MAKING SENSE OF TRADITIONAL MEDIA ONLINE BIG DATA: A METHODOLOGICAL APPROACH

Citation

Ada, S. Peter, Ph.D.
Email: ada_peter@biari.brown.edu; ada.peter@covenantuniversity.edu.ng
Covenant University, Km 10 Idiroko Rd, Ota, Ogun State, Nigeria
Ada Peter is a media, security and conflict scholar. As a lead researcher of investigations on online communication and social change in developing nations, her research has covered a wide array of topics, including civil wars, terrorism, insurgencies, cyber terrorism, cyber resilience, and security by other means. The principal settings of her study include Libya, South Sudan, Ethiopia, DRC and Nigeria; that have experienced or are experiencing varying degrees of violence-criminal violence, election-related violence, armed conflict, short term crisis-in different political contexts-restrictive and collaborative contexts. She has received several regional and international grants on these projects.

Tolulope, Kayode-Adedeji
Email: kehinde.kayode-adedeji@covenantuniversity.edu.ng
Covenant University, Km 10 Idiroko Rd, Ota, Ogun State, Nigeria
Tolulope Kayode-Adedeji launched her media broadcasting research career after her MSc in Contemporary Media at the University of Wolverhampton, United Kingdom. Her current research endeavours focus on the interconnections of violent conflicts and internet communication especially as it affects children and adolescents. She is now a PhD candidate at the Department of Mass Communication, Covenant University.

Darlynton, A. Yartey
Email: yartey.darlynton@covenantuniversity.edu.ng
Covenant University, Km 10 Idiroko Rd, Ota, Ogun State, Nigeria
Darlynton A. Yartey is an early career researcher with major in Integrated Marketing Communication. He holds a Master Degree in the same area of specialization from Covenant University, and currently a PhD candidate at the same institution. His PhD research focuses on using big data to solve marketing communication challenges.

INTRODUCTION

The analysis of media content has been central in social sciences, due to the key role that media plays in shaping public opinion (Flaounas, Sudhahar, Lansdall-Welfare, Hensiger, and Cristianini, 2012). However, the sizes of the corpora usually analysed are relatively limited. Some of the reasons for such limitation is that social scientists especially media researchers rely on little data and preliminary coding of the selected texts or visuals. The implication is that social scientists seldom engage computational technologies that allow massive scale investigations of big data, real time monitoring and system-level modelling of both local and global media systems. Computational technologies enable the automation of data collection, preparation, management, analysis and visualisation.

Thus, by an introductory approach, the chapter in general aims to demonstrate how media researchers can execute a big data analysis of traditional media online (TMO) using machine learning algorithms. Machine learning algorithms are problem-solving methods suitable for implementation as computer programs. Machine learning is inherently a multidisciplinary field. It draws on results from artificial intelligence, probability, statistics, computational complexity theory, control theory, information theory, philosophy, psychology, neurobiology, and other fields (Tom, 1997, Pp.17). Primarily, the automated process allows researchers to access two things that would be otherwise out of reach; first is the macroscopic patterns embedded in the big data of TMO; and secondly is the capacity to analyse such huge data that would hitherto not fit on a personal computer.

However, in an itemized arrangement, the following are the objectives of the chapter

CHAPTER OBJECTIVES

1. To provide an introductory guide to the scientific procedures for creating intelligence from TMO big data.
2. To introduce big data to the social scientist that primarily relies on little data and preliminary coding of selected texts or visuals but is nonetheless interested in analyzing TMO large datasets.
3. To introduce the scientific processes and some computational methods for analyzing the TMO big data.
4. Suggest other opportunities that abound with TMO big data.

LEARNING OUTCOMES

At the end of the chapter, the reader will recognize

1. The conceptualization of TMO big data; the diverse and consistent meanings of big data;
2. The value of the TMO big data
3. Rudimentary meaning of algorithms and machine learning algorithms
4. Some machine learning methods for analyzing and creating intelligence from TMO big data
5. The essential scientific processes for analyzing and creating intelligence from TMO big data