

“Lovestorm” How a Local Community Reclaims Positive Public Perception by Using Social Media

András Ács¹ and Sissel Quistgaard Pagh²

¹Zealand Institute of Business and Technology, Næstved, Denmark

²Zealand Institute of Business and Technology, Køge, Denmark

anac@easj.dk

sipa@easj.dk

Abstract: “Online lovestorms” are a new phenomenon, which provides an interesting countermeasure to negative “online firestorms”, also known as “shitstorms.” Our research aims to detect indications of a lovestorm’s ability to drive change in society. In April 2015, residents from Lolland-Falster, Denmark started a “lovestorm” to achieve better public reputation of their home region. The rules for the lovestorm were simple. An informal group of initiators encouraged their social media peers to share positive stories on Facebook about the everyday life of the region. “Lolland-Falster Lovestorm” developed into an activist movement since then, with the aim to nuance the public discourse about the rural areas of Lolland-Falster for the better. Our paper aims to contribute to social media research by describing and analyzing this “social media lovestorm” phenomenon. We will also be analysing to what extent a primarily social media based activist group can change the general public opinion towards their own rural area. In order to find perspectives for future research of positive, activist social media campaigns (lovestorms), the analysis strives to understand the workings of this particular social media lovestorm.

Keywords: social media, electronic word-of-mouth, lovestorm, shitstorm, social cohesion

1. Introduction

Controversial stories can travel fast on social media. For example, when Donald Trump, the president of The United States of America posts a tweet, the viral effect of the 140 character long social media message can be widespread. But it also happens to regular citizens in everyday situations, that their messages go viral on social media, and later spread to nationwide media or even to the global scene. This phenomenon is called a “shitstorm” in Denmark, and can in some cases escalate beyond the scope of social media, and gain national mainstream media coverage and thus affect the national agenda. In recent years several examples of this have been observed in Denmark (Brandt, 2015; Jensen, 2016). Since 62% of the Danish citizens above 12 years of age are using Facebook on a daily basis (Christensen, 2015), a majority of the society can be reached through Facebook. The term “shitstorm” can be traced back to Germany, where it was elected as the “Anglicism of the Year” in 2012 (Waldman, 2012). Since then, it has been used in the German and Danish media to describe sudden waves of public controversy amongst social media users with negative opinions on a specific topic. The word itself is now an official part of both the German and the Danish vocabulary, despite the Oxford Dictionary of English considering it to be *vulgar slang*.

In academic terms, a shitstorm can be described as an online firestorm, a negative online word-of-mouth (WOM) or electronic word-of-mouth activity (eWOM). WOM and eWOM research has a longer tradition in the field of marketing. Current marketing research seeks to understand the dynamics of the negative word-of-mouth in social media to offer courses of action for marketers, so they can better navigate through shitstorms (Pfeffer, 2014). Another scientific approach to the topic is more computational, where scientists are modelling the spread of negative word-of-mouth in online social networks, and searching for factors that are related to the spread of negative WOM (Stich, 2014). Furthermore, commercial companies are working on algorithms, which can analyze real-time media data with a big data approach to detect and observe online firestorms while they happen.

Lolland and Falster are two Danish islands with approximately 103,000 inhabitants (Statistics Denmark, 2016), where local digital activists were trying to mimic the viral effects of the shitstorms, but with an opposite starting point. They have turned the “shitstorm” term upside down by launching a campaign called Lolland Falster Lovestorm. Their hope was to achieve a similar rapid spread of messages, like those of shitstorms, but instead of spreading negative messages, they hoped to share positive messages about their region.

The region of Lolland-Falster has been struggling with socio-economic problems since the 1990s, and it is often referred in negative terms in the mainstream media, as the “Periphery of Denmark” (udkantsdanmark) or “The

Rotten Banana” (den rådne banan.) In April 2015, the national tv-channel, TV 2, started airing the documentary series “På røven i Nakskov” (“Ruined in Nakskov”), which portrayed the area as a place with hopeless social challenges. (Nakskov is one of the biggest cities in the area.) The lovestorm was started then as a reaction to the documentary series, in order to create a counter-agenda and change the public opinion about the islands for the better. The backbone of their efforts was a social media campaign, the Lolland-Falster Lovestorm. A local citizen, Kirsten Sydendal, introduced the #LollandFalsterLovestorm hashtag on Facebook, Twitter, Instagram, LinkedIn and created blogs and social media groups with one purpose:

“To invite the broader public to tell the good stories about Lolland and Falster with text, images and videos.” - from our interview with Kirsten Sydendal

This online lovestorm provides an interesting countermeasure to a shitstorm, which is “an unexpected, persistent wave of indignation over the behavior of public figures or institutions, transported via social networks and blogs (Waldman, 2012).” A lovestorm in our terms is a persistent wave of expressions of sympathy and compassion. Lovestorms seek to emphasise, develop and echo the positive stories on a specific topic by spreading positive messages across several social media platforms. Also, lovestorms invite the public to spread the good messages in order to enhance the general attitude towards the topic of the lovestorm. A successful lovestorm has a simple positive message, which invites for participation and co-creation, and resonates well with a larger group of social media users. Opposed to shitstorms, where uncontrolled internet trolls disrupt online communication with offensive or provocative statements, lovestorms are more organized, where the lovestorm participants spread, echo and develop the positive stories instead of keeping focus on negative issues.

To understand how the shitstorm and lovestorm terms have been used in the Danish media, we have queried a nation-wide media database for all the occurrences of the words (1) shitstorm and (2) lovestorm from 2000 to 2016. The full-text database search included articles from newspapers (both offline and online), news programs from tv-stations and radio-channels that are monitored by the online media monitoring service, Infomedia (Infomedia, 2016). Figure 1 illustrates the results of our queries.

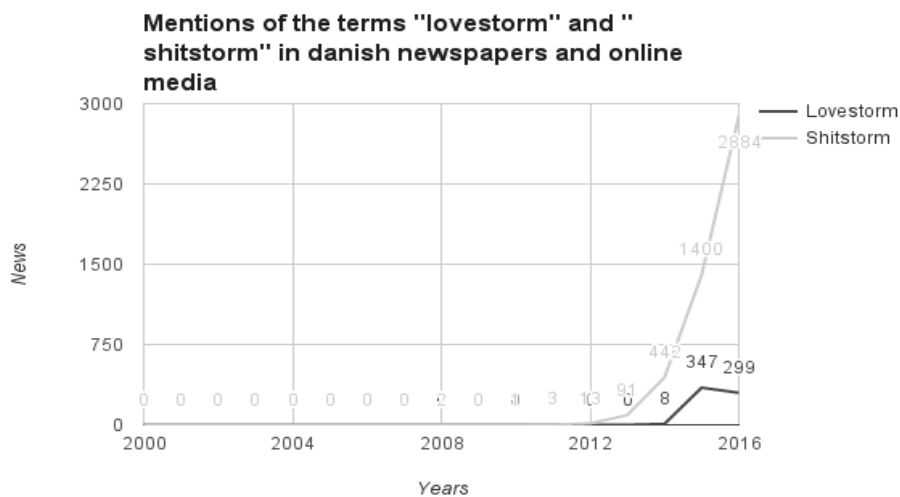


Figure 1: Mentions of “shitstorm” and “lovestorm” in the Danish news coverage (print, online, TV and radio)

Several major news outlets began using the shitstorm term in 2012, and the lovestorm term in 2015. While the usage of the term “shitstorm” has been showing exponential growth in the mainstream media from 2012 to 2016, its counterpart, the “lovestorm” term has not been growing as consistently. After a period with rapid growth the usage of this particular term seems to decay after reaching 347 counts (figure 1). This indicates, that while shitstorms continue to be a growing topic in the national media coverage, the lovestorm expression has not yet won such widespread usage - if it ever will.

The “lovestorm” seems to be a one of a kind phenomenon, which is not so widespread as shitstorms. The term is mostly used in connection to the specific Lolland Falster case, where the concept of the lovestorm gradually emerged among the lovestorm’s group members. We use the term social cohesion to describe this process, as the individual’s feeling of maintaining and joining social connectedness through their wish to create or participate in social interaction in a group (Friedkin, 2004).

2. Research

As “lovestorm” is a new term in the danish language, our research seeks to uncover the qualities of this term by doing empirical research on the topic. This paper intends to uncover and describe the origins and the qualities of the “lovestorm” term. Furthermore, we are interested to find out, how the lovestorm movement succeeds changing a stigmatising discourse.

We seek to analyze the Lolland-Falster Lovestorm phenomenon with a combined analytic approach, where we inspect the case from different angles and triangulate our findings to be able to present the readers with a contemporary understanding. We do not seek to achieve a complete understanding with our research, but merely try to establish a here-and-now understanding of the case in order to inspire further research in lovestorm-thematics. We also want to expand on the fact that the Lolland-Falster Lovestorm is not finished yet. It is continuing to evolve and change, transforming itself into new forms and directions.

The starting point for our work was desktop research. We have reviewed several viral stories online to be able to identify shitstorms and lovestorms in Denmark. We have found several examples of shitstorms (Brandt, 2015 and Jensen, 2016) and a few examples of lovestorms (Sydendal, 2015 and Andersen, 2014) in the media. Additionally, we have also conducted a semi-structured interview with the initiator of the Lolland-Falster Lovestorm movement, Kirsten Sydendal, to learn more about the intentions of the lovestorm. We have learned, that Kirsten (among others) was using voluntary time and effort on introducing and developing the lovestorm. When asked about the public perception of the region of Lolland-Falster, Kirsten was convinced that the lovestorm played an important role in changing its own citizen’s perception of the region. (Our later research seems to support this claim.)

We have also been provided access to observe the lovestorm’s Facebook group (Lolland-Falster Lovestorm, 2015) through a group data analytics tools called Grytics (Grytics, 2016). The data consists of approximately 8,000 posts and 40,000 comments. With approximately 23,000 members, we consider the group to be the backbone of the Lolland-Falster Lovestorm movement, and we have gone through all the posts from the lovestorm’s beginning to find suitable periods for our analysis. We focused our efforts to timeframes where the discussion in the group was least influenced by external factors. Afterwards, we conducted a critical discourse analysis of the interactions within the group. Considering the ethics of the analysis, we have used a non-interventional, observational method, where the participants were not aware of our analysis. This would normally raise privacy concerns, but as all the social media data, we have analysed, was available to the general public, we have not asked the individual participant’s consent. We were analysing the social media groups dynamics and concerns, and not the individuals. At last, we have chosen to anonymize some of our data to avoid exposing individuals. Our analysis specifically covers the periods of:

- April 19 to April 26, 2015 with 2,995 posts and 11,998 comments.
- May 9 to 15 2016 with 99 posts and 356 comments.
- December 12 to 19 2016 with 67 posts and 307 comments.

In our analysis, we looked for patterns of words, themes, and subjects in the group members posts and comments with the help of critical discourse analysis rooted in Foucault’s definition of discursive formations:

“Whenever one can describe, between a number of statements, such a system of dispersion, whenever, between objects, types of statements, concepts, or thematic choices, one can define a regularity (an order, a correlations, positions and functioning, transformations), we will say, for the sake of convenience, that we are dealing with discursive formation. Michel Foucault’s The Archeology of Knowledge as cited in (Bom, 2015).

The 2,995 posts and 11,998 comments of the first week analysed (April 19 to April 26, 2015) have formed the basis for our analysis’s thematics. We searched for words and themes repeated within the groups communication and hence compared these findings to the activity in the group later on to detect the shaping of a discursive formation. These can disclose the discourse established within the Lolland-Falster Lovestorm group.

Before embarking in the discursive analysis, we made a listing of our own preconceptions to unbias our own subjectivities in the data. There is also a question of reliability that must be addressed as the systematic analysis of posts and comments have been conducted on three selected weeks. This leaves a gap in time where the communities communication is not accounted for.

2.1 Inside the lovestorm, a discourse analysis of the Facebook group Lolland-Falster Lovestorm

The critical discourse analysis of the interactions in the lovestorms Facebook group seeks to find answers to the research question on how the group aims to shift focus from the region's socio-economic challenges and provide a more positive discourse of the region, than for example, the negative descriptions used in the media like “Periphery of Denmark” or “The Rotten Banana”. The Facebook group Lolland Falster Lovestorm is a public Facebook group. That means, that the users must be members of the group to write posts and comments in the group, but since it is public, everyone can see the group’s content like posts, comments, and members. In the following, we will be referring to this group as “the group” (Lolland-Falster Lovestorm, 2015).

In the treatment of data from the group, we have been using the Grytics tool (Grytics, 2016). Grytics divides the group data into different parameters, such as the number of reactions a post receives. Reactions are interpreted as an indication of how well the posts content resonates within the group. Comments is another parameter, which is referring to comments on the member's original posts. These can provide insight into the users’ attitudes and feelings for the featured content. A third parameter is whether a post will be shared with a member's own Facebook friends. This indicates which content the members perceive valuable enough to share with people outside the group. All of the three aforementioned parameters sum up to measure the engagement on specific actions within the group, which we use in the analysis to find the most widely accepted discursive formations in the group.

The following figure depicts the number of posts created from April 2015 to January 2017. It reveals a high activity level at the time the group was formed. The number of posts falls drastically from the first months and is at its lowest point in December 2015. This is where the group gradually starts to build activity again.

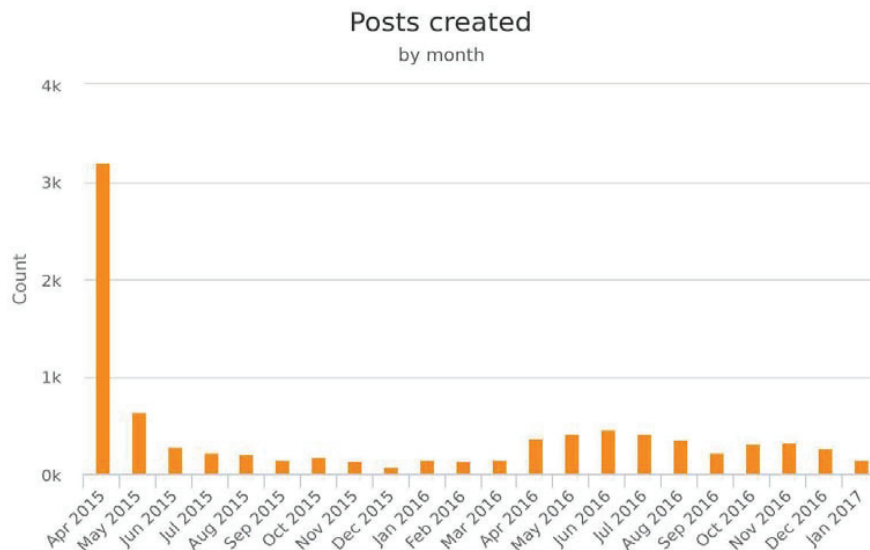


Figure 2: Posts created by month in the Facebook group LF Lovestorm from April 19th 2015 - January 23rd 2017 (Grytics, 2017)

András Ács and Sissel Quistgaard Pagh

We have chosen to analyse the group's inner discourse in details from three different selected weeks. The three weeks were selected because of their relevance for further analysis, based on our preliminary understanding of the lovestorm. The first week analyzed is from the start of the lovestorm, the second selected week is from a year after the start, and the last selected week is from latest available data, december 2016. Posts containing photos are highly represented within the selected weeks of the analysis. In the first week, 1,476 post contain photos, making up about 49% of all posts. The majority of photo posts grows in the two other selected weeks to 79% in week two and 64% in the last selected week, December 12 to 19 2016. The following text is going to explain our analysis in details.

The first period of the analysis is based on the activity in the Facebook group from April 19 to April 26. This is the first week of the group's existence. The posts in this time period pivots on the members defining themselves as a group, and on how they conduct themselves on the social network site. The comments show, how the group is forging social cohesion by forming a common consensus on how to communicate, use the group, and the media. The lovestorm's initiator, Kirsten Sydendal, repeatedly posts a similar worded update describing the group's objectives. (The following quotes are all from the Lolland-Falster Lovestorm Facebook group, translated from Danish by the authors.)

"Thursday, April 23 TV2 starts a program called "Ruined in Nakskov", but we are tired of once again being labeled. We will not minimize the problems. (...) A shitstorm is a sea of negative publicity on the social media. We will do the opposite. A lovestorm: An ocean of positive publicity on social media. We simply can not sit idly by, when these programs run. We will show the rest of Denmark, what Lolland-Falster also is, and that we are proud of our area." (Kirsten Sydendal)

The language used is informal and has a welcoming tone of voice, while she urges members on how to communicate in purpose of the lovestorm. Along with other group members, she enhances the ways of communication within the group, for example emphasising the need for using hashtags when sharing both within the group or on Facebook in general. It indicates, that not all group members are accustomed to the media's possibilities when wanting to gain a greater reach.

The number of members in the group grew rapidly within the first days, and new members exhibited both enthusiasm and pride in the apparent great support of the initiative. One of the members of the Facebook group, who has had moved away from the region, points out some of the dilemmas of the region, especially for young people. For example, there are more possibilities for work and studies if you move to Copenhagen. At the same time, she also points out a different dilemma, which she encounters when she talks to people about where she is from. A dilemma that confirms the negative discourse and view of the rural area.

"(...)I have repeatedly experienced, when people ask me where I'm from, and I of course answered "I'm from the lovely Lolland" that they tilt their heads to the side and sigh "awr I feel for you" (a post from a Lovestorm group member)

This topic is not mentioned as directly in other posts, and thus cannot directly be classified as a theme, though it points out the negative discourse, which the lovestorm is addressing and pivots on the them-and-us debate.

In opposition to shitstorms, the tone of voice as demonstrated is enthusiastic and positive and in a high degree uses pathos to gain sympathy to the initiative. The gathering of the online community is established within the first week and a sense of social connectedness emerges as members fight marginalisation and create a sense of belonging in their social interactions in the Facebook group. The use of the words we, ours, and their is strongly represented in both posts and comments within the first selected week of the analysis (see figure 3).

When compared to the two other selected weeks of the count of the words "we", "our" and "their" decreases, though are still present. This could be due to the nature of the community's formation, as the group in the first week is defining themselves and posting updates. They are directly speaking about the cause as the group has already established its foundation. The group makes a shift from dominantly posting positive stories to prove a point, to the mere existence where their points made are being confirmed.

András Ács and Sissel Quistgaard Pagh

Dominant topics in posts and comments	
Topic	Keywords
Nature	Nature, view, great, beautiful
Food production	Organic, food
A sense of belonging	Local, born local, newcomer, "lollok"
Cost of living	Cheap, price
Employment	Job
Culture	Culture
Community	Neighbor, we ..., our...
Periphery of Denmark	The South Sea Islands, Coastal Denmark + synonyms

Figure 3: Dominant topics in posts and comments from April 19th 2015 - January 23rd 2017.

The beginning of a thematic discourse formation is observed within the interactions of the first weeks, as the Lovestorm begins to address positive stories from the local environment. Data from three selected periods depict how members use word play to come up with a more positive spin to the earlier mentioned negative terms of Periphery of Denmark or The Rotten Banana. One of these is *Food Region Denmark*, referring to an international cooking competition held in the region. Other emerging nicknames are *Coastal Denmark*, *The South Sea Islands*, *The Golden Banana*, *Beachfront Denmark* and *Handsome Edge Denmark* all directing attention to the nature of the region. The South Sea Islands and Coastal Denmark have the largest count of mentions, respectively 144 and 36 times. The other nicknames were only mentioned once, and did not catch on. The majority of the new emerging nicknames refer to the region's rich nature, which gains a thematically dominant presence in posts of both text and photos. Specifically, the photos shared predominantly depict landscapes, the changing of the seasons, sunsets, and sunrises. From the selected weeks posts with the highest reactions where images of sunset (2015) tulips in spring (2016) and the Faroe bridge in Christmas (2016). A high number of reactions and comments as aforementioned provide us with insight into user attitudes and feelings for the featured content. Comments on these posts have a high degree of the words "beautiful" or "great" followed up by an emoji, often a heart.

Both nature and food are two themes that are highly presented in the posts in the Facebook group. Food as a theme derives from the areas farm shops and the local production of vegetables. One post uses ethos in their argumentation to build on the credibility of the region, when stating that a local apple wine is seizing the Chinese market, while another group member points out that a wine from Nakskov won a medal. The members of the group describe how Lolland Falster has a variety of choices:

"Some travel to London to do their shopping, others prefer Paris. Now I'm on the way to my hood, namely Nakskov. Where I will fill the car with apples, juice and jam from Fejø, we will take a walk through Søndergade and shop some clothes, (...)" (a post from a Lovestorm group member)

The Lolland-Falster Lovestorm Facebook group seems to be successful in sharing the positive stories, as it was the objective of the group. Discursive formations and thematics on a bountiful and beautiful nature, cheaper living conditions, as well as the helpfulness of neighbours and good networks emerged. Statements on the friendly local spirit, where everyone knows each other and wants to help each other is yet another theme that is pointed out in several posts. In one of the most responded posts, the subject in matter is confirmed, with a post from a woman who came to Lolland as a refugee when she was a girl. In the post, she speaks of the regions volunteers, helpfulness of neighbors and their children. The number of engagements the post received gives us insight into the attitudes on the features content (2,460 likes, 145 comments and was shared 95 times). This is on the one hand, a personal story of a refugee and traumatic experiences replaced with happier

childhood memories, but it is also a story of the region standing together to help one another. There is a pride to the cause and the social connectedness seems to be confirmed furthermore in a post, which announces that the Lolland-Falster Lovestorm initiative is nominated to a community price. The post is liked 1,000 times and commented 302 times with at least one heart in almost all comments.

The lovestorm pictured here is an online activist movement with a high grade of self-governance by a group of enthusiastic core members, and thousands of regular members, who also participate in the process of co-creation by telling the good stories for each other. However, did these stories ever leave the region to make an impact on the surrounding society?

2.2 The lovestorm's interaction with the surrounding society

We have gone through all the articles referencing Lolland or Falster in nationwide media in the same two weeks in April 2014, 2015 and 2016. The articles were categorized positive, negative or neutral, according to their content. The majority of the articles were describing the events of the region objectively and without prejudice and was categorized as neutral, but some articles had clear negative or positive connotations. The following figure shows that there are more positive stories in the nationwide media a year after the lovestorm, than a year before.

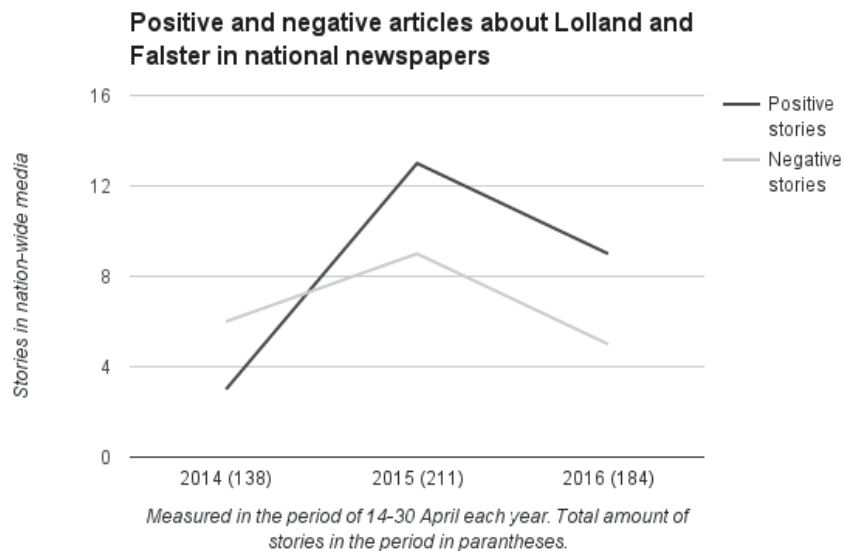


Figure 4: Positive and negative stories

There is an obvious peak in both positive and negative stories in the media in 2015, where the tv-series were shown and the lovestorm was born. This data seems to confirm, that there were more negative stories about the region than good ones before the lovestorm, and that this has changed after the lovestorm. Here are some examples of the stories:

Positive stories	Negative stories
<ul style="list-style-type: none"> ▪ In debt citizens can get good help on Lolland ▪ Cheese from Lolland gets gold medal ▪ Lolland Falster, a destination actually worth visiting ▪ Lolland has relatively high spendings on art 	<ul style="list-style-type: none"> ▪ Lolland heavily underperforms on the real-estate market ▪ Layoffs are expected in the region ▪ Churches are almost empty on Lolland, should be closed ▪ Local youth has a hopeless future ▪ Problematic to help drug addicts

Most of the stories seem to be in the same discursive formations and thematics, as within the earlier discussed Facebook group, for example about the beautiful nature and the good quality of the local food products. Finally, the word "lovestorm" has been elected to be "The Word Of The Year" in Denmark by the Union of Communication Professionals, because the word itself has been used so effectively in the Lolland Falster

Lovestorm case, that it has gained widespread public acceptance and usage (Olsen, 2015), which also indicates, that surrounding society have noticed the lovestorm.

3. Summary

We have described and discussed the Lolland-Falster Lovestorm case in order to contribute to social media research within the topic of positive online eWOM, or simply put "lovestorms on social media".

The particular lovestorm we have analysed, showed both similarities and differences compared to shitstorms. Similar to traditional shitstorms, the lovestorm had an external trigger, which initiated the storm. The trigger was a tv-documentary with negative stories from the region of Lolland-Falster. This could have resulted in a shitstorm towards the tv-channel, if not for a small group of activist citizens who had explicitly changed the rules by urging their social media connections to tell good stories about the region instead of complaining about the tv-program. This resulted in several thousands of Facebook posts in the first month of the lovestorm, showing and sharing the good things about the region. The lovestorm was also picked up by the national news and television.

The objective of the Lolland-Falster Lovestorm Facebook group was to use a bottom up approach to change the negatively charged discourse about Lolland Falster. The group has succeeded with sharing positive updates and comments about the region on a daily basis. The Facebook group turned out to be a forum, where locals can join forces as a community. It is our belief that this could contribute to a greater sense of social cohesion. Social connectedness within the group's members is enhanced by the use of words like "we" and "our", as well as by declaring their positive affiliations with the region. The lovestorm connected the local citizens on social media in a new manner, which seemingly enabled them to cooperate in new, constructive ways.

At the same time, the national media's coverage of the region also seems to have changed. Our review of national news indicates that more good stories were told about the region after the lovestorm, than before. Although this does not prove causal relationship between the lovestorm and the improved media coverage, but it could be an indication that the lovestorm held a part of the change.

3.1 Perspectives

As for now, the Lolland Falster Lovestorm phenomenon seems to stand alone, but the case might inspire new lovestorms, where there is a need to build social cohesion within local communities. Although there are yet many questions regarding the lovestorms, which are seeking for answers. Could the lovestorm be developed into a strategic framework to be used in social media? Can social cohesion be ignited and developed through positive online social media activities in general? How do lovestorms compare to positive eWOM's dynamics? These questions could not be answered for now, and they call on future research.

References

- Andersen, D. R., (2014), "Når det blæser op til kærlighed". Article at kforum.dk. Available at <http://www.kommunikationsforum.dk/artikler/det-modsatte-af-shitstorm-er-lovestorm> (Accessed: december 2016)
- Bom, A.K. (2015), Diskursanalytisk metode, Samfundslitteratur. pp 13-36.
- Brandt, C. (2015), "Shitstorm almanakken: Det var vi rasende over på de sociale medier i år", News article from dr.dk. Available at: <http://www.dr.dk/nyheder/kultur/medier/shitstorm-almanakken-det-var-vi-rasende-over-paa-de-sociale-medier-i-aar> (Accessed: december 2016)
- Christensen, D. (2016), Media Development 2015, [Online]. Available at: <http://www.dr.dk/om-dr/about-dr/media-development-2009-2015> (Accessed: december 2016)
- Friedkin, N. (2004), Social Cohesion, Article in Annual Review of Sociology
- Grytics (2016), Facebook Group Analytics. [Online]. Available at: <https://grytics.com/>, a subscription service. (Accessed: december 2016)
- Infomedia (2016), Infomedia Media Archive. [Online]. Available at: <https://apps.infomedia.dk/mediarkiv/>, a subscription service. (Accessed: december 2016)
- Jensen, K. V. (2016), Her er 12 danske shitstorme. Article from Finans.dk. Available at: <http://finans.dk/live/erhverv/ECE8375403/her-er-12-danske-shitstorme/?ctxref=ext> (Accessed: december 2016)
- Lolland-Falster Lovestorm (2015), An open Facebook group. Available at: <https://www.facebook.com/groups/lollandfalsterlovestorm/?fref=ts> (Accessed throughout january - december 2016)

András Ács and Sissel Quistgaard Pagh

- Olsen, M. (2015) Årets ord: Lovestorm. News article at Folketidende.dk. Available at: <http://folketidende.dk/Lokal-nyt/AArets-ord-Lovestorm/artikel/320369> (Accessed: december 2016)
- Pfeffer, J., Zorbach, T. & Carley, K.M., (2014). Understanding online firestorms: Negative word-of-mouth dynamics in social media networks. *Journal of Marketing Communications*, 20(1-2), pp.117–128.
- Statistics Denmark (2016), Statistics Denmark. [Online]. Available at: <http://dst.dk/en>, (Accessed: december 2016)
- Stich, L., Golla, G. & Nanopoulos, A., 2014. Modelling the spread of negative word-of-mouth in online social networks. *Journal of Decision Systems*, 23(2), pp.203–221.
- Sydendal, K. (2015), Lolland-Falster Lovestorm, Available at: <https://lollandfalsterlovestorm.wordpress.com/> (Accessed: december 2016)
- Waldman, K., (2012), "Germans Select "Sh*tstorm" as "Anglicism of the Year"". Article at Slate.com. Available at http://www.slate.com/blogs/browbeat/2012/02/14/shitstorm_was_english_s_most_helpful_contribution_to_german_last_year.html (Accessed: december 2016)