

Proceedings of the Informing Science + Information Technology Education Conference

An Official Publication
of the Informing Science Institute
InformingScience.org

InformingScience.org/Publications

Online July 5 – 6, 2023

THE INFLUENCE OF COVID-19 ON EMPLOYEES' USE OF ORGANIZATIONAL INFORMATION SYSTEMS

Maayan Nakash Department of Information Science, <u>Maayan.Nakash@biu.ac.il</u>

Bar-Ilan University, Ramat Gan, Israel

Dan Bouhnik* Department of Information Science, Bouhnik@ict.ac.il

Bar-Ilan University, Ramat Gan, Israel; Department of Computer Science and Engineering, Jerusalem College of Tech-

nology, Jerusalem, Israel

ABSTRACT

Aim/Purpose COVID-19 was an unprecedented disruptive event that accelerated the shift to

remote work and encouraged widespread adoption of digital tools in organizations. This empirical study was conducted from an organizational-strategic perspective, with the aim of examining how the COVID-19 pandemic outbreak affected employees' use of organizational information systems (IS) as reflected in

frequency.

Background To date, only a limited effort has been made, and a rather narrow perspective

has been adopted, regarding the consequences of the adoption of new work environments following COVID-19. It seems that the literature is lacking in information regarding employee use of organizational IS since the outbreak of the pandemic. Specifically, this issue has not yet been examined in relation to employees' perception about the organization's digital efforts and technological

maturity for remote work. The present study bridges this gap.

Methodology The public sector in Israel, which employs about a third of the Israeli work-

force, was chosen as a case study of information-intensive organizations. During the first year of COVID-19, 716 questionnaires were completed by employees and managers belonging to four government ministries operating in Israel. The responses were statistically analyzed using a Chi-Square and Spearman's

Rho tests.

The full paper has been published as the following and is being presented at this conference:

Cite as: Nakash, M. & Bouhnik, D. (2023). The influence of COVID-19 on employees' use of organizational information systems. *Interdisciplinary Journal of Information, Knowledge, and Management*, 18, 353-368. https://doi.org/10.28945/5164

Abstract published in *Proceedings of InSITE 2023: Informing Science and Information Technology Education Conference*, July 5-6 [online], Article 8. Informing Science Institute. https://doi.org/10.28945/5136

(CC BY-NC 4.0) This article is licensed to you under a <u>Creative Commons Attribution-NonCommercial 4.0 International License</u>. When you copy and redistribute this paper in full or in part, you need to provide proper attribution to it to ensure that others can later locate this work (and to ensure that others do not accuse you of plagiarism). You may (and we encourage you to) adapt, remix, transform, and build upon the material for any non-commercial purposes. This license does not permit you to use this material for commercial purposes.

^{*} Corresponding author

Contribution Given that the global pandemic is an ongoing phenomenon and not a passing

episode, the findings provide important theoretical and practical contributions. The period prior to the COVID-19 pandemic and the period of the pandemic are compared with regard to organizational IS use. Specifically, the study sheds new light on the fact that employee perceptions motivated increased IS use during an emergency. The results contribute to the developing body of empirical

knowledge in the IS field in the era of digital transformation (DT).

Findings More than half of the respondents who reported that they did not use IS before

COVID-19 stated that the pandemic did not change this. We also found a significant positive correlation between the perception of the digital efforts made by organizations to enable connection to the IS for remote work and a change in frequency of IS use. This frequency was also found to have a significant positive correlation with the perception of the organization's technological maturity

to enable effective and continuous remote work.

Recommendations In an era of accelerating DT, this paper provides insights that may support chief for Practitioners information officers and chief digital officers in understanding how to promote

information officers and chief digital officers in understanding how to promote the use of IS. The results can be useful for raising awareness of the importance of communicating managerial messages for employees regarding the organizational strategy and the resilience achieved through IS not only in routine, but

also in particular in emergency situations.

Recommendations Considering that the continual crisis has created challenges in IS research, it is appropriate to continue researching the adaptation and acclimation of organiza-

tions to the "new normal".

Impact on Society The COVID-19 pandemic created a sudden change in employment models,

which have become more flexible than ever. The research insights enrich the

knowledge about the concrete consequences of this critical change.

Future Research We suggest that researchers investigate this core issue in other sectors and/or

other countries, in order to be obtain new and complementary empirical in-

sights on a comparative basis.

Keywords COVID-19, new normal, information systems, information technology, remote

work, digital transformation, workplace environment

AUTHORS



Ms. Maayan Nakash is a Ph.D. student in the Department of Information Science in Bar Ilan University Israel. She is an Information Science magna cum laude M.A. graduate, specializing in knowledge management and information technology, with summa cum laude thesis. Maayan has extensive knowledge and experience in design and implementation of strategic solutions and systematic methodologies for information and knowledge management; mapping needs to improve business performance; modeling, characterization, and analysis of systems. <a href="https://or-

cid.org/0000-0001-6791-1624



Prof. Dan Bouhnik is the Rector of the Jerusalem College of Technology. He was a faculty member in the Department of Information Science in Bar-Ilan University. Dan is the author of a number of books used for teaching advanced computer sciences and his research focuses on knowledge management, information security, big data and the infusion of new technologies in the learning environment. https://orcid.org/0000-0002-3141-8819