without the generous financial support from the Faculty of Graduate Studies, University of Moratuwa and the Hayleys Aventura (PVT) Ltd, organizing and holding this conference would have been impossible. Furthermore, support received from the Head/Department of Management of Technology, Dr. Dinesh Samarasinghe, Head/Department of Industrial Management, Dr Dharsana Mudalige and the Head/Department of Decision Science, Dr. Indra Mahakalanda is also highly appreciated. I would like to recognize the support rendered from all the members of the organizing committee including Mr. Shenal Rajakarunanayake and Ms. Rashenka de Silva (ICBR - 2019 Secretaries), whose names are recorded in the front matter of the proceedings, for their cooperative spirit, extraordinary efforts, and professionalism depicted in all aspects of their duties. I am very grateful to Dr. Tiloka de Silva, Dr. Venura Welagedara and Mr. Supun Gothama for their great efforts in editing the Conference Proceedings. I am also grateful to Dr. Shantha Fernando, Director of the centre for IT Service and the webmaster of the University Mr. Lalinda Rathnabharatie for creating and maintaining BRU and ICBR - 2019 websites. Special thanks for Head/Computer Science and Engineering (CSE) Dept. Dr A S Perera for giving us CSE's conference room for inauguration event and other technical sessions. Registrar, Bursar and the administration of the University of Moratuwa for their support in getting financial matters solved in pragmatic manner. The services of all logistical support providers for this conference is also highly appreciated. It was a true privilege to work with such a dedicated and focused team that sacrificed a significant portion of their time in organizing this ICBR 2019 to become a successful event.

Keynote address

Hiranya Samarasekera

Vice President of Engineering, Sysco LABS



It is with immense delight that I attend as the keynote speaker for the 2nd International Conference on Business Research (ICBR) 2019 of the Faculty of Business, University of Moratuwa, Sri Lanka. The emergence of a new faculty for contemporary business studies from a university that is renowned for its technical education in Sri Lanka is a very timely advancement.

We are going through an era where the traditional business norms and beliefs are being challenged by a new breed of businesses, which harness the power of data and technology. Competition has become a global phenomenon, so as consumption where our market opportunity is enormously wider. The supply-chains are more deeply integrated and are vulnerable to global challenges, be it economic or political.

In this new economy, data has become an essential commodity. It is the insight mined from this valuable resource that gives its currency. Therefore, the real value of data comes from analyzing it to generate insight. It is in such a backdrop that the University of Moratuwa has decided to venture in to offer several specializations in Business, which is centered on data analytics, financial analytics and business process management. These programs are going beyond traditional business study programs and offering very relevant knowledge to address contemporary business demands and vocational needs.

There exists a tremendous need for intellectual discourse related to business in Sri Lanka, both at an academic and industrial level. New knowledge creation is essential for a renaissance in entrepreneurship in Sri Lanka, in its quest towards growth. The International Conference on Business Research (ICBR)

2019 will be an invaluable platform for research collaborations locally, regionally as well as globally.

I make this an opportunity to wish great success to all the delegates who will be presenting in this year's conference, as well as the Business Research Unit (BRU) of the Faculty of Business in its endeavors to further uplift the body of business knowledge locally and globally.

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| | |
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| Application of information systems in small and medium enterprises in Sri Lanka K.H Malwenna | 29-40 |
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