Abstract. or marketing to function in a globalized world it must respect a diverse set of local cultures. With marketing efforts extending to social media platforms, the crossing of cultural boundaries can happen in an instant. In this paper we examine how culture influences the popularity of marketing messages in social media platforms. Text mining, automated translation and sentiment analysis contribute largely to our research. From our analysis of 400 posts on the localized Google+ pages of German car brands in Germany and the US, we conclude that posting time and emotions are important predictors for reshare counts.

1 Introduction

To a large part, marketing can be summarized as giving consumers what they want [1, 2]. In the right contexts, a proven method is to do this informally [3]. While informal, heard it through the grapevine communication channels have always been important to marketing niche products and in conquering new markets, social media enables marketers to use word of mouth propagation for more established mainstream products as well [1, 5]. Since word of mouth is a very powerful vehicle to transport marketing messages [6], marketers seek to harness the power of social media to enlist users not only as consumers but as propagators and endorsers of products [7], to e.g. make them partners in the co-creation process of a brand. As Kitchen [5] demonstrates, social media can be used very cost effectively, enabling marketers to reach millions of users with only a negligible amount of resources.

It is therefore tempting to use social media marketing efforts to spread across traditional borders and reach for new markets. However, there is a risk associated with this: communication needs to be careful when crossing borders venturing into the realms of other cultures.

A lot has been written about the need for culturally-aware communication and the management of global brands in a globalized economy [8–11]. It is generally recommended [12], to develop culturally similar markets when moving one’s brand abroad. This is, because culturally accurate (i.e. functioning) translations of marketing and branding messages are very complex to produce. In this paper we seek to examine how the access to word of mouth propagation changes
across cultures. To answer this question we employed data and sentiment mining techniques to the social media posts of two brands (BMW and Audi) in two countries (Germany and the US) and compared the factors that contributed to these posts being endorsed by users.

This paper is organized as follows. We will first review the literature on social media, our target platform Google+ and how marketing is done there. We then turn our attention to cultural aspects of communication and marketing. We complete this paper’s theoretical part with a concise review of sentiment mining methodology. We then present the method behind our data harvest/generation and introduce the statistical models we optimized. Finally, we discuss our findings and close with some concluding remarks that point to further research.

2 Social Media Marketing

In this section we focus on a rather novel arena of marketing: social media marketing. To this end we will give a short run-down on social media and then introduce a recently becoming increasingly popular social media platform: Google+ [13, 14]. Because of its comparably young age, Google+ has not yet received widespread attention in academia, apart from its technical aspects [15]. This is perhaps due to its somewhat differing implementation of classical social media.

Social media and online social networks refer to a rather new phenomenon in human, internet-based communication. Diverging from a dogma that had been valid for about two decades, users themselves started out using blogs to regularly provide content themselves. While blogs were and still are appealing to users interested in writing longer texts, social media as a mass phenomenon took off only after the introduction of communities centered around profiles, frequent status updates and shared content creation. Today, leading examples of social media platforms are Facebook, Twitter, vKontakte and Google+, to name but a few. While the implementation details differ from a technical point of view, there is a common theoretical framework.

In the center of social media are user following relationships. They can be thought of as (directed) graphs linking up users. From a network theoretical point of view, this graph has small world properties and has a node distribution that follows a power law [16, 17], thus being very similar to actual, offline human behavior. This relationship is called following and implies that messages sent by a user will be pushed into the stream of news all of her followers receive. While some social media platforms require reciprocal fellowship relations (e.g. Facebook, LinkedIn), others don’t (e.g. Google+).

Once a message gets pushed to a user, that user can decide on how to further treat the message. Besides the obvious ignoring, a user has two levels of endorsement to choose from: liking and resharing. Endorsements are then pushed further downstream the user’s network. The lesser form of endorsement, liking, does usually not contain the endorsed message but only the fact that a message from the original author was endorsed and a link to that message. User interfaces will also show likes not as prominently as reshares. With reshares the entire