

Learning Through Teaching: ATLAS.ti And Social Media

Andrea Potgieter

Abstract

Social Media is no longer a foreign concept in the current business environment. Companies, for the most part, understand the value that an effective Social Media strategy can add. Firstly, this paper reports on the possible use of ATLAS.ti in analyzing user interaction on Social Media platforms, in order to generate feedback that may assist companies in developing and maintaining a customer-focused Social Media strategy. Furthermore, this paper will discuss the researcher's decision to apply ATLAS.ti for this specific purpose, as well as the challenges and victories that were faced in introducing a post-graduate student to this tool.

Keywords

ATLAS.ti, Social Media, teaching, learning, post-graduate student

Introduction

With the rise of Social Media and Online Social Networking, Li and Li (2013) argue that it is advisable for organizations to actively collect and analyze customer opinions to gain business competitiveness, as opposed to waiting for customers to make first contact. Organizations should apply Social Media platforms as data sources for market research and align their business goals with customer expectations, derived from these platforms (Li & Li, 2013).

This paper aims to discuss the use of ATLAS.ti as a tool to aid organizations in analyzing customer interactions on Social Media platforms, specifically focusing on Facebook and Twitter in this study. Furthermore, this paper will offer a reflection on the challenges that were faced and successes that were had in using ATLAS.ti for this specific purpose, while introducing a novice researcher to the tool for the first time.

Literature

The World Wide Web has evolved into a platform whereby content and applications are no longer created and published by individuals, but instead are continuously modified by all users in a participatory and collaborative fashion (Kaplan & Haenlein, 2010). The tool that has made this collaborative environment possible is Social Media, and the interactive nature of this tool allows businesses to share and exchange information with their customers and also allows consumers to share and exchange information with one another as well (Sashi, 2012). Social Media operates "like a giant word-of-mouth machine, catalysing and accelerating the so-called viral distribution of information" (Gallaughner & Ransbotham, 2010), and some industry leaders claim that if you do not partake in Social Media, you are not part of cyberspace anymore (Kaplan & Haenlein, 2010).

Contemporary Social Media also offers a new way of customer interaction with business, which enables an individual to "consume, produce, and redistribute content" (Gallaughar & Ransbotham, 2010). Highly engaging Social Media campaigns involving user-generated content, has the potential to generate customer commitment to the brand, reinforcing loyalty and making the customer more likely to commit additional effort to support the brand in the future (Hoffman & Fodor, 2010). This implies that Social Media gives businesses two important options: Firstly, the traditional customer and business interaction is enriched, and secondly, customers and businesses are able to monitor what other customers are saying about the business (Gallaughar & Ransbotham, 2010).

Even though the idea behind Social Media is far from ground-breaking (Kaplan & Haenlein, 2010), companies need to embrace the shift in online customer interaction and, instead of managing customers, the role of the businesses should be to facilitate the collaborative experiences and dialogue that their customers value (Hoffman & Fodor, 2010), since, through the Internet, customer influence "extends beyond geographically proximate contacts, amplifies other customers' actions, shapes product success, and moulds markets" (Gallaughar & Ransbotham, 2010).

Kaplan and Haenlein (2010) note that using Social Media is not an easy task and that it may require new ways of thinking, but that the potential gains are far from being negligible; for example, Dell states that its use of Twitter has "generated \$1 million in incremental revenue due to sales alerts". However, Gallaughar & Ransbotham (2010) mention that, even though businesses recognize the importance and possible advantages of listening to and communicating with customers, many businesses are still struggling to navigate the emerging complex, consumer empowered environment. A reason for this struggle may well be because returns from Social Media investments will not always be measured in monetary value, but also in customer behaviours (consumer investments) tied to particular Social Media applications (Hoffman & Fodor, 2010). This implies that companies should see Social Media platforms as "transaction processing systems" where customers create messages and each message is equivalent to a transaction (Culnan, McHugh & Zubillaga, 2010).

In order to facilitate these online collaborative experiences and extract value from user interaction, businesses need to know how to use Social Media to their advantage, and to the advantage of their customers, since ultimately customers will benefit from a richer and more fulfilling online experience with the brands of their choosing. Baird and Parasnis (2011) state that consumers interact with businesses when they believe it is to their benefit, feel they can trust the company and decide Social Media is the right channel to use to get the value they seek. Fischer and Reuber (2011) see the value of this consumer interaction and mention that Social Media can provide a means of "observing" customers, getting to know customers' needs and preferences, thereby developing personal and company brands. Social Media also allows firms to create mechanisms for customer-to-customer dialog and then, more importantly, to monitor and mediate that dialog (Gallaughar & Ransbotham, 2010).

This paper proposes the use of ATLAS.ti as one such mechanism to monitor customer interaction with brands, and with each other, about those brands. Even though quantitative Social Media Analysis tools such as Web Analytics provide traditional attributes of page views and unique site visitors, Fisher (2009) states that this alone is not adequate anymore, since customers are talking to each other and these conversations do not necessarily happen on a platform that you can control or measure in the traditional sense. Also, with the use of qualitative Social Media Analysis tools, the analysis often "requires human intervention to remove duplications and also check which product or brand was actually referred to", and it is also generally agreed that "irony or sarcasm is very difficult for machines to understand" (Branthwaite & Patterson, 2011).

Fisher (2009) also states that Social Media interaction is about "engagement with your customers, your potential customers, and your critics, at every level of social interaction that modern communication has to offer" and that businesses need to look beyond traditional ways of measuring this interaction, and look "into the buzz, the opinions, voices and experiences that people are sharing about your brand". This paper proposes that ATLAS.ti is a tool that may be utilised to do exactly that, especially when taking the following differentiation between quantitative and qualitative research into account.

According to Branthwaite and Patterson (2011), the three key features that make qualitative research a unique and invaluable tool in marketing to consumers include:

- A conversation: a direct dialogue with consumers that is physically face to face, over the telephone or across Skype – or in the case of using ATLAS.ti, an analysis of customer conversation.
- Active listening for the underlying dialogue: the mental stance; frame of mind; reluctant, half-suppressed comments and admissions.
- An interactive "merging of minds" (or rapport): to achieve insights and possibilities that can be extrapolated to marketing issues.

As mentioned by Branthwaite and Patterson (2011), those three features of qualitative research stand in opposition to Social Media Monitoring (a predominantly quantitative monitoring method), which is:

- Based on an instantaneous, static expression giving a superficial appreciation of the consumer at a single moment;
 - Unable to probe and explore the gaps in what is said to get to the meaning behind the utterance;
 - A remote and vague understanding of the respondent; and
 - Powerlessness to extrapolate findings to new scenarios through "what if" questions.
- Therefore, even though the "chatter of a community can indeed be used to make quantitative predictions" (Asur & Huberman, 2010), the use of qualitative analysis methods through the use of a tool such as ATLAS.ti, could provide insight into customer interaction that will prove invaluable to businesses.

Using ATLAS.ti To Analyze Social Media Comments: The Process

The decision to use ATLAS.ti to analyze Social Media comments, was made while supervising a BA Honours Information Management student at the University of Johannesburg's Department of Information

and Knowledge Management. These students are expected to submit a print ready research article in their final semester of study and this article should, of course, include original empirical research findings. The author was assigned a student for supervision, and this student decided to base his research article on the interaction of consumers with specific brands on the Social Media platforms Twitter and Facebook.

It was assumed from the start that the research method would be qualitative in nature, as the student's research problem focused strongly on gathering customer insight and knowledge from Social Media interactions. The relevant research problem was established as follows: "What is the significance of online Social Networking in gathering customer insight and knowledge?" and the objectives of the study were to analyze the use of social networks by BlackBerry Ltd and Ford and to establish how these companies gather customer insight by using online social networks.

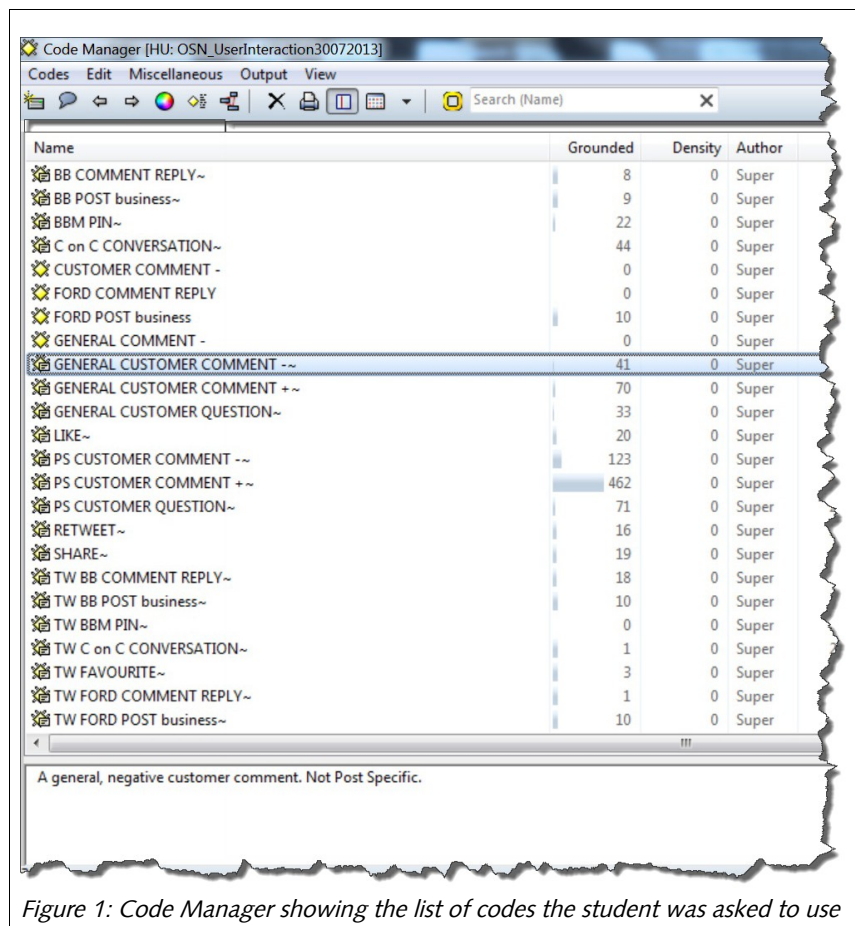


Figure 1: Code Manager showing the list of codes the student was asked to use

The research question "How does Social Networking help companies to gather customer insight and knowledge?", clearly requires not only quantitative data to be examined, as the need for insight requires an in-depth analysis of the actual conversations being had between the customers of these companies with the companies themselves, as well as with each other. In order to gain such insight, ATLAS.ti was suggested as the appropriate analysis

tool.

The author decided, since the student was a novice researcher, to guide him in his analysis of Social Media comments, and chose the comments for analysis for him. Twenty Facebook posts with their relevant comments, shares and likes, were selected – ten posts from BlackBerry and ten from Ford. The same principle was applied for Twitter interactions: twenty Tweets with their relevant replies, favourites and re-

Tweets, were selected – ten Tweets from BlackBerry and ten from Ford. The student was assisted in downloading the latest version of ATLAS.ti onto his laptop computer, through the University of Johannesburg's Centre for Technology Assisted Learning's (CenTAL) portal, ULink.

The author created a Hermeneutic Unit (HU) for the student and initially uploaded the ten Facebook posts for BlackBerry into the HU, before creating a code book for the student to use in his coding process.

The HU was then sent (after creating a "Copy Bundle") in its entirety, to the student by using a file hosting service. The student was informed about the coding process, and after a couple of examples, was left to code the remaining BlackBerry Facebook posts. Subsequently, the same process was followed with the ten Ford posts on Facebook and the ten BlackBerry Tweets as well as the ten Ford Tweets.

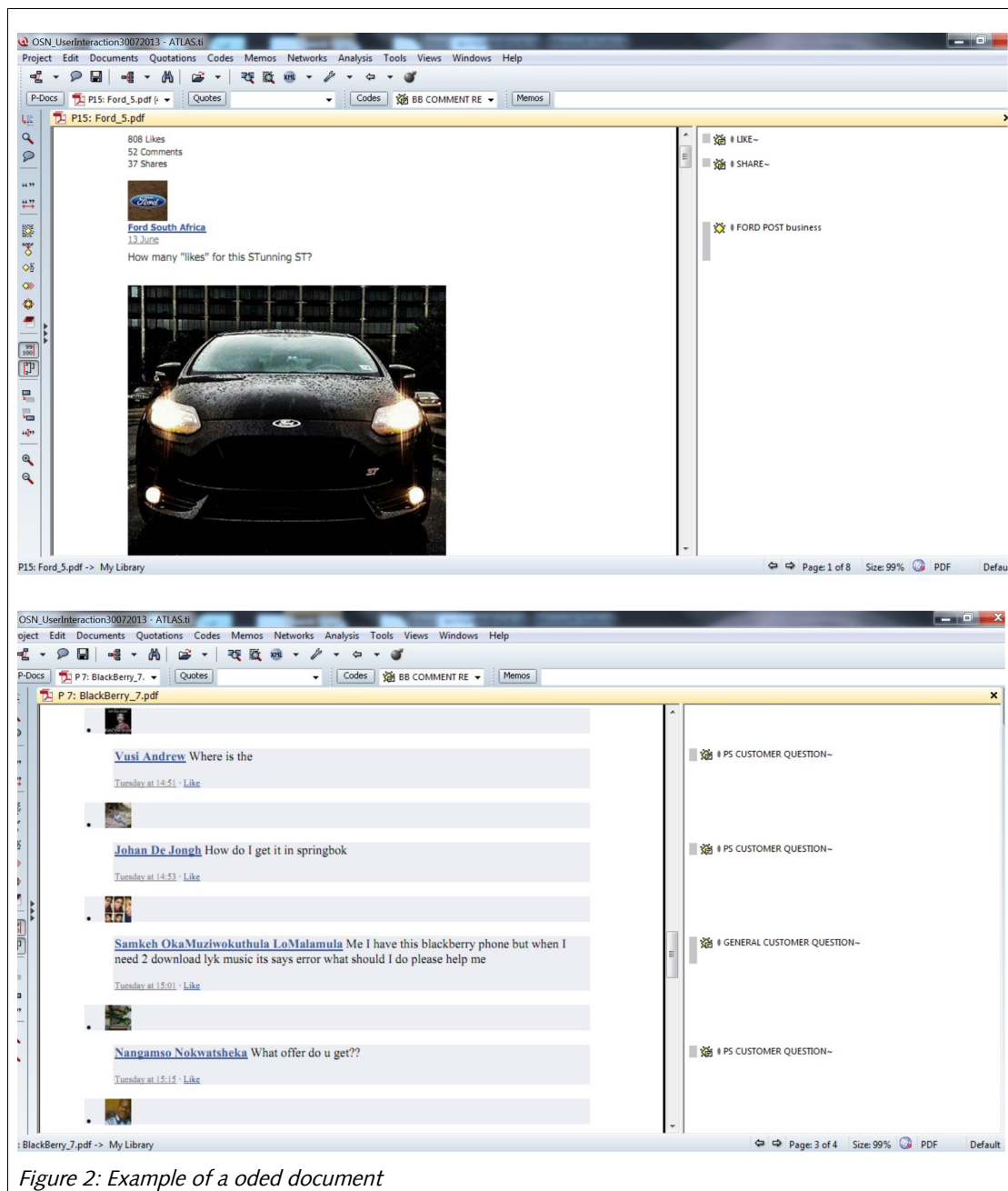


Figure 2: Example of a coded document

After the coding was completed by the student, the author showed him how to "print" the quotes from specific codes, as well as the process for creating a frequency table. The student was encouraged to experiment with ATLAS.ti, by creating different frequency tables and subsequently using the data to draw conclusions related to his research question and sub-questions.

	BlackBerry_3	BlackBerry_5	BlackBerry_6	BlackBerry_8
C on C CONVERSATION	0	1	5	3
GENERAL CUSTOMER COMMENT -	2	2	2	8
GENERAL CUSTOMER COMMENT +	5	16	4	4
GENERAL CUSTOMER QUESTION	2	1	2	2
PS CUSTOMER COMMENT -	20	4	16	22
PS CUSTOMER COMMENT +	33	19	30	11
PS CUSTOMER QUESTION	0	2	6	6
	Ford_4	Ford_5	Ford_6	Ford_8
C on C CONVERSATION	4	1	2	1
GENERAL CUSTOMER COMMENT -	0	0	0	0
GENERAL CUSTOMER COMMENT +	9	2	5	2
GENERAL CUSTOMER QUESTION	0	0	1	0
PS CUSTOMER COMMENT -	2	1	0	1
PS CUSTOMER COMMENT +	70	39	50	51
PS CUSTOMER QUESTION	7	2	4	0

Figure 3: Examples of a Codes-Primary Documents Table

Challenges During The Process

Introducing a student to a new tool, especially a tool which is new to the individual doing the introduction, is challenging in itself. Initially, the author did not take the student's level of computer literacy into consideration, making an incorrect assumption about his level of experience. This was especially evident in his use of Excel while experimenting with the frequency tables. However, the student showed great potential and that, combined with his enthusiasm and willingness to learn, proved to be a remedy for most of the computer literacy shortcomings.

Other challenges included the format in which the posts were uploaded into ATLAS.ti. The Facebook posts could be copied and pasted as text into a Word document and the uploaded into ATLAS.ti. However, the Twitter posts could not be processed in the same way, and had to be spliced together from screenshots, creating image files which were then saved as PDF documents, to be uploaded into ATLAS.ti. Obviously no quotes could be extracted as text from the Image-to-PDF Tweets, which proved to be a difficult but not impossible challenge.

Successes Of This Process

In the opinion of the author, the successes of this process far outweighed the challenges. The student was introduced to a new tool, opening countless opportunities to him in future research and possibly professionally as well, as he has already identified a possible gap for companies to use ATLAS.ti in streamlining their marketing endeavors.

Through this process, the author gained insight into the way students perceive research, which will definitely prove to be helpful in future interactions with students. Also, the skills gained from managing this process – both the challenges and successes, will be applied when introducing other academics and students to this tool.

Finally, the student was also able to answer his research question and sub-questions with conclusions drawn from the analysis of the ATLAS.ti-coded Facebook and Twitter posts, proving that this tool can in fact produce insight into the conversations that customers are having with businesses, and with each other.

Reflection And Final Comments

This paper discussed the use of ATLAS.ti as a tool to aid organizations in analyzing customer interactions on Social Media platforms, specifically focusing on Facebook and Twitter, and also offered a reflection on the challenges that were faced and successes that were had in using ATLAS.ti for this specific purpose, while introducing a novice researcher to the tool for the first time.

As mentioned by Smit (2003), when using computer aided text analysis, the researcher needs to appreciate that computers are not capable of comprehending or discerning meaning of words or constructs, as their real strength and contribution lies in ordering, structuring, retrieving and visualising tasks. ATLAS.ti as a tool in the process of analyzing Social Media interaction plays on all these strengths, to ultimately allow companies to monitor customer interaction on these sites, which could produce market intelligence and insights and could allow companies to "amplify positive messages, correct inaccuracies, and mitigate damage" (Gallaughner & Ransbotham, 2010).

Social Media interaction offers a valuable insight into the workings of the minds of consumers, and if tools such as ATLAS.ti are effectively utilised to harvest this insight, businesses may soon find themselves no longer struggling, but thriving in this emerging complex, consumer empowered environment. Teaching young researchers how to utilise a tool such as ATLAS.ti to accomplish this, is the first step in revolutionising the way businesses view Social Media interaction.

References

- Asur, S., & Huberman, B. A. (2010, August). Predicting the future with social media. In *Web Intelligence and Intelligent Agent Technology (WI-IAT), 2010 IEEE/WIC/ACM International Conference on* (Vol. 1, pp. 492-499). IEEE.
- Baird, C. H., & Parasnis, G. (2011). From social media to social customer relationship management. *Strategy & Leadership*, 39(5), 30-37.
- Branthwaite, A., & Patterson, S. (2011). The power of qualitative research in the era of social media. *Qualitative Market Research: An International Journal*, 14(4), 430-440.
- Culnan, M. J., McHugh, P. J., & Zubillaga, J. I. (2010). How large US companies can use Twitter and other social media to gain business value. *MIS Quarterly Executive*, 9(4), 243-259.
- Fischer, E., & Reuber, A. R. (2011). Social interaction via new social media:(How) can interactions on Twitter affect effectual thinking and behavior?, *Journal of Business Venturing*, 26(1), 1-18.
- Fisher, T. (2009). ROI in social media: A look at the arguments. *Journal of Database Marketing & Customer Strategy Management*, 16(3), 189-195.
- Gallaugh, J., & Ransbotham, S. (2010). Social media and customer dialog management at Starbucks. *MIS Quarterly Executive*, 9(4), 197-212.
- Hoffman, D. L., & Fodor, M. (2010). Can you measure the ROI of your social media marketing. *MIT Sloan Management Review*, 52(1), 41-49.
- Kaplan, A. M., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of social media. *Business Horizons*, 53(1), 59-68.
- Li, Y. & Li, T. (2013). Deriving market intelligence from microblogs. *Decision Support Systems*, 55(2013), 206-217. doi: <http://dx.doi.org/10.1016/j.dss.2013.01.023>
- Sashi, C. M. (2012). Customer engagement, buyer-seller relationships, and social media. *Management Decision*, 50(2), 253-272.
- Smit, B. (2003). ATLAS.ti for quality in qualitative research: a CAQDAS project. University of Pretoria Research Articles (Education Management & Policy Studies): *Education as Change*, 6(1), 130-145. doi: <http://hdl.handle.net/2263/4543>

Andrea Potgieter

Department of Information & Knowledge Management, University of Johannesburg. Email: apotgieter@uj.ac.za

Article Information

This article is published at the Digital Repository of Technische Universität Berlin, URN [urn:nbn:de:kobv:83-opus4-44230](http://nbn-resolving.de/urn:nbn:de:kobv:83-opus4-44230), <http://nbn-resolving.de/urn:nbn:de:kobv:83-opus4-44230>. It is part of ATLAS.ti User Conference 2013 : *Fostering Dialog on Qualitative Methods*, edited by Susanne Friese and Thomas Ringmayr. Berlin: Universitätsverlag der TU Berlin, 2014, ISBN 978-3-7983-2692-7 (composite publication), URN [urn:nbn:de:kobv:83-opus4-51577](http://nbn-resolving.de/urn:nbn:de:kobv:83-opus4-51577), <http://nbn-resolving.de/urn:nbn:de:kobv:83-opus4-51577>