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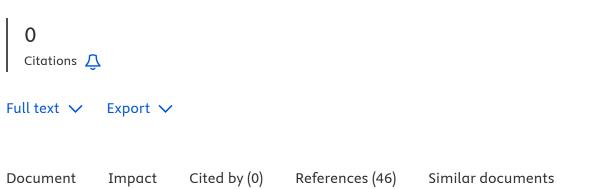
Mobile Technology in Agriculture: A Systematic Literature Review of Emerging Trends and Future Research Directions

Ingenierie des Systemes d'Information • Review • 2025 • DOI: 10.18280/isi.300202 ☐

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Abstract

This literature review examines the current trends and future research directions in the use of mobile technology in agriculture from 2014 to 2024. In 2024, a search was conducted on the SCOPUS database, resulting in 2,570 documents published between 2014 and 2024. These documents were analyzed to identify the most frequently cited articles in the SCOPUS database. The search used keywords such as mobile technology, mobile applications, smartphones, and mobile devices in combination with keywords like agriculture, farming, and crop production. The analysis of publication trends revealed a significant increase in the number of documents and citations. Notably, India, the United States, and China emerged as the leading contributors in agricultural technology research. Most publications were conference papers and journal articles, with notable contributions from institutions such as Bina

Nusantara University and the Sri Lanka Institute of Information Technology. Through keyword analysis, major research clusters focusing on crops, the Internet of Things (IoT), and mobile applications were identified. Key journals in this field, such as Communications in Computer and Information Science, Sensors (Switzerland), and Agriculture (Switzerland), cover these topics. This review aims to highlight the global, dynamic, and interdisciplinary nature of research in mobile agricultural technology. It underscores the increasing importance of this field and emphasizes the need for further exploration. ©2025 The authors.

Author keywords

agriculture; crop production; farming; mobile technology

Funding details

Details about financial support for research, including funding sources and grant numbers as provided in academic publications.

Funding sponsor	Funding number	Acronym
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Funding text

The authors acknowledge financial support from SIMAD University's Centre for Research and Development (CRD). Additionally, the authors thank all participants.

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