



DIVINE WORD UNIVERSITY
FACULTY OF BUSINESS AND INFORMATICS



BUSINESS, TOURISM & INFORMATICS SYMPOSIUM 2023



Serving society through research and knowledge exchange in business, tourism and technology

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Message from the Symposium Coordinator

Martin Daniel

On behalf of the Faculty of Business and Informatics, Divine Word University, I welcome you all to the 4th Business, Tourism and Informatics Symposium. The theme of this year's symposium is 'serving society through research and knowledge exchange in business, tourism and technology'. The symposium provides an avenue to promote a scholarly culture, which can positively impact our teaching, research and other professional activities.

The Symposium allows academics and non-academics to present the outcomes of their research activities, and to share knowledge with others, both within and outside the University. The Symposium provides an opportunity to build and maintain a research culture and for staff to work together in the spirit of teamwork and collegiality in hosting such an event. It enables those involved to discover, develop and realize their gifts and potential, and utilize their knowledge, skills and experiences to contribute to the body of knowledge in their respective fields.

The book of abstracts for the Symposium can be accessed at <https://www.dwu.ac.pg/en/index.php/faculty-pages/277-fp-fbi/fbi-dept/fp-fbi-mcs/788-researchfbi>. Some of the topics to be presented will be published in the Electronic Journal of Informatics. The Journal can be accessed at <https://www.dwu.ac.pg/en/index.php/faculty-pages/277-fp-fbi/fbi-dept/fp-fbimcs/709-fbi-e-journal>.

Hosting the Symposium and publishing volume 5 of the Journal are great achievements for the Faculty and University to create and maintain a research culture, and encourage others to publish. They uplift our standards and motivations so that we can continue to serve society by conducting research, exchanging our findings and contributing to the body of knowledge for the common good.

Once again, welcome to the 4th Business, Tourism & Informatics Symposium 2023; an event we can all enjoy and remember.

Dr Martin Daniel (PhD)
Coordinator | Business, Tourism & Informatics Symposium
Chief Editor | Book of Abstracts
Dean | Faculty of Business & Informatics
Divine Word University



National online application system in Papua New Guinea

Martin Daniel

Abstract

Many countries around the world are using information and communication technologies to improve their educational processes, thereby, attaining a significant reduction in time, cost and other resources, leading to effective and efficient educational service delivery. The PNG Department of Higher Education, Research, Science and Technology (DHERST) in partnership with PCG Academia developed an online system to improve the process of grade 12 students (school leavers) applying to study at higher educational institutions. This study provides a brief background of PNG higher education and DHERST. It also discusses the manual process of applying to study at higher educational institutions and its challenges. The study then discusses the online application process (national online application system) and its benefits. Lastly, it provides some suggestions for improvement and optimum use of the online application system. Email: mdaniel@dwu.ac.pg and mdmartindaniel@gmail.com.

Keywords: Department of Higher Education, Research Science and Technology, information and communication technology, national online application system, NOAS, PCG Academia.

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Biodata

Martin Daniel (PhD) is an Associate Professor and the Dean of the Faculty of Business & Informatics at DWU. He holds a Bachelor's degree in Information Technology from the University of Queensland in Australia, a Master's degree in Information Technology from the Queensland University of Technology in Australia and a Doctor of Philosophy from DWU. His interests include researching and modelling technological developments such as e-government and e-learning in PNG. Email: mdaniel@dwu.ac.pg and mdmartindaniel@gmail.com.



Assessing the impact of mobile application integration on enhancing efficiency and user experience in traditional service delivery at Divine Word University

Raunu Gebo Sarsoruo

Abstract

The study delves into a faster and more efficient mode of communication and service delivery for Divine Word University. It aims to explore how the introduction of a mobile application can transform and improve various aspects of service delivery within the university. Factors such as user satisfaction, efficiency gains, and the overall effectiveness of digitalizing traditional processes through a mobile application will be investigated in this study. It further examines the challenges faced during the integration and proposes recommendations for optimizing the mobile application to better meet the university's needs specifically through its' divisional teams. The functionality of this application would minimize queues and save time during registration as well as financial and school fee status enquiries. The application can further generate event notifications to notify both staff and students of important university events. It can also provide information about the university and its programs as a way of marketing to any new member of the community both locally and internationally.

Keywords: digitalizing traditional processes, Divine Word University, efficiency gains, mobile application integration, overall effectiveness, traditional service delivery, user satisfaction.

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Biodata

Raunu Gebo Sarsoruo is a lecturer in the Mathematics & Computing Science Department at DWU and specializes in Pure and Applied Mathematics. She holds a Master's Degree in Mathematical Methods for Computing Science from the University of Silesia in Poland. Her research interest includes mathematical modelling for solving real-world problems, security for secured systems including Internet-of-Things against cyber-attacks and mobile application development covering both Android and iOS apps. Email: rgebo@dwu.ac.pg or geboraunu@gmail.com.



Integrating cloud computing into the curriculum: A case study for the Department of Information Systems at Divine Word University

Cronicle Nambahin

Abstract

Cloud computing (CC) has now become a fundamental component of the information technology (IT) industry and its expansion is inevitable in the future. Information systems (IS) students need to have a substantial understanding of the concepts of cloud computing and how to deploy and manage cloud infrastructure and services. This study aims to propose a 'cloud computing' unit for the Department of Information Systems at Divine Word University. The unit would be designed to furnish students with a strong understanding of CC concepts and help students develop in-demand practical skills and implementation experiences in deploying and managing cloud infrastructure and services in Amazon Web Services, Microsoft Azure, Google Cloud Platform, and other cloud service providers. Further, the unit would aim to prepare students to pursue industry-recognized certifications and in-demand IT jobs that require professionals with cloud computing skills. This study outlines the importance of the cloud computing unit and integrating it into the IS program. It discusses the curriculum design of the unit and the assessment methods to be used. Then, it presents the resources and infrastructures required to deliver the unit effectively. Finally, it highlights the benefits that students will gain from taking the CC unit. The proposed unit will equip students with the requisite knowledge, skills, tools, and techniques they need to succeed in the IT sector.

Keywords: cloud, cloud computing, cloud technology, cloud service provider, curriculum, Department of Information Systems, information technology.

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Rajab, M. A., & Huda, S. (2019). Cloud computing in higher education: A comprehensive review. *International Journal of Learning Technology*, 14(2), 130-147.

Biodata

Cronicle Nambahin is a senior tutor in the Department of Information Systems at Divine Word University (DWU). He aims to be a Cloud Computing Expert and an AWS Academy Educator at DWU soon. He hopes to further his studies abroad in the field of Cloud Computing and Virtualization. Cronicle possesses demonstrated expertise in Windows and Linux server administration, network infrastructure design, deployment, and administration, as well as web application design and development. He holds a Graduate Certificate in Data Networking (CCNAv7), a Postgraduate Certificate in Higher Education Teaching and Learning, and a Bachelor's Degree in Mathematics and Computing Science. He previously worked with Telkom PNG in the Billing Solutions Department as a Casual IT Officer and later joined New Guinea Binatang Research where he worked as an ICT Support Officer. His research interests lie within the field of Cloud Computing and Virtualization.



Integrating hands-on (practice) into the Business Studies curriculum through partnership with stakeholders

Haroldlyn Pelly Larsh

Abstract

Desktop research was conducted to examine opportunities for integrating industry practice into business studies curriculums through collaboration with stakeholders. Several Australian universities embedded professional (e.g. industry case studies) and work-integrated learning in their curriculums to bridge theory and practice. This aids in connecting the graduates to the real world to increase their employability. There is a need for business curricula in universities to be reviewed due to pressures from key stakeholders. The review should capture the new skill sets resulting from the changing business environment such as increased competition, globalization and rapid changes in information technology. Further, new organizational structures and the need for technical competence and other new skills place importance on the education of future employees. Different universities use various approaches to integrate curricula to equip graduates with new skills for the changing business landscapes. Universities also work on improving their curriculum due to needs in the industry, which may require specific knowledge, skills and abilities from employees. Knowledge, skills and abilities need to be refreshed and captured in the curriculum so that it matches the needs of the industry. From the research, the DWU business curriculum can integrate professional and work-integrated learning to bridge theory and practice and equip the graduates with skills that enable a smooth transition from university to the workplace.

Keywords: business, curriculum, employability, professional learning, work-integrated learning.

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Biodata

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Factors affecting staff of the Business Studies Department in research and publication at Divine Word University

Kosley Wara

Abstract

Research and publication by academic staff are significant for several reasons: advancement of knowledge, academic excellence, teaching and learning enhancements, problem-solving, collaboration and networking, career development and recognition and new knowledge contribution to society. When an academic staff member does not actively engage in research and publication, several consequences arise: stagnation of knowledge, reduced teaching effectiveness, missed opportunity for professional growth, limited contribution to new knowledge in the discipline, decreased institutional reputation, limited collaboration and networking and reduced contribution to societal impact thus, research and publication are highly valued in academia. This paper discusses some of the factors that affect research and publication by the staff of the Business Studies Department at Divine Word University. These factors need to be addressed for staff to engage in research and publication.

Keywords: factors, research, publication, academic staff, research productive, publication output, workload, Business Studies Department, Divine Word University, Papua New Guinea.

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Biodata

Kosley Wara is a lecturer and the Head of the Department of Business Studies in the Faculty of Business & Informatics at the Divine Word University. Email: kwara@dwu.ac.pg.



The use of photo-elicitation in enhancing an indigenous research method

Fiona N'Drower

Abstract

This study explores photo-elicitation as an accompaniment in enhancing an indigenous research method piloted in rural Papua New Guinea. It discusses photographs being used during storytelling as a tool to increase the engagement of the storytellers. They are able to visualize the point of discussion. An indigenous method emphasizes respect for the participants and that, research should be about the participants and their concerns. It also encourages the participants to be co-creators of the research. Photo-elicitation helps to create a comfortable environment between the researcher and the participants as the focus is on the photograph, a common space for a dialogue between the researcher and the participants. Photographs taken during fieldwork enable the researcher to be more connected to the community and persons being investigated, a reminder of the research journey. Hence, the researcher becomes passionate about the research and the purpose of an indigenous research method is realized.

Keywords: indigenous research method, Papua New Guinea, photo-elicitation, storytelling.

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Biodata

Fiona Pisong N'Drower (PhD) is a Senior Lecturer and Head of the Department of Tourism & Hospitality Management in the Faculty of Business and Informatics at the Divine Word University. Her research interests include the application of indigenous research, community-based tourism and rural tourism. Email: fdrower@dwu.ac.pg.



Rise of artificial intelligence: Examining its impacts on teaching and learning in educational institutions in Papua New Guinea

Martin Daniel

Abstract

As the world continues to advance technologically, the integration of artificial intelligence (AI) has become increasingly prevalent across various sectors. In the realm of education, AI has the potential to revolutionize the teaching and learning experiences for staff and students in higher educational institutions in Papua New Guinea. However, it is crucial to examine both the positive and negative impacts that AI may have on staff and students including academic performance, social skills, research capabilities, critical and analytical thinking, access to educational resources and mental health. Having such an understanding can help institutions to maximize the positive aspects but minimize the negative impacts.

Keywords: academic performance, artificial intelligence, critical thinking, higher education, impacts of artificial intelligence, learning experience, mental health, research capabilities, social skills, teaching experience.

References

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Biodata

Martin Daniel (PhD) is an Associate Professor and the Dean of the Faculty of Business & Informatics at DWU. He holds a Bachelor's degree in Information Technology from the University of Queensland in Australia, a Master's degree in Information Technology from the Queensland University of Technology in Australia and a Doctor of Philosophy from DWU. His interests include researching and modelling technological developments such as e-government and e-learning in PNG. Email: mdaniel@dwu.ac.pg and mdmartindaniel@gmail.com.

Program for the Symposium

Theme: Serving society through research and knowledge exchange in business, tourism and technology

Time	Activities
9:00-9:05am	Opening prayer Grace Chokoli
9:05-9:10am	Opening remarks Martin Daniel, Symposium Coordinator
9:10-9:20am	National online application system in Papua New Guinea Martin Daniel
9:20-9:30am	Assessing the impact of mobile application integration on enhancing efficiency and user experience in traditional service delivery at Divine Word University Raunu Gebo Sarsoruo
9:30-9:40am	Integrating cloud computing into the curriculum: A case study for the Department of Information Systems at Divine Word University Cronicle Nambahin
9:40-10:00am	Questions and answers
10:00-10:35am	Break
10:35-10:50am	Dr Pamela Kamyra, Vice President of Research & Higher Degrees
10:50-11:00am	Integrating hands-on (practice) into a business studies curriculum through partnership with stakeholders Haroldlyn Pelly Larsh
11:00-11:10am	Factors affecting staff of the Business Studies Department in research and publication at Divine Word University Kosley Wara
11:10-11:20am	The use of photo-elicitation in enhancing an indigenous research method Fiona Pisong N'Drower
11:20-11:30am	Rise of artificial intelligence: Examining its impacts on teaching and learning in educational institutions in Papua New Guinea Martin Daniel
11:30-11:45am	Questions and answers
11:45-11:50am	Closing remarks Dr Martin Daniel, Symposium Coordinator Dean, Faculty of Business & Informatics