THE USE OF SOCIAL MEDIA DATA IN STUDYING LEADERSHIP IN SUSTAINABLE INVESTING A GLOBAL PHENOMENON

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Abstract

This study describes a proposed alternative method to qualitatively study global phenomena which create challenges to access informants due to either geographical or time availability constraints. A mix between the capturing and usage of secondary data obtained from the abundance of social media data, an established hermeneutic phenomenology method and triangulation with conventional method is proposed. A sample case on studying leadership in sustainable investing is featured to demonstrate the application of the method. Reasons for decision to invest through the SI strategy emerge from leaders' insight obtained from the hermeneutic circles and were supported by direct interviews. There are four reasons for decision i.e., (1) climate change, (2) stakeholders' demand alignment, (3) risk – performance consideration, and (4) value alignment. While other characteristics of transformation leadership is intellectual stimulation represents major finding from the data. The abundance of insights on the internet, along with established qualitative research methods, computer software, as well as accessible primary source represent opportunities to replicate the example to cover other topics.

Keywords: Social Media Data; Leadership; Sustainable Investment; Hermeneutic

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Introduction

In view of the purpose of science to explain or predict a phenomenon (Purtill, 1970), social scientists have options of various qualitative and quantitative research methodologies to obtain findings and/or insights. Such findings and/or insights are derived from the study of the data collected as part of the research methodology. As the phenomenon dictates the method, and not the other way around (Hycner, 1985), participants selection and data collection to study a global phenomenon using a qualitative research method could be a challenge. Global phenomena include globalization, multinational enterprises, sustainable development in emerging markets and climate change (Bergé, 2018). Respondents who could provide meaningful data that

will lead to conclusive findings may be in different geography from the researchers, so that face to face meeting, if critically required by the methodology, is challenging. They may also do not even have the time to be allocated to the researchers, making it challenging to proceed with the planned research.

This article describes an alternative method used as an attempt to address the challenge by utilising the abundance of data on the internet and social media. A combination between secondary data obtained from the internet and an explication following an established methodology, and a validation process using a primary data leads to confirmed results.

Globalization, multinational enterprises, sustainable development in emerging markets and climate change are some examples of global phenomena (Bergé, 2018). These observable facts or events take place beyond the boundary of countries. Globalization which represents a clear example of how the boundary of states have been irrelevant to economic interaction between parties located in different geographies. Such interaction occurs through the establishment of multinational corporations/enterprises whose operations span across countries. At the same time, following the Brundtland report (Brundtland, 1987), sustainable development has become a global phenomenon whereby attention towards the wellbeing of future generation has become a major consideration in the development of emerging economy, with one of the main drivers is awareness towards climate change, which on its own is also a global phenomenon.

In studying the above global phenomenon, social scientists have options of various research methodologies, both quantitative and qualitative. The qualitative methodology which focuses on understanding meanings rather than the frequency of a phenomenon includes interviews, focus group, and observational studies (Cavana, Delahaye, & Sekeran, 2001). Each of the methods requires the availability of respondents, i.e., persons who provides data relevant to the phenomenon being studied. In studying a global phenomenon, challenge around accessing the respondents arises since the respondents are in a different geography than the researcher, so that a face-to-face interaction which is critical to a qualitative research may not be practical. While the presence of electronic conferencing solutions may partly solve the problem, another challenge which is the availability of the respondents due to their daily activities given the global scope of their role represent a bigger challenge.

A potential solution to these problems is the media and social media data collection using public and social media due to the abundance of readily available materials on the internet, enabling low cost and time efficiency of data collection. Data sources including website text and video, Facebook posts, tweets (Twitter posts), YouTube videos, or other social media content (Snelson, 2016; Alexa, 2015), including data gathered in discussion forums, chat rooms, and via blogging sites such as WordPress (Townsend & Wallace, 2016). Combined with confirmation or triangulation from interviews of qualified informants, this innovative approach represents a new

approach of addressing challenge in accessing informants when studying global phenomenon.

Corporations including its CEOs and leaders nowadays are increasingly opening themselves to providing insights on their investment strategies and portfolio to the public through interviews, public statements, letters, blogs, posts, tweets, and many other ways leveraging the information and communication technologies such as the internet and other broadcasting media, and are called "social media data" (Duggan, 2013; Duggan, Ellison, Lampe, Lenhart, and Madden, 2015). Sample of insights provided by corporate leaders includes those in the forms of a video interview of Larry Fink, the CEO of BlackRock with CNBC (https://www.cnbc.com/video/2018/01/16/blackrock-ceo-larry-fink-pushes-companies-to-become-more-socially-responsible.html), an edited excerpt of an interview of with Michael Baldinger, Head of Sustainable and Impact Investing at UBS Asset Management (http://www.climateaction.org/climate-leader-interviews/interview-with-michael-baldinger-head-of-sustainable-and-impact-investing-a), and an interview with Andrew Parry of Hermes Investment Management in a blog (https://blogs.cfainstitute.org/investor/2018/06/15/effective-esg-investing-an-interview-with-andrew-parry/). Such samples represent a potential insight in a study that will be featured in this article.

Research Methods

The proposed framework to conduct the overall research starting with the above data collection technique is described in the following figure.
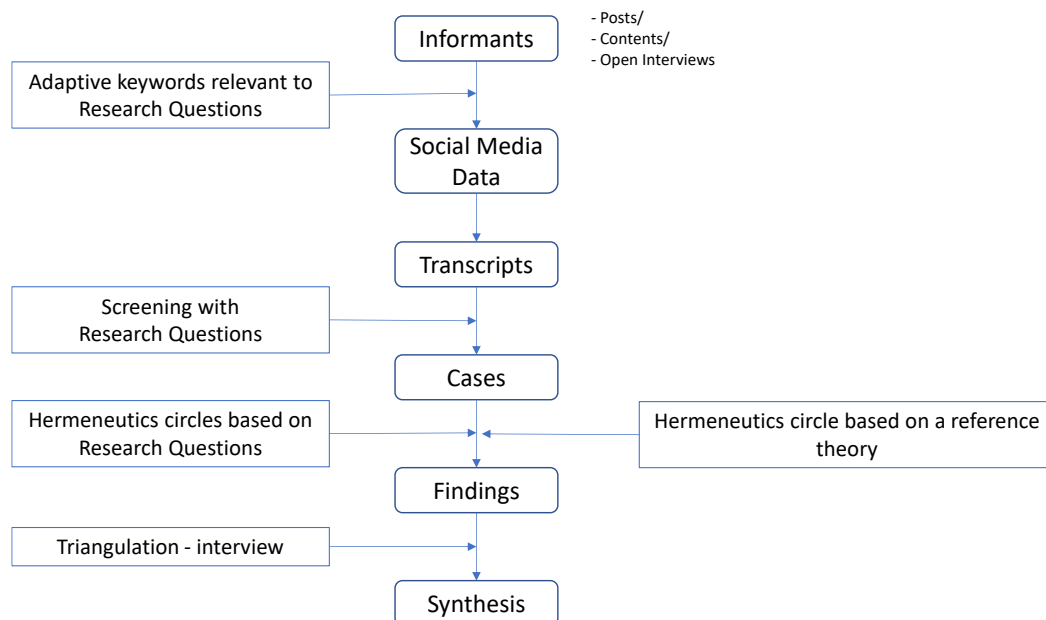

Figure 1. The proposed framework

A global phenomenon could be studied qualitatively through exploration of actors/informants' explanation or understanding thereof (Ritchie, Lewis, Nicholls, & Ormston, 2013). Informants are those with significant role, and hence understanding of the topic, including but not limited to political leaders, heads of countries or high ranked government officials, business leaders, community leaders, scholars, etc. Due to the nature of their profile and activities, they are naturally hard to access, both from geographical and time availability reasons. Qualitative research which relies on insights from the actors of the phenomenon would be dependent on the accessibility of the informants. The good news is the fact that such informants have been increasingly making relevant statement and contents around the phenomenon in the public media. The abundant data from informants on the internet in the forms of social media posts, open interviews, and other types of contents can be searched using the adaptive keywords leading to sites containing information with potential relevance to the phenomenon being researched. Researcher goes through the material stored in the sites and makes judgment on materials that have prospects towards answering the research questions.

The prospective materials are then transcribed, and the transcripts are stored in a support system such as the NVivo program for further analysis. Transcription process which used to be cumbersome nowadays could be done easily using computer software that are abundant in the market. A 30-minute interview content could be accurately transcribed in a mater of seconds.

Each transcript is studied to see whether it has the potential to answer the research questions. At this stage researcher's attention is more on the context of the whole transcript rather than the meaning of each sentence. Transcripts with potential to address the research questions are then grouped into cases which then form the relevant data for the explication process. Each case represents a unit of analysis and can be structured and further detailed to allow next level of analysis. For example, a case could reflect a certain individual and can be detailed further with information of gender, age, position, geographic location, etc. so that analysis at those further level could be done.

The term 'explication' in lieu of 'analysis' is used following (Hycner, 1985). In contrast with 'analysis' which often means examination of details by breaking the whole apart with a risk of losing the overall context, 'explication' is looking at pieces with a constant reference to the overall context (Kristiyono, 2020). Constantly expanding circles of interpretation and understanding, called 'hermeneutic circles' (Gadamer, 1997) are conducted with constant reference to both research questions and the referenced theory. Both research questions and the referenced theory provide context as well as guideline towards the emergence of meanings from reviewing the contents. Such meanings are captured by means of theme or codes which are then stored in the support software for further generalization of similar meanings and flow of thoughts, leading to the findings of the results.

The findings are then triangulated with the findings from direct interviews (primary data) before building the synthesis of the study following discussions of the

findings. Findings from the hermeneutic circles and the direct interviews may be either convergent or divergent. Discussions by referring to the literatures and researchers' own experience will form a major part the synthesis.

Sample Study – Leadership in Sustainable Investing

To provide an example of how the proposed method is used in practice, the next part of this article features a study around leadership in sustainable investing (SI) (Ng, Tan, Sugiarto, Widjaja, & Pramono, 2021). Similar to the phenomenon of sustainable development, the study highlights SI as a global phenomenon. Following the establishment of sustainability as a term since Our Common Future (Brundtland, 1987), or also called as the Brundtland Report, along with recognition of the need for financing sustainable development (Nations, 2014), private investment following the SI strategy has grown to reach USD22.89 trillion of assets under management (AUM), represent 26% of total professionally managed assets in 2016 (Alliance, 2016).

Such phenomenon attracts an interest to study how leadership contributes to the growth. Review of various leadership research found that the study of leadership in SI was scarce (Purwanto, Asbari, & Hadi, 2020). Leading leadership theories such as the transformational leadership, servant leadership, leader-member exchange (LMX), situational theory covered little on, not to say nothing, the phenomenon of SI. Research questions were formulated around leaders' reason for decision toward SI and leadership style employed when making such decisions. Transformational leadership (TL) was chosen as the reference theory to study the phenomenon as it remains the most researched leadership theory to date (Wanasida, Bernarto, Sudibjo, & Pramono, 2021).

Informants are leaders of the world's largest investment management firms by AUM. Those leaders have been making public interviews and statement around their believe and commitment to invest following the SI strategy, hence the abundance of secondary data on the internet and social media. Sample statements made by the leaders include the one by Larry Fink of BlackRock

"I believe the companies that have purpose are the best companies in the world because it unites employees, it connects the clients, but most importantly it brings the organization onto a common plan"
and "I believe the involvement in a community to have a purpose is vital for long-term survivability, but long-term profitability".
Another statement by Sergio Ermotti of UBS:

"we are responding to a clear demand that is there, and this is by the way not only a demand coming from the millennials or the new generations which of course they have that they want to do something that good while doing well".
Along with 10 other leaders' statements, significant amount of data are available for further explication towards insights and learning.

Data gathering

Data gathering process was initiated by using search engines and applying adaptive keywords around SI such as 'sustainable investing [company name]' and 'sustainable investing [executive name]'. Further refinement of the search was then done by specifying the media name, e.g., '…. [executive name] [media name]'. Keywords were adjusted adaptively depending on the results of the search and analysis. Relevant data were the results of searches that represent potential answers to research questions, which were either asked by the interviewer in the media or were implicitly expressed by the participant as a public statement.

The result of the data collection starting in the first quarter of 2019 following the procedure described above were more than 150 sites sourced from various media including interviews, blog statements, and websites. The interviews, blog statements, and websites were very general in terms of content, not specifically relevant to the research questions. Researcher then reviewed each site and determined those with relevance to the phenomenon and contents from the relevant sites were the transcribed. 28 transcripts were then produced and stored in the Nvivo program for further treatment.

Case and unit of analysis

Using the Nvivo program, the 28 transcripts were screened using the research questions and were grouped as cases, which would form the unit of analysis. Each case was coded using the name of each leader, hence 13 cases named after leaders providing insights. The leaders are listed in the following table.

Table 1.
List of Leaders

Name	Title	Company/Group
Aubre Clemens	Executive Director, Sustainable Investing Due Diligence	J.P. Morgan Chase
Audrey Choi	Chief Marketing and Sustainability Officer	J.P. Morgan
Frédéric Samama	Deputy Global Head of Institutional & Sovereign Clients	Amundi
Jean-Jacques Barbéris	Head of Institutional and Corporate Clients Coverage on Sustainable finance	Amundi
Joyce Chang	Global Head of Corporate Investment Bank	J.P. Morgan Chase
Larry Fink	CEO	BlackRock
Matt Arnold	Managing Director and Global Head of Sustainable Finance	JP Morgan Chase
Nicole Connolly	Portfolio Manager and Investments Head of ESG	Fidelity Investment
Oliver Bate	CEO	Allianz SE
Ommeed Sathe	Director of Impact Investments	Prudential
Rakhi Kumar	Director and Head of ESG Investment	State Street Global

Name	Title	Company/Group
	and Asset Stewardship	Advisors
Scott Mather	CIO U.S. Core Strategies	PIMCO
Sergio Ermotti	CEO	UBS

The 13 cases were further detailed to reflect connection with each of the informants' particular information such as gender and level in respective firms, such as CEO or sub-CEO levels. This would allow for refinement of further qualitative analysis.

To confirm reliability of the finding, direct interviews with selected informants to triangulate the results were also conducted. Transcripts were then treated similarly with that of the secondary data obtained above.

Hermeneutic circles of each case

Forming the core of the framework, explication of the 13 cases following the method proposed by (Hycner, 1985) were then conducted with the help of the Nvivo program to record the emerging themes/codes from the hermeneutic circles on all transcripts. Hermeneutic circles rely on researcher's observation and careful attention to each word, sentence, and the whole statement to understand the meaning of the texts under the context obtained from understanding the whole data set, beyond individual transcript. Constant review of each text goes along the line of clustering general meaning of themes/coded resulted from the hermeneutic circles.

The hermeneutic circles were performed with constant reference to the research questions around reasons for decisions toward SI and leadership style employed when making the decision, and the referenced theory, i.e., the TL. Specific to the TL, constant reference to the components of TL listed in the Multifactor Leadership Questionnaire/MLQ (Bass, B.M., and Avolio, 2015) were made. Therefore, themes/codes captured using the Nvivo program were potentially relevant to the two references. 75 themes/codes were identified and further refined to yield 64 themes/codes with stronger relevance to answer the research questions. Upon further delineation of general meaning following (Hycner, 1985) 12 main organizing themes were generated and listed as follows.

1. What attitude
2. Why attitude
3. Action to affect SI
4. Believe
5. Climate change
6. Corporate Responsibility
7. Reasons for decision
8. Investment management
9. Portfolio
10. Sustainable Investing (SI)

11. Transactional Leadership
12. Transformational leadership

The next hermeneutic circles were performed to further organize the overall flow of understanding of the whole phenomenon, a continuous and non-linear process to make sense of the whole from each piece of the information. General understanding around the overall context of SI suggested a common starting point i.e., climate change as the initial driver of the flow, followed by the attitude, reasons for decision, and finally the leadership style employed when making the decisions.

At the later stage, the similar hermeneutic circles were also conducted on the data obtained from the direct interviews.

The Results

The results of the hermeneutic circles following the above procedure are listed in the following tables, each summarizes answers to the research questions.

Table 2.
Summary of leaders' statements – reasons for decision

	Climate change as reason for decision	Risk-Performance	Stakeholder Demand Alignment	Value alignment
1. Aubrey Clemen				
2. Audrey Choi	1	3		
3. Frederic Samama	7	2		
4. Jean-Jacques Barberie	2	1		
5. Joyce Chang	1	2		
6. Larry Fink			3	
7. Matt Arnold		1		
8. Nicole Connoly		2	2	2
9. Oliver Bate	1			
10. Ommeed Sathe			1	
11. Rakhi Kumar	1			1
12. Scott Mather			1	
13. Sergio Ermotti			2	
14. Interviewee 1	1	1		1
15. Interviewee 2	1	5	4	

Table 3.
Summary of leaders' statements – transformational leadership components

	Idealized Influence	Individualized consideration	Inspirational Motivation	Intellectual Stimulation
1. Aubrey Clemen				
2. Audrey Choi				
3. Frederic Samama	1			3
4. Jean-Jacques Barberie	2			1
5. Joyce Chang			1	3
6. Larry Fink		4	1	3

	Idealized Influence	Individualized consideration	Inspirational Motivation	Intellectual Stimulation
7. Matt Arnold				2
8. Nicole Connoly			1	1
9. Oliver Bate			1	2
10. Ommeed Sathe				
11. Rakhi Kumar				2
12. Scott Mather			1	3
13. Sergio Ermotti				
14. Interviewee 1	5		1	14
15. Interviewee 2			2	1

Reasons for decision to invest through the SI strategy emerge from leaders' insight obtained from the hermeneutic circles and were supported by direct interviews. There are four reasons for decision i.e., (1) climate change, (2) stakeholders' demand alignment, (3) risk – performance consideration, and (4) value alignment. Climate change is viewed more as a context for the decision, while the other three are more direct antecedents to decision, although value alignment is not as strong and widely discussed as the other two i.e., stakeholders' demand alignment and risk – performance consideration. Special note is taken on stakeholders' demand alignment whereby such alignment may challenge the significant assumption basing the stakeholder theory (Freeman, 2001), which assumes that the interest of principal diverge from that of the agents.

Upon further explication of the data, the core purpose of the study starts being served, as it can be mentioned that leaders' statements when driving SI reflect demonstration of TL characteristics. The dominant TL characteristics in driving SI is Intellectual Stimulation as can be seen from the multiple statements made by multiple leaders. Such characteristic of SI includes the examination of critical assumptions to ensure their appropriateness, the pursuit of contrasting views in solving problems, encouragement for others to look at problems from different view, and suggestion in forms of new ways on how to complete tasks. While other characteristics of TL such Idealized Influence/Charismatic Leadership, Inspirational Leadership/Motivation and Individualized Consideration also emerge from leaders' statements, they are relatively less demonstrated. Therefore, Intellectual Stimulation represents major finding from the data.

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Conclusion

The above example shows the use of a proposed framework which could be used to study similar phenomenon, i.e., those with challenge to access the informants due to geographical and/or time availability constraints. The abundance of insights on the internet, along with established qualitative research methods, computer software, as well as accessible primary source represent opportunities to replicate the example to cover other topics.

Reasons for decision to invest through the sustainable investment strategy emerge from leaders' insight obtained from the hermeneutic circles and were supported by direct interviews. There are four reasons for decision i.e., (1) climate change, (2) stakeholders' demand alignment, (3) risk – performance consideration, and (4) value alignment.. While other characteristics of TL such Idealized Influence/Charismatic Leadership, Inspirational Leadership/Motivation and Individualized Consideration also emerge from leaders' statements, they are relatively less demonstrated. Therefore, Intellectual Stimulation represents major finding from the data.

Limitations, however, do present. Among the key limitations of the method is along the sincerity of the informants when making the public statements, along with the unknown vested interest. More primary data obtained through direct interviews may be needed to triangulate the findings, to a level that do not defeat the key feature of the method, i.e., using the public information. The other limitation is inherent in qualitative research such as a hermeneutic phenomenology, i.e., the generation of themes/codes are heavily influenced by the bias and limited knowledge of the researcher.

Further recommendations include time series study on the consistency between informants' statement and their real action, and the use of other method, especially quantitative studies to test the holding of the findings in different context, e.g., local, or regional rather than global.

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BIBLIOGRAFI

Alliance, Global Sustainable Investment. (2016). *Global sustainable investment review 2016*.

Bass, B.M., and Avolio, B. J. (2015). *Multifactor Leadership Questionnaire^{TM}*.

Bergé, Jean Sylvestre. (2018). *Global Phenomena and Social Sciences*. Springer
.
Brundtland, G. H. (1987). Our common future Oxford University Press. *New York*.

Cavana, Robert, Delahaye, Brian, & Sekeran, Uma. (2001). *Applied business research: Qualitative and quantitative methods*. John Wiley & Sons.

Duggan, M. (2013). Photo and video sharing grow online. Pew Research Center. <http://pewinternet.org/Reports/2013/Photos-and-ideos.aspx>

Duggan, M., Ellison, N. B., Lampe, C., Lenhart, A., and Madden, M. (2015). Social media update 2014. Pew Research Center. <http://www.pewinternet.org/2015/01/09/socialmedia-update-2014/>

Freeman, R. Edward. (2001). A stakeholder theory of the modern corporation. *Perspectives in Business Ethics Sie*, *3*, 144.

Gadamer, H. G. (1997). *Truth and Method. 2nd rev. ed. J. Weinsheimer and D. G. Marshall, Trans. rev*. New York: Continuum. (Original work published 1960).

Hycner, Richard H. (1985). Some guidelines for the phenomenological analysis of interview data. *Human Studies*, *8*(3), 279–303.

Kristiyono, N. H. et al. (2020). Social Media Data Explication to Support Study on Leadership Style for Sustainable Investing. *International Journal of Control and Automation*, *13*(4), 626–657.

Nations, U. (2014). Report of the Intergovernmental Committee of Experts on Sustainable Development Financing. *New York: United Nations Publication*.

NG, Hadi Cahyadi, TAN, Jacob Donald, Sugiarto, Sugiarto, Widjaja, Anton Wachidin, & Pramono, Rudy. (2021). Too Big to Fail: Succession Challenge in Large Family Businesses. *The Journal of Asian Finance, Economics, and Business*, *8*(1), 199–206.

Purwanto, Agus, Asbari, Masduki, & Hadi, Agus Hari. (2020). Pengaruh Gaya Kepemimpinan Tansformational, Authentic, Authoritarian, Transactional Terhadap Kinerja Guru Pesantren di Tangerang. *Dirasah: Jurnal Studi Ilmu Dan Manajemen Pendidikan Islam*, *3*(1), 85–110.

Ritchie, Jane, Lewis, Jane, Nicholls, Carol McNaughton, & Ormston, Rachel. (2013).

Qualitative research practice: A guide for social science students and researchers. sage.

Snelson, Chareen L. (2016). Qualitative and mixed methods social media research: A review of the literature. *International Journal of Qualitative Methods*, *15*(1),

Townsend, Leanne, & Wallace, Claire. (2016). Social media research: A guide to ethics. *University of Aberdeen*, *1*, 16.

Wanasida, Albert Surya, Bernarto, Innocentius, SUDIBJO, Niko, & PRAMONO, Rudy. (2021). Millennial Transformational Leadership on Organizational Performance in Indonesia Fishery Startup. *The Journal of Asian Finance, Economics, and Business*, *8*(2), 555–562.