

# Re-imagining Diffusion and Adoption of Information Technology and Systems: A Continuing Conversation

Sujeet K. Sharma, Yogesh K. Dwivedi, Bhimaraya Metri, Nripendra P. Rana

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IFIP was founded in 1960 under the auspices of UNESCO, following the first World Computer Congress held in Paris the previous year. A federation for societies working in information processing, IFIP's aim is two-fold: to support information processing in the countries of its members and to encourage technology transfer to developing nations. As its mission statement clearly states:

IFIP is the global non-profit federation of societies of ICT professionals that aims at achieving a worldwide professional and socially responsible development and application of information and communication technologies.

IFIP is a non-profit-making organization, run almost solely by 2500 volunteers. It operates through a number of technical committees and working groups, which organize events and publications. IFIP's events range from large international open conferences to working conferences and local seminars.

The flagship event is the IFIP World Computer Congress, at which both invited and contributed papers are presented. Contributed papers are rigorously refereed and the rejection rate is high.

As with the Congress, participation in the open conferences is open to all and papers may be invited or submitted. Again, submitted papers are stringently refereed.

The working conferences are structured differently. They are usually run by a working group and attendance is generally smaller and occasionally by invitation only. Their purpose is to create an atmosphere conducive to innovation and development. Refereeing is also rigorous and papers are subjected to extensive group discussion.

Publications arising from IFIP events vary. The papers presented at the IFIP World Computer Congress and at open conferences are published as conference proceedings, while the results of the working conferences are often published as collections of selected and edited papers.

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# Re-imagining Diffusion and Adoption of Information Technology and Systems: A Continuing Conversation

IFIP WG 8.6 International Conference on Transfer and Diffusion of IT, TDIT 2020 Tiruchirappalli, India, December 18–19, 2020 Proceedings, Part II



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#### Preface

The IFIP Working Group (WG 8.6) was established in the early '90s "to foster understanding and improve research in practice, methods, and techniques in the transfer and diffusion of information technology within systems that are developed, and in the development process<sup>1</sup>." The 2020 IFIP WG 8.6 conference on the theme "Re-Imagining Diffusion of Information Technology and Systems: A Continuing Conversation" was held at Tiruchirappalli, India, and was hosted by the Indian Institute of Management (IIM) Tiruchirappalli during December 18–19, 2020. We are grateful to IIM Tiruchirappalli for providing all required facilities and the IFIP WG 8.6 for mentoring the successful organization of the conference. The proceedings volumes of this conference focus on the re-imagination of diffusion and adoption of emerging technologies.

Developments in blockchain, artificial intelligence, Internet of Things, social media, mobile computing and applications, agile systems development techniques, cloud computing, and business analytics have become central to the business and the cycle of innovation has sped up, platforms provide quick access to infrastructure, and information spreads on a 24-h cycle. These developments, in turn, have impacted the way both organizations and societies, engage with transfer and diffusion of information technology (IT) systems within and between organizations, in interactions with customers, and society in general. The question is no longer how to adopt and diffuse IT systems, but how to quickly assess and manage those that best serve the broader purposes of businesses and societies. In addition to the idea of adoption and diffusion of IT systems, IT teams in organizations and individuals are also working on how IT systems are contributing to the value creation in both organizations and society.

There is an innate need for understanding the diffusion and adoption of emerging information technologies and systems (i.e., artificial intelligence, blockchain, Fin-Tech applications, Internet of Things, social media), which are expected to have a substantial impact on future economic development of society, organizations, and individuals (Borus et al. 2020; Dwivedi et al. 2019ab; Hughes et al. 2019; Ismagilova et al. 2019; Janssen et al. 2019). A review of the role of information technologies, particularly over the past two decades, clearly shows the vital link between technology adoption and socio-economic development in many economies (Venkatesh et al. 2016; Williams et al. 2015). The Gartner report on "Top Strategic Technology" in 2019<sup>2</sup> lists trends including blockchain, artificial intelligence, autonomous things (robots, vehicles, drones, etc.) among others as the game changers that could revolutionize industries and their strategic models through 2023. These emerging technologies have great potential to contribute to organizational and societal reforms. Thus, in the recent past, the

<sup>&</sup>lt;sup>1</sup> http://ifipwg86.wikidot.com/about-us.

<sup>&</sup>lt;sup>2</sup> https://www.forbes.com/sites/peterhigh/2019/10/21/breaking-gartner-announces-top-10-strategic-technology-trends-for-2020/#47dbbb940744.

scholarly body is showing an increased interest in the understanding of adoption, usage, impact, and potential of aforementioned technologies mentioned on individuals, societies, and organizations.

This conference brought together scholars and practitioners from interdisciplinary areas for the enrichment of scholarly deliberations on the adoption, usage, impact, and potential of emerging technologies. The conference mainly focused on the papers that addressed questions related to the diffusion and adoption of emerging technologies. Besides, we were also open and committed to the broader theme of the IFIP WG 8.6. We created 15 tracks with 2 or 3 track chairs. We received 247 papers, including 214 through EasyChair account and 33 direct submissions through conference email. All submissions were double-blind reviewed by at least two knowledgeable reviewers. This process resulted in 122 full and short papers. The acceptance rate of the papers in the conference proceedings is about 49.4%. We are grateful to all track chairs who selected reviewers and provided constructive and timely comments to authors to revise and resubmit their manuscripts.

Due to a large number of submissions, the conference proceedings of IFIP WG 8.6 are divided into two volumes. There are seven sections in Volume I and eight sections in Volume II.

Volume one includes sections namely:

- Artificial Intelligence and Autonomous Systems
- Big Data and Analytics
- Blockchain
- Diffusion and Adoption Technology
- Emerging Technologies in e-Governance
- Emerging Technologies in Consumer Decision Making and Choice
- Fin-Tech Applications
- Healthcare Information Technology
- Internet of Things

Volume two includes:

- Information Technology and Disaster Management
- Adoption of Mobile and Platform-Based Applications
- Smart Cities and Digital Government
- Social Media
- Diffusion of Information Technology and Systems (Conference Theme)

We sincerely thank all authors, reviewers, participants, Program Committee members, track chairs, advisory board, IFIP WG 8.6 officials, and IIM Tiruchirappalli staff who helped in making this conference a grand success.

October 2020

Sujeet K. Sharma Yogesh K. Dwivedi Bhimaraya Metri Nripendra P. Rana

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