Guest Editorial Preface

Special Issue on the E-Adoption of Emerging Technology in Organizational and End User Computing (EUC) in the Recent COVID-19 Era

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Electronic adoption or e-adoption refers to the use of electronic equipment, practices, and services to achieve one or more societal and organizational tasks**.** Emerging technology such as Artificial Intelligence (AI), Machine Learning (ML), Internet of Things (IoT), Blockchain, Cloud Computing, and IoT has revolutionized and enhanced the usage of E-adoption in the organization, especially in the end user computing (EUC) aspects, particularly in the Covid-19. During COVID-19, it was witnessed that the majority of the organizations and Institutions were striving to provide required end-user computing (EUC) devices/tools for employees, trading partners, students, customers, patients, and other users to work efficiently through remote access. EUC incorporates user access to organizational data anywhere at their internal data centres or in the public/private cloud. The application of such E-Adoption methods and practices are enormous, including remote patient monitoring, and e/m health care systems. During Covid-19, such applications played a vital role in providing telemedicine consultancy, classification and identification of disease, e/m commerce was also found to be a very effective tool to provide the necessary services at the doorstep of the customer without compromising their health. Hence, there is a need to identify powerful EUC devices and enhance E-Adoption that can better perform and empower individuals and organizations through active online participation and other activities.

Due to the increasing number of end-user devices, intelligent device management and usage techniques will always be in need to address the issues. AI and ML empower such initiatives to automatically monitor and provide better solutions to design optimized workflows with improved user satisfaction. E-Adoption of Blockchain Technology recognizes as an application of smart contracts and distributed ledger databases that are critical to the daily operations of business organizations. Blockchain offers a futuristic strategic recommendation in various industrial domains, with the logistics and supply chain activities in different domains. Further, advances in cloud technology have also significantly impacted organizational EUC by offering data storage services to the private or public cloud. IoT connects end-user devices from one location to another. Finally, adopting emerging technologies with EUC devices is impossible without Internet and Internet-

based technologies, and with the implementation of the 5G/6G Network, the need for E-adoption with emerging technologies will be in the near future.

This special issue of the *International Journal of E-Adoption* (IJEA) aims to discuss the E-Adoption of emerging technology for EUC devices and practices by the organizations during the COVID-19 pandemic. This special issue focuses on various frameworks, theories, and challenges in the E-Adoption of medical equipment with emerging technology and is electronically connected with a health institution which was well noticed during this COVID-19 pandemic. This special includes a collection of articles on the E-Adoption of emerging technology on health organizations and end-user devices to offer more competent, intelligent, connected, and efficient services to end users, particularly in COVID-19.

The five papers in this special issue cover various aspects of E-adoption of emerging technology in health organizations to enhance medical practices, disease classification, and medical equipment such as CT scans and X-Rays. Each of these submitted papers has undergone a full double-blind peer review prior to being finally selected for this special issue.

The first paper is "An Enhanced Multipath TCP: E-Adoption of Emerging Technology for Better Internet Bandwidth." The author(s) explore the demand for internet bandwidth and the availability of multihomed devices, Multipath TCP (MPTCP), during COVID-19. The backbone of any E-adoption of emerging technologies relies on high-speed, secure Internet. The principle of the MPTCP suggests that each internet device can easily use MPTCP to achieve high bandwidth, offers a connected environment to each end-user device, and assists COVID-19 patients in various aspects.

The COVID-19 pandemic has led to an inevitable surge in digital technologies due to the social distancing norms and worldwide lockdowns. Adopting electronic equipment, emerging technologies, and the Internet becomes a game changer for any firm or organization, and health organization is not an exception in this line. In "E-Adoption of Emerging Technology in Health Sector During COVID-19," the author examines the health sector before, during, and after the COVID-19 era by viewing emerging technologies. E-adoption of emerging technologies becomes important to face critical situations during the COVID-19. Their study examines similar work and the impact of e-adoption on healthcare.

In the next contribution, the authors have observed from various studies that people with diabetes are more likely to have severe problems from COVID-19. Taking this into account, the author(s) in his article entitled "Risk Identification of Diabetic Macular Edema Using E-Adoption of Emerging Technology" analyzes diabetic macular edema (DME) disease. Their scientifically sound analysis revealed that the electronic adoption of emerging technology such as the Radio Dense model outperformed other classifiers and attained an accuracy of 87.4%.

Due to the massive growth of COVID-19 cases and lack of health infrastructure, an efficient mechanism to handle COVID-19 cases was required. Adopting a CT scan is one of the proven methods to detect Covid positives. Author(s) of the title "Machine Learning-Based COVID-19 Classification Using E-Adopted CT Scans" discusses ML-based COVID-19 detections using CT scans. Their model adopts the federated learning model with the existing machine learning algorithms and analyses results in terms of accuracy, precision, recall, and F1-score. Since data are stored across multiple sources, centralizing those data leads to privacy and security issues. The author(s) also contributed to the safe transmission of data between data centres without affecting privacy on similar lines.

Author(s) of "Advancement in the Healthcare System by Automated Disease Diagnostic Process Using Machine Learning" proposed an AI-based machine learning model to classify and identify diabetes disease. Author(s) implements the Random Forest, Decision Tree, Logistic Regression, and XGBoost Algorithm of machine learning on the PIMA database. They discuss how E-adoption and emerging technology can enhance and better support automated disease detection.

We hope this special issue will significantly contribute to a better understanding of the E-adoption of emerging technology during COVID-19. We would also like to thank all the authors

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