

Silicon Snowball Sampling: A Dynamic Approach to Online Data Collection

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Abstract

21st century digital communications have catalysed developments in research methods, particularly with social science sampling. This research report explores the evolution of snowball sampling techniques in sociological research and presents an innovative method of sampling in social media research: silicon snowball sampling. Traditional snowball sampling relies on the social networks of initial participants to identify and recruit further subjects, effectively accessing hard-to-reach populations. However, this method has limitations, including potential bias and challenges in managing large samples. With the advent of social media, silicon snowball sampling adapts these principles to the digital age, allowing researchers to trace digital interactions and discover interconnected networks of users, topics, and content. This report presents the methodology, benefits, and challenges of silicon snowball sampling and demonstrates its application through a case study on self-directed guitar learners in online communities. By leveraging digital platforms, researchers can uncover hidden patterns and enhance their understanding of social media's role in contemporary research.

Keywords: Snowball Sampling, Research Methodology, Social Media Research, Online Learning Communities, Online Education