Editorial note

Welcome to Volume 4 of the Electronic Journal of Informatics, which is an annual publication produced by the Faculty of Business and Informatics, Divine Word University. Publication of this journal began in 2019 to promote research culture through intensified research and knowledge exchange from its contributors.

Alcinda Trawen presents the lessons and insights from PNG tourism crisis management from the COVID-19 pandemic. She shows that communications, crisis management strategy and tourism specific support are essential elements for implementation to support crisis management in the tourism industry in Papua New Guinea.

Harry Gahare and **Fiona N'Drower** present the use of social capital as means of enhancing rural tourism from a PNG perspective. They show that communities/villages visited had in existence a key ingredient that supports tourism, which is the family and clan system that forms the basic foundation of traditional societies in PNG. The concept of social capital has prompted villages/communities to work together and promote tourism as a community initiative.

Martin Daniel presents the essential pillars of e-government for developing countries, around which e-government is developed, including citizen centricity, standardised infrastructures, back-office reorganisation, governance, new organisational models, social inclusion, people, processes, technology and resources. He provides some recommendations for developing countries so that these pillars are considered to shift from paper-based procedures to electronic processes, in the development of e-government.

Michaelyn Yaguro and **Raunu Gebo Sarsoruo** use an optimization model on current PNG Human Development Index data through an objective function to generate a maximized ranking for Papua New Guinea. The objective function is solved through linear programming with a maximized value between 0.7 to 0.9, thus placing PNG amongst the top very high human development countries and thereby achieving its' 2050 goal.

Peter K. Anderson presents the variation of the value of Pi on non-Euclidean surfaces. He shows that on spheres, Pi becomes smaller as circle circumferences grow larger with the reverse occurring on hyperbolic surfaces. This topic is of general interest, given the worldwide celebration of Pi day on 3/14/xx each year when we try to interest the general population, including students in Madang schools, colleges and universities in mathematics.

Ram Bilas Misra and **Ranjana Bajpai** present computing cube root of a real number. A method has been formulated to compute the real cube root of a real number irrespective of its nature whether containing only integral part, decimal part or both.

S. P. Khare and **Ram Bilas Misra** discuss primality and factorization - a computer challenge. They deal with the primality and factorization of RSA numbers including the latest test called the AKS Primality Test. Results of number theory are comprehensible by even the non-specialists but their proofs are most challenging.

Rik King discusses Benford's law, which concerns the prevalence of first and subsequent digits that appear in naturally occurring numerical transactions. He indicates that one possible forensic application is in the detection of fraud in machine-generated sets of data, which do not obey this law.

Hope that you find the articles interesting and informative.

Associate Professor Martin Daniel (PhD)
Coordinator and Chief Editor of the Journal