

Lecture Notes on Data Engineering and Communications Technologies

Volume 72

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The aim of the book series is to present cutting edge engineering approaches to data technologies and communications. It will publish latest advances on the engineering task of building and deploying distributed, scalable and reliable data infrastructures and communication systems.

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Data Science, Health Informatics,
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Preface

We are honored to welcome you to the 5th International Conference of Reliable Information and Communication Technology 2020 (IRICT2020) that was conducted online on December 21–22, 2020, and organized by the Yemeni Scientists Research Group (YSRG), Information Service Systems and Innovation Research Group (ISSIRG) in Universiti Teknologi Malaysia (Malaysia), Data Science Research Group in College of Computer Science and Engineering at Taibah University (Kingdom of Saudi Arabia), School of Science and Technology in Nottingham Trent (UK), College of Engineering, IT, and Environment at Charles Darwin University (Australia) and Association for Information Systems—Malaysia Chapter (MyAIS).

IRICT2020 is a forum for the presentation of technological advances in the field of information and communication technology. The main theme of the conference is “Innovative Systems for Intelligent Health Informatics.”

Many researchers have been attracted to submit 140 papers to IRICT2020 from 29 countries including Algeria, Australia, China, Egypt, Fiji, Germany, India, Indonesia, Iraq, Iran, Jordan, Malaysia, Morocco, Myanmar, Nigeria, Oman, Pakistan, Saudi Arabia, Singapore, Somalia, South Africa, Sri Lanka, Sudan, Sweden, Taiwan, Tunisia, UK, USA and Yemen. Of those 140 submissions, 111 submissions have been selected to be included in this book.

The book presents several research topics which include health informatics, bioinformatics, information retrieval, artificial intelligence, machine learning, data science, big data analytics, business intelligence, Internet of things (IoT), information security, intelligent communication systems, information systems theories and applications, computational vision and robotics technology, software engineering and multimedia applications and services.

We would like to express our appreciations to all authors and the keynote speakers for sharing their expertise with us. And we would like to thank the organizing committee for their great efforts in managing the conference. In addition,

we would like to thank the technical committee for reviewing all the submitted papers; Prof. Dr. Janusz Kacprzyk, AISC series editor, Prof. Dr. Fatos Xhafa, book series editor; and Dr. Thomas Ditzinger from Springer.

Finally, we thank all the participants of IRICT2020 and hope to see you all again in the next conference.

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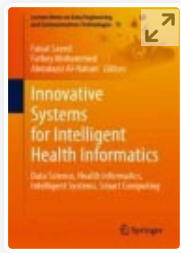
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Sustainable e-Learning Framework: Expert Views

[Aidrina Binti Mohamed Sofiadin](#) 

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Abstract

The efforts toward sustainable development goals in the educational context are of growing importance even in an e-learning perspective. Sustainability aims to improve the e-learning quality since it supports long-term innovation processes while benefiting society, economy, and the environment. In order to portray its prosperous mission, this paper presented the outline of a Sustainable e-Learning Framework (SeLF). This paper aimed to collect the expert perspectives on this framework. Qualitative data were

collected through expert interviews during which the utility and usability of the framework were iteratively evaluated and refined. In order to achieve the framework practicability in different contexts, stakeholders from various universities were invited to participate. The expert perceptions and expectations of sustainable e-learning in the context of SeLF were presented in this paper. The experts were asked to reflect on the possible impact of SeLF toward sustainable practices at their own university and personal practice of e-learning sustainability. The findings indicated that SeLF can be used as a guideline for developing sustainable e-learning that supports the continuity of e-learning initiatives.

Keywords

Sustainable e-learning **e-learning**

The triple bottom line **Higher education**

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