Social media marketing practices and consumer reactions:  
a content analysis on Facebook brand pages

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Abstract
Social media marketing (SMM) is becoming relevant in marketing communication strategies for successful firms in recent years. Even with the COVID-19 pandemic, social media allowed the companies to interact with the consumers and all people to stay in contact, even if they were far away. These digital tools are important for the consumer and firms due to the connection that can be created for sustaining competitive advantage from a marketing perspective. Companies invest in developing innovative communication solutions that create a relationship with consumers to understand their opinions and needs.
The purpose of the paper is to analyze the role of SMM strategies to support communication processes that generate higher levels of engagement in order to stimulate greater consumer responses. The work uses a content analysis on a sample of four Facebook brand pages operating in the automotive industry (BMW, Honda, Mercedes-Benz, and Toyota). Regression analysis is used to test the proposed model.

Keywords: Social media marketing, Consumer-brand relationship, COBRA, Consumer engagement, Automotive.

Introduction
Social media are revolutionizing many of our habits, becoming part of our daily lives as a tool with great potential. Several authors give a social media definition (Mangold and Faulds 2009; Kaplan and Haenlein 2010). In particular, Filo et al. (2015) define social media as ‘‘new media technologies facilitating interactivity and co-creation that allow for the development and sharing of user-generated content among and between organizations (e.g. teams, government agencies and media groups) and individuals (e.g. customers, athletes and journalists)’’. These innovative tools have enabled distant people, colleagues and students to stay in touch. In line with the connection between the people, organizations adopted social media to reach them (Miller et al., 2009). Using these digital marketing solutions, companies effectively increase value equity by providing new value to customers that traditional marketing means usually do not provide (Zahoor and Qureshi 2017). Hence companies benefit from consumers sharing posts that showcase their new needs, wants, and preferences (Baldwin et al., 2006; Kamboj et al., 2018). This creates a relationship between the brand and consumers, which must be nurtured over time (Hudson et al., 2016). By here, the necessary for managers and researchers to monitor and measure this relationship. The consumer online brand-related activities (COBRAs) framework could be valuable for a manager that can measure the consumer reaction to their effort on SMM communications (Ashley and Tuten, 2015; Buzeta et al., 2020). In the automotive industry, this is important because social media is no longer just attracting customers by placing adverts but is also focused on getting customer opinions to develop new products that satisfy future customer needs (Babčanová et al., 2021).
This paper aims to advance the research on SMM strategies. More specifically, we explored social media trends in the automotive industry. Consistent with these statements, the research questions of the paper are as follows:
RQ1: What are the automotive industry’s recurrent social media marketing practices?
RQ2: Which trends can generate much response in terms of consumer reactions?
The structure of the article is organized as follows. Paragraph one profiles the theoretical background according to the most recent studies on SMM and its impact on consumer-brand relationships. Also is investigated the consumer-brand online related activities in order to
understand how to measure consumer reaction. The second describes the methodology used to explore our multiple cases. The third section briefly summarises our findings and discusses our study’s main results and theoretical and managerial implications. Finally, the conclusions underscore limits and discuss future research opportunities.

1. Theoretical Background

1.1 Social media marketing (SMM) in brand management

In literature, there are many definitions of SMM (Dwivedi et al., 2015; Tuten and Solomon, 2015). Li et al., 2021 define it as “an organization’s integrated pattern of activities that, based on a careful assessment of customers’ motivations for brand-related social media use and the undertaking of deliberate engagement initiatives, transform social media connectedness (networks) and interactions (influences) into valuable strategic means to achieve desirable marketing outcomes.”

From a strategic perspective, SMM is something different from traditional methods of marketing; indeed, it is linked to relationship marketing, where the firms need to shift from “trying to sell” to “making connections” with the consumers; where the brand, easily accessible, can be more in touch with the consumer by showing itself more friendly (Gordhamer, 2009). There are many benefits for the brand in doing SMM strategies (Tsimonis and Dimitriadis, 2014) that are: a) Brands can effectively develop and sustain relationships with customers; b) Firms can reach out to people that otherwise could not be reached; c) Social media relationships can boost sales; d) due to viral content can generate EWOM; e) Social media practices can establish and raise brand equity, awareness, and image. Social media interaction creates a consumer-brand relationship in which consumers derive satisfaction through increased attachment to brands, which companies use to better understand and respond to customer needs, generating more brand loyalty and profitability (Hudson et al., 2016). Sreejesh and Roy (2015), in their work, analyze the consumer-brand relationship and divide it into four stages with seven different dimensions: 1) relationship establishment (brand attitude and brand satisfaction); 2) relationship augmentation (brand attachment and brand trust); 3) relationship maintenance (brand commitment); and 4) the relationship outcome (brand equity and brand loyalty).

From a branding perspective, social media can play a crucial role in the automotive industry. Indeed, social media practices can increase the brand image and sustain brand trust that could drive re-purchase intentions (Wiedmann et al., 2011; Waluya et al., 2019).

1.2 Consumer online brand-related activities

Business recognizes that receiving positive consumer feedback online is essential, requiring attention to SMM strategies. With these new innovative social media trends, the consumers can feel parts of a brand becoming active creators and contributors of brand-related content (Muntinga et al., 2011; Schivinski et al., 2021). In this vein, Muntinga et al. (2011) defined the COBRAs as “a set of brand-related online activities on the part of the consumer that vary in the degree to which the consumer interacts with social media and engages in the consumption, contribution, and creation of media content.” Also, the authors classified the possible consumer behaviour into three categories based on the level of action required: a) consuming, b) contributing, and c) creating. Starting with this, Kim and Yang (2017) categorize social media behaviours into three levels distinguished by cognitive efforts. They state, “While a click is enough for like, comment and share need additional actions that ask extra commitment or cognitive effort. Second, a share may be a higher level than a comment.” In particular, sharing a post requires more effort as users pay more attention to what they share than what they comment (Kim and Yang 2017). Many authors have been researching COBRAs (Piehler et al. 2019; Buzeta et al. 2020; Schivinski et al., 2021). Buzeta et al. (2020)
explore how social media practices use motivations to drive consumers’ online brand-related activities. Additionally, Piehler et al. (2019) investigate word of mouth and remuneration motivations as antecedents of COBRAs. Schivinski et al. (2021) examine the perceptions of brand equity influence consumers’ propensity to engage with brand-related content on social media.

Coherently, we propose an original theoretical model (Figure 1) that considers the SMM efforts that can establish a consumer-brand relationship capable of generating a response from the consumer that can be measured as more or less intense by the degree of effort they make in responding.

![Figure 1 – Theoretical model](image)

Source: Our elaboration.

2 Research design and methodologies

Following the aim of the study, content analysis on the brand post was employed. By gathering data from the previous step, an OLS regression technique was performed to investigate the relationship between social media practices and consumer response.

Coherently, this study has used qualitative and quantitative research methods to compare some companies present in the automotive industry. The selection criterion adopted in the empirical study has extracted the brands from the Interbrand ranking (Best Global Brands 2020), selecting all automotive brands (i.e. four brands) in the top 20 of the ranking: Toyota (7th in the ranking), Mercedes-Benz (8th in the ranking), BMW (11th in the ranking), and finally Honda (20th in the ranking).

Data of these brands’ social media pages (i.e. Facebook) were collected by using FanPage Karma tools for three months (July 2021- September 2021). This software makes it possible to analyze and obtain data on the number of fans, engagement (Engagement is the average number of interactions on a profile’s posts per follower per day), post-interaction (Post-Interaction is the average number of interactions on a profile’s posts per follower per post), number of posts, posts per day, likes, comments, share, page performance index (Root product between the comparison values of the engagement value and the average weekly growth of a Page). We chose to analyze Facebook as the world’s most popular site in terms of time spent (https://www.pewresearch.org/internet/fact-sheet/social-media/).

In Table 1, the main data about these brands are reported. Starting with the posts analysis of the brands selected, the authors conduct a content analysis (Kolbe and Burnett, 1991; Hsieh and Shannon, 2005). So, the first step of the analysis is to define the unit of analysis, which captures the basic unit of data to be analyzed and coded (Elo
and Kyngäs, 2008). According to Smith et al. (2012), we process brand posts and all the additional information they incorporate (i.e., texts, photos, videos, hashtags, and links) as a unit of analysis. The second step is to review the relevant literature to identify pre-existing coding categories. Following Tafesse and Wien’s research methods (2017), we use their layered coding procedure that includes 12 specific categories to categorize all posts. These categories are: 1) Emotional brand posts; 2) Functional brand posts; 3) Educational brand posts; 4) Brand resonance; 5) Experiential brand posts; 6) Current event; 7) Personal brand posts; 8) Employee brand posts; 9) Brand community; 10) Customer relationship; 11) Cause-related brand posts; 12) Sales promotion. The authors double-coded the validation sample of brand posts (n = 337) manually, without communicating to identify their specific coding decisions (Kolbe and Burnett, 1991). The procedure was based on a binary coding adopting the value of 1 when one of the Tafesse and Wien’s categories was present and 0 when it was not present. The measures referred to the consumer efforts (i.e. Like, comments and share) are used as ratios, divided by the total number of likes the page had at the time of posting, and are transformed with the use of natural logarithms following previous research (De Vries et al., 2012; Sabate et al., 2014; Schultz, 2017; Antoniadis et al., 2019). Using these variables, in the paper is estimate the following OLS regression (De Vries et al., 2012; Sabate et al., 2014; Schultz, 2017; Antoniadis et al., 2019):

\[ y_i = \beta_0 + \beta_1 \times \text{Emotional brand posts} + \beta_2 \times \text{Functional brand posts} + \beta_3 \times \text{Educational brand posts} + \beta_4 \times \text{Brand resonance} + \beta_5 \times \text{Experiential brand posts} + \beta_6 \times \text{Current event} + \beta_7 \times \text{Personal brand posts} + \beta_8 \times \text{Employee brand posts} + \beta_9 \times \text{Brand community} + \beta_{10} \times \text{Customer relationship} + \beta_{11} \times \text{Cause-related brand posts} + \beta_{12} \times \text{Sales promotion} + u_i \]

Table 1 – Facebook brand metrics.

<table>
<thead>
<tr>
<th>Brand</th>
<th>Fans</th>
<th>Post</th>
<th>Like</th>
<th>Comments</th>
<th>Share</th>
<th>Engagement</th>
<th>Page Performance Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMW Italia</td>
<td>1.103.870</td>
<td>89</td>
<td>120.164</td>
<td>6.518</td>
<td>4.953</td>
<td>0.13%</td>
<td>3.00%</td>
</tr>
<tr>
<td>Honda Italia</td>
<td>102.747</td>
<td>42</td>
<td>4.457</td>
<td>346</td>
<td>436</td>
<td>0.06%</td>
<td>2.00%</td>
</tr>
<tr>
<td>Mercedes-Benz Italia</td>
<td>1.175.651</td>
<td>143</td>
<td>52.380</td>
<td>2.310</td>
<td>3.803</td>
<td>0.06%</td>
<td>2.00%</td>
</tr>
<tr>
<td>Toyota Italia</td>
<td>779.489</td>
<td>63</td>
<td>317.374</td>
<td>10.686</td>
<td>10.302</td>
<td>0.52%</td>
<td>6.00%</td>
</tr>
</tbody>
</table>

Source: Our elaboration by Fanpage Karma (September 2021).

3 Findings

The data analysis produced 337 posts resulting from 89 posts for BMW Italia, 42 for Honda Italia, 143 posts for Mercedes-Benz Italia, and 63 for Toyota Italia (see Table 1). Mercedes-Benz Italia was the brand with the higher number of followers (1.175.651), followed by BMW Italia (1.103.870). Toyota Italia resulted in being the brand with the higher page performance index (6.00%), followed by BMW Italia (3.00%). Additionally, Toyota had the highest engagement (0.52%) among the brand observed.

Table 2 displays the OLS regression estimates for the automotive brands’ posts are examined. The Adj. R² value of each model ranged from 0.222 – 0.367, with a higher value for like ratio (0.367) and share ratio (0.294). In all cases, the variance inflation factor (VIF) values were significantly lower than the critical value of 10, which indicates the absence of multicollinearity (Kennedy, 2008). The main results show that brand community (-0.614) and cause-related (-0.606) brand posts have a significant and negative effect on the like ratio. Additionally, emotional (0.574) and brand resonance (0.524) posts significantly and positively affect the share ratio. Instead, customer relationship posts (-0.646) showed a negative and significant effect on the share ratio. Finally, sales promotion posts seem to have a higher significant and positive effect at p<0.01 for all consumer efforts.
3.1 Discussion, managerial and theoretical implications

SMM is becoming a trend that companies cannot underestimate. Indeed, the automotive industry is significant because cars represent a status symbol that is strongly connected with the brand. Due to this status symbol, consumers want to participate in developing new products. So the companies must establish a relationship with the consumer that needs to be nurtured on time, and social media practices represent an excellent way to do that. The main objective of companies could be to receive consumer opinion and sharing, which is the highest effort generating brand-related activities. This work tries to understand the main contents that can generate that kind of consumer effort on social media in the automotive industry.

Table 2 - Regression results for the automotive brand pages

| Source: Our elaboration. |

| Source | Our elaboration. |

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ln_Like Ratio</td>
<td>Ln_Comment Ratio</td>
<td>Ln_Share Ratio</td>
</tr>
<tr>
<td>1</td>
<td>Emotional brand posts</td>
<td>0.405 (2.18)***</td>
</tr>
<tr>
<td>2</td>
<td>Functional brand posts</td>
<td>0.363 (1.16)</td>
</tr>
<tr>
<td>3</td>
<td>Educational brand posts</td>
<td>-0.234 (0.88)</td>
</tr>
<tr>
<td>4</td>
<td>Brand resonance</td>
<td>0.322 (2.59)***</td>
</tr>
<tr>
<td>5</td>
<td>Event brand posts</td>
<td>-0.239 (1.11)</td>
</tr>
<tr>
<td>6</td>
<td>Current event</td>
<td>-0.042 (-0.15)</td>
</tr>
<tr>
<td>7</td>
<td>Personal brand posts</td>
<td>-0.290 (1.05)**</td>
</tr>
<tr>
<td>8</td>
<td>Employer brand posts</td>
<td>-1.827 (-1.72)</td>
</tr>
<tr>
<td>9</td>
<td>Brand community</td>
<td>-0.814 (-2.34)***</td>
</tr>
<tr>
<td>10</td>
<td>Customer relationship</td>
<td>-0.377 (-2.59)***</td>
</tr>
<tr>
<td>11</td>
<td>Cause-related brand posts</td>
<td>-0.606 (-3.30)***</td>
</tr>
<tr>
<td>12</td>
<td>Sales promotion</td>
<td>2.689 (8.00)***</td>
</tr>
<tr>
<td>oms_</td>
<td>-7.747 (-32.11)***</td>
<td>-11.081 (-34.97)***</td>
</tr>
<tr>
<td>n</td>
<td>337</td>
<td>297</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.349</td>
<td>0.254</td>
</tr>
<tr>
<td>Adj. R-squared</td>
<td>0.347</td>
<td>0.222</td>
</tr>
<tr>
<td>F-statistic</td>
<td>17.200</td>
<td>8.050</td>
</tr>
<tr>
<td>Mean VIF</td>
<td>1.73</td>
<td>1.77</td>
</tr>
</tbody>
</table>

Notes: *p < 0.10; **p < 0.05; ***p < 0.01

The study shows that emotional brand posts have a significant and positive effect on the highest consumer effort due to the kind of post. In fact, emotional brand posts evoke consumer emotions, for example, showing inspiring stories that can generate stronger feelings and emotions, creating an emotional relationship between consumer and brand (Davis, 2014; Tafesse and Wien, 2017) and improving digital customer-based brand equity (Swaminathan, 2016). The brand is crucial in expressing consumer self-image using preferred brands (Vernuccio et al., 2015). In the automotive, that is a key factor resulting in the study for the brand resonance post, which creates a positive and significant effect on the share ratio. With these kinds of posts, firms try to differentiate their brand appropriately in consumer minds, reinforcing brand identity, image, personality, and association. Finally, a sales promotion brand post is most effective in terms of reaction. This could be expected because that kind of post pushes the consumer to action (Tafesse and Wien, 2017).

This study can be significant to understand the content trend on social media in the automotive industry; this is important because social media strategy can be adapted in line with the most effective post type. In fact, the manager should understand that the choice of content is essential. For example, the findings highlight the role of sale promotion posts that can engage consumer reaction in the automotive industry.

4 Conclusion
The purpose of this paper was to investigate what kind of post can generate a consumer reaction in terms of efforts in the social media page of the Italian automotive industry. In the paper, the authors used a layer coding procedure to label the selected brand’s post in twelve distinct categories. That allows a regression analysis to understand how consumers react to the twelve categories and generate the most expensive consumer effort (i.e. share).

This study has some limitations. First, the generalisability of the finding has to be considered. The research refers only to the Italian Facebook brand page, which could be enlarged to the world page or a different country page. Moreover, the firms analyzed are in the automotive industry, and it could be interesting to explore what is happening in other industries. Additionally, the $R^2$ and the Adj. $R^2$ values highlight the fact that other variables (e.g. image, video, text, etc.) could improve our explanatory model for better understanding the consumer engagement related to posts. Finally, to explore the result could be used other kinds of analysis (SEM) and methodology, for example, using Facebook business manager data to get more insight.

References


