Social Media Analytics

An Application in Data Science

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Penerbit Universiti Kebangsaan Malaysia
Bangi • 2024
www.ukm.my/penerbit

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Diterbitkan di Malaysia oleh/ *Published in Malaysia by*
PENERBIT UNIVERSITI KEBANGSAAN MALAYSIA
43600 UKM Bangi, Selangor Darul Ehsan, MALAYSIA
www.ukm.my/penerbit
e-mel: penerbit@ukm.edu.my

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MAJLIS PENERBITAN ILMIAH MALAYSIA/
MALAYSIAN SCHOLARLY PUBLISHING COUNCIL
PERSATUAN PENERBIT BUKU MALAYSIA/
MALAYSIAN BOOK PUBLISHERS ASSOCIATION
No. Ahli/ *Membership No*. 198302

Atur huruf oleh/ *Typeset by*
PENERBIT UNIVERSITI KEBANGSAAN MALAYSIA
43600 UKM Bangi, Selangor Darul Ehsan, MALAYSIA

Dicetak di Malaysia oleh/ *Printed in Malaysia by*
MASSA CREATIVE ENTERPRISE
Back Side of GF-03A, Menara Paragon
Persiaran Bestari, Cyber 11, Cyberjaya
63000 Selangor Darul Ehsan, MALAYSIA

Data Pengkatalogan-dalam-Penerbitan

Perpustakaan Negara Malaysia

Rekod katalog untuk buku ini boleh didapati dari Perpustakaan Negara Malaysia

ISBN 978-629-486-305-7

Contents

List of Table & Figures ... 7
Preface ... 11

CHAPTER 1 Social Media Analytics ... *15*
Shuzlina Abdul-Rahman & Azuraliza Abu Bakar

CHAPTER 2 Re-Entering The Realm of Data Science ... *21*
Shuzlina Abdul-Rahman & Azuraliza Abu Bakar

CHAPTER 3 From Inception to Innovation: The Phases and Technologies ... *39*
Shuzlina Abdul-Rahman & Azuraliza Abu Bakar

CHAPTER 4 Looking at Social Media Data ... *54*
Nur Atiqah Sia Abdullah & Sofianita Mutalib

CHAPTER 5 Exploring Public Opinion Towards Higher Educational Institution ... *77*
Shuzlina Abdul-Rahman, Wan Fakhrurrazi Wan Azizan & Sofianita Mutalib

CHAPTER 6 Revealing Hot Issues On Covid-19 Vaccination In Malaysia ... *96*
Mohd Mukhlis Mohd Sharif & Ruhaila Maskat

CHAPTER 7 Detecting Fake Reviews On Online Shopping Data ... *114*
Yuzi Mahmud, Muhammad Afiq Zakwan Azidi & Shuzlina Abdul-Rahman

CHAPTER 8 Forecasting Electoral Results through Political Sentiment ... *135*
Siti Sakira Kamaruddin, Farzana Kabir Ahmad & Nor Idalaila Aziz

CHAPTER 9 Identifying People Opinion On Covid-19 Vaccines Products ... *152*
Lau Yong Jie, Azuraliza Abu Bakar, Mohd Ridzwan Yaakub & Abdullah Fahim Ahmad Hamdan

References ... 165
List of Contributors ... 187
Index ... 193

Preface

As Malaysia forges ahead with its strategic plan to become a data-driven economy, the fusion of social media analytics and data science is proving crucial. Utilizing predictive analytics, supported by advanced machine learning techniques and Artificial Intelligence, this book can be part of a game-changer for the nation's development agenda. These technological advancements are not just academic exercises; they are practical tools that empower policymakers and business leaders to anticipate and respond to dynamic socioeconomic patterns. The applications are wide-ranging and aligned with Malaysia's growth objectives, from sustaining economic resilience, and improving public services, to driving innovation in local industries. As part of its commitment to embracing the Fourth Industrial Revolution, Malaysia is harnessing these insights to inform its strategic decisions, ensuring that the nation remains competitive on the global stage while fostering sustainable growth and development at home.

The Book's Approach

This book is structured into two main parts, each offering valuable insights into the field of data science and its application. The first segment comprises the initial four chapters, providing an insightful overview of data science. It marks the inception of the social media era and outlines the fundamental phases of social media analytics: Data Collection, Data Curation, Data Analysis, and Data Presentation, succinctly referred to as Collection-Curated-Analysis-Present (CCAP). Throughout these chapters, we present essential techniques that can be applied at each stage to optimize the value obtained from the entire process.

The subsequent five chapters of the book immerse readers in illuminating case studies, meticulously examining social media data across a spectrum of platforms, including education, businesses, healthcare, and political domains. These case studies, meticulously researched by experts from diverse institutions, unveil the implementation of social media analytics leveraging cutting-edge data science technologies, artificial intelligence, and machine learning.

Why You Should Read This Book

This book will give you a broad understanding of the following topics:

1. How the data science, social media analytics, and sentiment analysis related?
2. What are the key phases in extracting the knowledge from the social media data?
3. What are the various types of social media analysis that can be mined for the analytics?
4. What are the artificial intelligence and machine learning technologies being used by researchers to extract insights from social media data?
5. How do we analyse the data using a variety of tools and techniques to get value from it?
6. How do we interpret the results and apply them for real business value?

What This Book Does and Does Not Focus On

This book is designed for researchers, academicians, students, and the general public who are interested in learning how social media data can be harnessed to uncover insights. It is also intended for businesses and marketing managers aiming to maintain their competitive edge in the marketplace. Additionally, it caters to students in higher education who are eager to understand the processes and challenges associated with deriving insights from social media data.

This book is not meant for technologists, architects, or programmers seeking to implement the most advanced technological solutions for social media analytics. Furthermore, it does not concentrate on a singular technology platform or tool, and thus, it does not function as a manual for any specific product.

The goal is to provide sufficient information to enable interested individuals to develop their technology solutions for extracting business value from social media content.

Acknowledgments

The editor, Shuzlina Abdul Rahman would like to express gratitude to the College of Computing, Informatics, and Mathematics, at Universiti Teknologi MARA for granting her sabbatical leave from November 1, 2022, to August 31, 2023, under the supervision of Professor Dr Azuraliza Abu Bakar from Universiti Kebangsaan Malaysia.

Part of the research findings in this book are funded by Ministry of Higher Education research grants: FRGS/1/2020/ICT02/UKM/01/2 Sentiment-based Community Detection Method for Behavioural Learning in Online Social Network; FRGS/1/2018/ICT04/UITM/02/9 Designing Multilingual Sentiment Classifier Algorithm For Social Media Data, and Universiti Teknologi MARA internal grants: 600-RMC 5/3/GPM (043/2022) Development of Hybrid Model for Fake News Detection In Social Media Platforms.

All Praises and Thanks to Allah.

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