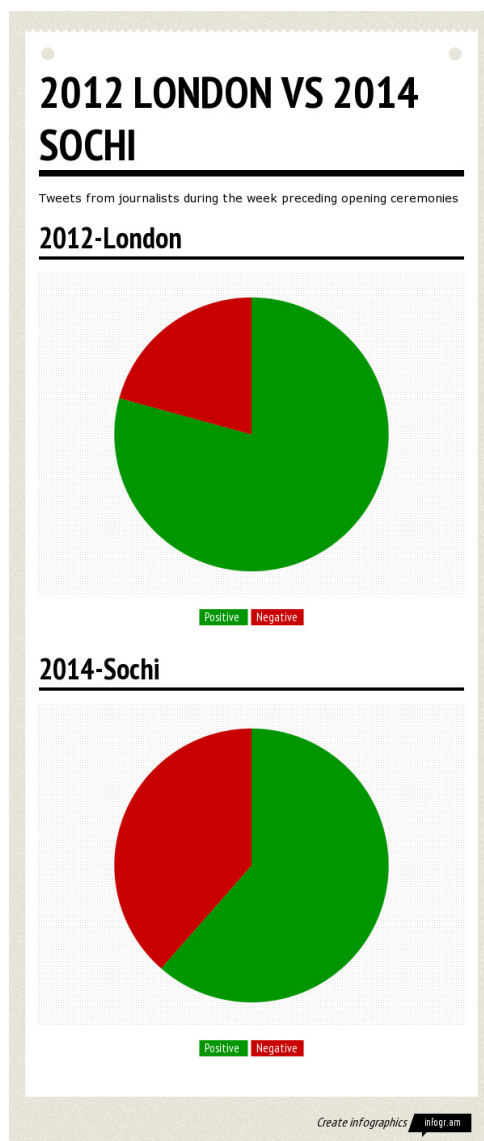


SPOTLIGHT ON SOCHI:

Social Media Analysis Series

TONAL SHIFT

BAE Systems is partnering with Homeland Security Today magazine to produce a daily report that provides a unique perspective on the 2014 winter games in Sochi, Russia.

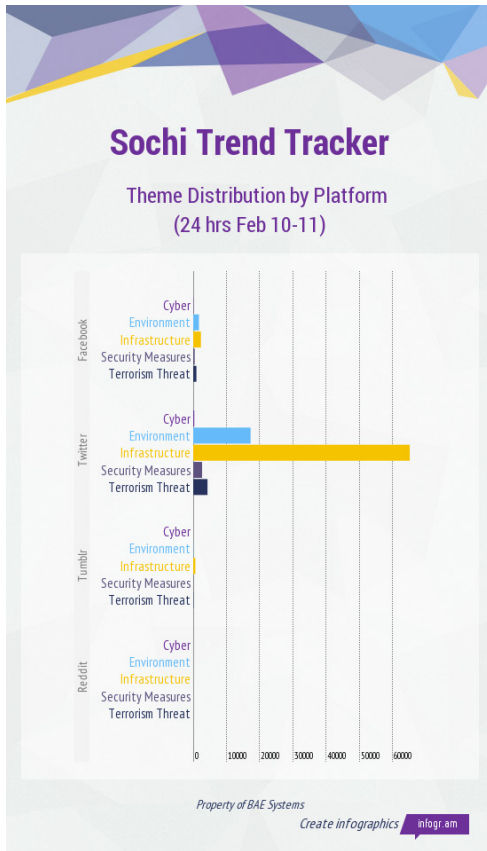


The winter games in Sochi, like other major athletic competitions, thrive on media attention. Journalist-provided free marketing draws in viewers, grants prestige to the competition, and adds brand value to the event's merchandise and trademarks.

While the Sochi games have received significant media attention, it hasn't all been flattering. The hashtag #sochifails and the account @sochiproblems have become popular social phenomena focused on administrative and infrastructure-related mistakes by Sochi administrators. Prominent social issues, from LGBT rights to Russia's foreign policy, have also been covered extensively in stories nominally about the games.

Sochi is certainly not the first major sporting event to receive negative press. Before the London games in 2012, issues with construction, traffic, and funding were frequently criticized by journalists. However, analysis of social media data may indicate more serious problems with Sochi's media relations than normal.

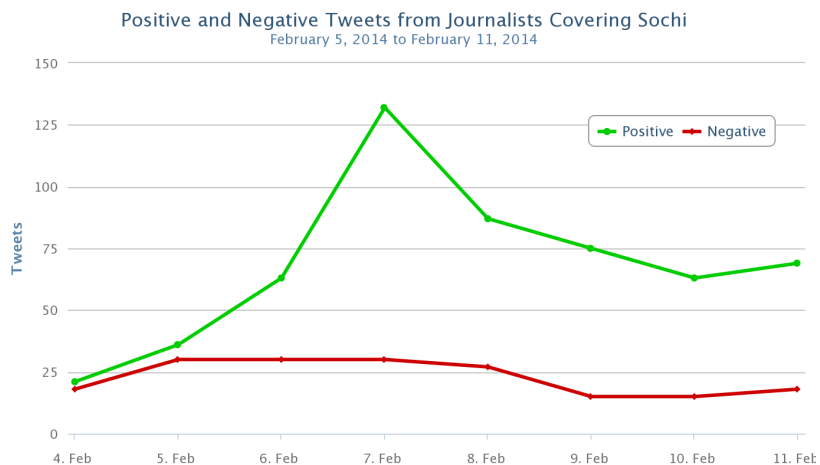
To examine this issue, we used sentiment analysis, a technique designed to determine the how positive or negative the language in a body of text is. Sentiment analysis involves breaking down a text into words. These words are then matched against an external database, which assigns a sentiment value to the word. Words like "happy," "awesome," or "fun" receive high sentiment values. Words like "sad," "terrible," or "pain" receive low value. These scores are aggregated to determine the sentiment of the text. This type of analysis can be imprecise, so it is most useful when looking for general trends across a dataset.



We applied sentiment analysis to tweets from respective groups of English-language journalists attending the London and Sochi games. We focused on the week preceding the respective opening ceremonies in order to find a similar period in the media cycle. Tweets from journalists attending the London games, where a clear sentiment value could be determined, produced a much higher average sentiment score. Journalists in our London sample set sent 57 tweets categorized as negative and 218 categorized as positive, approximately a 1-to-4 negative-to-positive ratio. Journalists in our Sochi sample set sent 111 negative tweets and 177 positive tweets, more than a 3-to-5 negative-to-positive ratio.

There are likely a variety of reasons for this relatively low sentiment. The majority of these journalists are based in Europe or North America, continents where opinions of Russia are likely to be less positive than opinions of the United Kingdom. The low sentiment may also be due to the relatively media-unfriendly stance taken by Russian officials. News reports have discussed efforts by Russian authorities to control and limit journalists ahead of the games. Watchdog organizations like Reporters Without Borders and the Committee to Protect Journalists have issued reports accusing the Russian government of violence and intimidation against journalists. American journalist David Satter, historically critical of the Russian administration, was expelled from the country in the weeks prior to the games.

However, despite the somewhat negative media atmosphere surrounding the buildup to games, the coverage will likely become noticeably more positive as competition ramps up. As the availability of stories documenting athletic victory and defeat increases, the need for journalists to find hard hitting expose`s will decrease, and the benefit to focusing on inspirational victories and star athletes will increase. This trend is evident when examining the sentiment score of tweets before and after opening ceremonies. In the days following the opening ceremonies, negative tweets have decreased to one fifth the amount of positive tweets.



Games organizers need journalists. But journalists need the games, too. Every four years, billions of consumers will read, listen, and watch stories that pour out of one city faster than journalists can collect them. With proper management, this symbiotic relationship can be the key to ensuring that the respective benefits of games hosting - positive publicity for the nation and its leadership along with easy rating numbers - are maximized for both parties.

Concerns about security issues, and likewise the social media chatter about them, change constantly as the environment around the winter games evolves. Understanding how and why those changes occur will help us better understand both the mood on the ground in Sochi and emerging concerns from the worldwide audience. For the duration of the games, the BAE Systems Advanced Analytics Lab is tracking dynamic social media activity related to common security issues by category and will report daily on how that discussion progresses.

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