Abstract:
Given the importance of a business being able to create a positive brand image and positively influence customer buying behaviour, there is a lack of research on the role that social media tools can play in this regard. Research studies have focussed on determining the advantages of using social media tools, however, the impact of social media tools specifically on businesses’ brand image and customer buying behaviour has not been investigated. In addition, this has not been researched in the context of food retailers. The South African food retail industry is an important contributor to this developing country’s economy. However, Gross Domestic Product growth and sales growth in the South African food retail industry are stagnating. Therefore, the primary objective of this study is to investigate the influence of social media tools on brand image and customer buying behaviour in the food retail industry. A questionnaire was used in an empirical investigation to gather the responses of 180 customers in Nelson Mandela Bay, South Africa. The questionnaires were subjected to various statistical analyses and significant relationships were found among the independent (Official websites, Facebook and Twitter), intervening (Brand image) and dependent (Customer buying behaviour) variables. This study’s recommendations could assist South African food retailers to use social media tools in ways to ensure a positive brand image, and to positively influence customers’ buying behaviour. This may lead to more successful food retailers and ultimately contribute positively to the South African economy.

Keywords:
brand image; customer buying behaviour; food retail industry; social media tools

JEL Classification: M31
Introduction and problem statement

The South African retail trade sub-industry contributes approximately 5.7% to this developing country’s Gross Domestic Product (GDP) (Aye, Balci̇lar, Gupta & Majumbar, 2015, p. 67). Young and Tilley (2006:402) as well as a report by PriceWaterhouseCoopers (PWC, 2012, p. vi,17,20) also highlight the amount of employment opportunities that retailers offer, as well as other factors that provide evidence that the importance of retailers are growing. These factors include retailers’ dominant role in supply chain control and retailers’ contribution to sustainability. South African retailers, especially food retailers, are also expanding to neighbouring countries which leads to retail supermarketisation in other African countries (BMR, 2014, p. 13). This shows the regional value of South African food retailers, as they offer more employment opportunities and aim to further improve economic growth.

The Bureau of Market Research’s 2014 forecasts also indicated that the retail product group that will attract the most sales in the near future is food, beverages and tobacco (BMR, 2014, p. 38). However, the forecasts also show that the proportion of income spent on the food category will decrease over the medium to long-term (BMR, 2014, p. 38). Durham (2011, p. 33) concur that South African customers are pessimistic and it is evident that the growth trends in food retail sales have stagnated (BMR, 2014, p. 44). Among different types of retailers, food retailers had the lowest annual growth rate in 2013, being -0.4% (BMR, 2014, p. 24). Future projections show that food retailers can expect increasing costs and lower sales (PWC, 2012, p. 6). In addition to a lower sales growth rate, slow GDP growth is predicted for South Africa (Kumo, Rieländer & Omilola, 2014, p. 3; PWC, 2012, p. 6). Already, on a quarter-on-quarter seasonally adjusted annualised basis, the economy expanded 1.3% in the first quarter of 2015, slowing from a 4.1% increase in the last 2014 quarter (Taborda, 2015).

Due to the lower GDP growth, and specifically the lower sales growth among food retailers, these businesses should focus on marketing to create value for customers, and in return capture value from customers (Kotler, Armstrong & Tait, 2010, p. 19; PWC, 2012, p. 19). One part of marketing is promotion or marketing communication, which entails communicating with current and potential customers to convince them that the business’ products are better than those of competitors, and to position the products in the minds of customers (Lamb, Hair, McDaniel, Boshoff, Terblanche, Elliott & Klopper, 2015, p. 31,381). There are three primary purposes for marketing communication: to increase product awareness, to persuade people to purchase the product, and to remind people that the product exists (Kotler & Keller, 2012, p. 504-505; Lamb et al., 2015, p. 397). Considering this, one could argue that marketing communication aims to improve a business’s brand image (linking to product awareness and reminders about product existence), and to increase customer buying behaviour positively (linking to the persuasion to purchase).

One way in which marketers can improve their businesses’ brand image and customer buying behaviour, is to effectively use the Internet (Berndt & Tait, 2014, p. 221,226-
227; Kotler et al., 2010, p. 518-519). With the introduction of advanced technology there is an increased potential for marketers to use the Internet for promotion (Thackeray, Neiger, Hanson & McKenzie, 2008, p. 338) or marketing communication purposes (Kotler et al., 2010, p. 36; Papasolomou & Melanthiou, 2012, p. 322). Social media tools, defined as online platforms which provide users with the opportunity to upload content and share information (Asur & Huberman, 2010, p. 492), can be used by businesses. However, the degree to which social media applications impact businesses’ marketing communication has not been thoroughly researched (Thackeray et al., 2008, p. 339). The existence of a relationship between the use of social media tools and the creation of a positive brand image and positive customer buying behaviour, specifically in the food retail industry, is still to be measured. The problem statement of this study is therefore formulated as a question:

**What is the influence of selected social media tools on food retailers’ brand image and customer buying behaviour?**

**Objectives**

The primary objective of the study is to identify the influence of three social media tools (independent variables) on brand image (intervening variable) and ultimately customer buying behaviour (dependent variable) in the food retail industry. By understanding the influence of the social media tools, recommendations can be proposed to food retailers on how to use social media tools to create a positive brand image as well as improve customer buying behaviour.

**Literature review**

In South African, customers allocate over one quarter of their household expenditure to food and beverages, which includes their spending at food retailers (PWC, 2012, p. 13). Eight out of every 10 South African retailers trade in food (PWC, 2012, p. 13). The retail environment is however continuously undergoing many changes (Dunne Lusch & Carver, 2011, p. 4; Ferrell & Hartline, 2010, p. 161). Retailers have to regularly adapt their strategies to fit changing customer preferences and purchasing patterns (BMR, 2014, p. 14; PWC, 2012, p. vii). An area to focus on is marketing communication to possibly improve a business’ brand image and customer buying behaviour. Creating a positive brand image in the minds of customers is a very important objective of any business (Jue, Marr & Kassotakis, 2009, p. 2; R.O.I. Media, 2013). Brand image refers to the overall impression that a business communicates to its stakeholders, including customers. A retailer’s brand image consists of the public and specifically target markets’ perceptions and attitudes of its products/services (Bygrave & Zacharakis, 2009, p. 106; Kapferer, 2008, p. 174; Kotler et al., 2010, p. 246). According to Kotler et al. (2010, p. 242) a positive brand image will possibly ensure advantages to a business. A positive brand image could ensure positive word-of-mouth, brand loyalty, market growth, a competitive advantage as well as higher sales and profits (Kirby & Marsden, 2006; Kotler et al., 2010, p. 246-247). A positive brand image can also lead customers from awareness into buying (Kumar 2008, p.
192; Rayner 2012, p. 199). Therefore, it is possible to claim that if a retailer’s brand image improves, the retailer’s current and potential customers’ buying behaviour will improve. Some authors (Kapferer, 2008, p. 230; Lawrence & Kleinman, 2012, p. 90) concur by stating that if a business is able to create a positive brand image, it will possibly have an effect on the buying behaviour of customers. Customer buying refers to how individuals decide on spending available resources on products/services, as Hoyer and Macinnis (2010, p. 3) as well as Kengton (2011, p. 2) indicate it is the way in which customers evaluate, purchase or dispose products/services.

A business has the opportunity to create a desired, accurate and positive brand image as well as improve customers’ buying behaviour by making use of social media for marketing communication purposes (Bruhn, Schoenmüller & Schäfer, 2012, p. 770; Fallon, 2012, p. 8; Mangold & Faulds, 2009, p. 358). According to Donovan and Henley (2010, p. 354), social media tools can be defined as electronic programs, applications and technologies which allow users to exchange content and communicate interactively. Therefore, any platform which allows users to comment, make status updates, “like” or “share” comments or photos and/or allow interaction with other online users based on common interests (Boyd & Ellison, 2010, p. 16; Meyerson, 2010, p. 327) can be classified as a social media tool. Social media tools can thus be used by businesses to provide business information, interact with customers, and market products/services. Therefore, marketing communication has changed significantly with the emergence of social media tools (Berndt & Tait, 2014, p. 118,221; Mangold & Faulds, 2009, p. 357). Businesses should make use of the social media opportunity to establish strong business-customer relationships by communicating and interacting more closely with customers (Bruhn et al., 2012, p. 784; Gordon, 2013, p. 108; Smith & Zook, 2011, p. 9; Taprial & Kanwar, 2012, p. 39). Other advantages from using social media tools include increased brand recognition and exposure among customers (Berndt & Tait, 2014, p. 221), as well as the implementation of new and lower cost marketing strategies (Bruhn et al., 2012, p. 785; Riese, Pennisi & Major, 2010, p. 2). The rising trend of customers using social media shows that customers are also becoming familiar with, and prefer, the use of social media tools to communicate with businesses (Berndt & Tait, 2014, p. 118; Bruhn et al., 2012, p. 784; Rangaswamy & Van Bruggen, 2005, p. 5).

The most popular social media tools are official business websites, Facebook, Twitter, LinkedIn, Pinterest, MySpace and Google Plus+ (Jain, 2012; The eBusiness Knowledgebase, 2013). In 2014, Facebook and Twitter respectively reached 1.28-billion and 255-million monthly active users worldwide (Bennett, 2014). Following a 25% increase from the end of 2010 to the end of 2011, 8.5 million South Africans had Internet access by December 2011 (PWC, 2012, p. 22). This suggests that the number of South Africans currently with Internet, and thus social media access, might be much higher. For the purpose of this study the social media tools official websites, Facebook and Twitter will be considered. The official website refers to a retailer’s Internet site. Facebook is a social utility used for online interaction with family, friends and the public. Twitter is a form of social media that connects users to the latest, most
relevant news and information by means of online “tweeting”, which entails communicating a short message.

**Research hypotheses**

From the literature overview, and by considering the study’s objectives, hypotheses were constructed to evaluate proposed relationships in an empirical investigation:

- **H¹**: There is a significant positive relationship between the use of *Official websites* and food retailers’ *Brand image*.
- **H²**: There is a significant positive relationship between the use of *Facebook* and food retailers’ *Brand image*.
- **H³**: There is a significant positive relationship between the use of *Twitter* and food retailers’ *Brand image*.
- **H⁴**: There is a significant positive relationship between food retailers’ *Brand image* and *Customer buying behaviour*.

**Research methodology**

A quantitative research approach was followed to test the hypotheses empirically (Zikmund & Babin, 2013, p. 99). The researchers used a non-probability sampling technique (Struwig & Stead 2013, p. 116), as no sample frame of food retail customers in South Africa exists. Convenience sampling was used to identify a sample of food retail customers in Nelson Mandela Bay, South Africa as respondents were selected based on their availability (Gravetter & Forzano, 2012, p. 151). Respondents were approached by trained fieldworkers within or in close proximity to shopping centres where the largest food retailers have outlets. Prior to the encounter with customers, institutional ethics clearance was obtained.

A self-developed and self-administered measuring instrument in the form of a structured questionnaire was distributed to a sample of 300 food retail customers. The English questionnaire consisted of three sections. The biographical and demographical data of respondents were captured in Section A. Section B of the questionnaire consisted of statements, formulated from the literature review, regarding the three social media tools. Section C consisted of statements relating to the brand image of food retailers and customers’ buying behaviour. Statements in this section were also formulated based on the literature review conducted. Both sections B and C were in the format of a five-point Likert-type scale ranging from ‘strongly disagree’ (1) to ‘strongly agree’ (5). The face and content validity of the measuring instrument was ensured as experts in the field of marketing assisted with the questionnaire design, and a pilot study was conducted among 10 retail customers.

A total of 192 completed questionnaires were returned of which 180 questionnaires were usable. Therefore, a response rate of 60% was obtained. The data was analysed using Microsoft Excel and Statistica. Data analysis was performed in five phases:
Descriptive statistics were calculated to summarise data about the sample and variable responses (Struwig & Stead, 2013, p. 165).

Exploratory Factor Analyses (EFA) were conducted to measure construct validity and Cronbach's alpha correlation coefficients were calculated to evaluate reliability. Items with EFA factor loadings of at least 0.4 are considered as valid (Hair, Black, Babin & Anderson, 2014, p. 115). Cronbach's alphas greater than 0.70 are acceptable and indicate reliability (Hair et al., 2014, p. 123).

Pearson's Product Moment Correlations were calculated to assess links between variables. Each Pearson r result measures the association between two variables and the measurement ranges from -1.00 to +1.00 (Bryman, Bell, Hirschsohn, Dos Santos, Du Toit, Masenge, Van Aardt & Wagner, 2014, p. 322).

Multiple regression analyses were used to test the influence of the three social media tools on the brand image of food retailers, and ultimately on customer buying behaviour. Thus, the regression analyses enabled the researchers to test the formulated hypotheses (Zikmund & Babin, 2013, p. 99).

An ANOVA and t-test were conducted to determine whether respondents’ perceptions were influenced by selected biographical variables. ANOVA simultaneously test or compare the difference of two or more population means (Davis, Pecar & Santana, 2014, p. 592). A t-test is used to compare scores collected from two groups of respondents (Struwig & Stead, 2013, p. 170).

Empirical results

There were more female (61.11%) than male (38.89%) respondents. The majority of respondents were aged between 20 and 29 years (35.56%), and younger than 20 years (20.00%). Most of the respondents were White (49.44%) and Black (34.44%). Considering the use of social media, 83.05% stated that they use Official websites, 88.70% use Facebook and 39.55% use Twitter.

The EFA showed that items loaded onto five distinct factors. Any items that loaded insufficiently onto a factor, in other words below 0.4, were removed from any further statistical analyses. Based on the item loadings, three factors were named Official websites, Facebook and Twitter respectively. To measure Official websites, nine items were created, and six items loaded together with factor loadings between 0.40 and 0.86. Originally 12 items were created to measure Facebook, and of those items, 11 loaded (between 0.69 and 0.89) onto one factor as expected. All 10 items formulated to measure Twitter loaded together onto one construct with factor loadings of between 0.76 and 0.97. These three factors correspond with the hypotheses’ proposed independent variables, and the factors’ Cronbach’s alphas were 0.87, 0.95 and 0.98 respectively. In addition, two factors were named Brand image and Customer buying behaviour. All 12 items that were initially created to measure Brand image loaded together onto a single construct with factor loadings between 0.55 and 0.85. A total of seven items were originally created to measure Customer buying behaviour, and all...
seven items loaded onto one construct as expected. Factor loadings of between 0.46 and 0.81 were reported for Customer buying behaviour. The two factors correspond with the hypotheses’ proposed intervening and dependent variables, and had Cronbach’s alphas of 0.92 and 0.86 respectively. The factor loadings (all greater than 0.4) provide sufficient evidence of construct validity. In addition, the Cronbach’s alphas, all being above the 0.7 cut-off value, provide sufficient evidence of reliability.

With regards to the mean scores for variables, the intervening variable Brand image returned a mean score of 2.09. This indicates that most respondents disagreed with the items, which suggests that respondents currently do not have highly positive brand images of food retailers. The dependent variable customer buying behaviour reported a mean score of 1.95, indicating that most respondents also disagreed with the items regarding the dependent variable. This suggests that respondents’ buying behaviour are currently not at levels that retailers desire, as current customers would not necessarily purchase, return to purchase or increase purchases at the food retailers.

Pearson correlation coefficients indicated positive correlations between all the variables of this study. The strongest link was between Brand image and Customer buying behaviour \( r = 0.69 \). In addition, the results showed that each independent variable has a correlation with the intervening variable and dependent variable. All correlations were significant at the 5% significance level. To determine the nature of the variable relationships three separate regression models were constructed. Table 1 shows that significant positive relationships \( (0.000; p<0.001) \) were reported between Official websites, Facebook, Twitter and Brand image. As these relationships are positive, it indicates that the more retailers use these three social media tools, the more likely it is that the businesses’ brand image will improve. In totality, the independent variables \( (\text{Official websites, Facebook and Twitter}) \) explain 63% of the variance in the intervening variable \( (\text{Brand image}) \).

<table>
<thead>
<tr>
<th>Intervening variable: Brand image</th>
<th>R-Square = 0.63</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent variables</td>
<td>Beta</td>
</tr>
<tr>
<td>Use of Official websites</td>
<td>0.35</td>
</tr>
<tr>
<td>Use of Facebook</td>
<td>0.32</td>
</tr>
<tr>
<td>Use of Twitter</td>
<td>0.35</td>
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</tbody>
</table>

\(^{(*)p<0.001}\)

Source: Calculated from survey multiple regression results.

Table 2 shows a significant positive relationship \( (0.0000; p<0.01) \) between Brand image and Customer buying behaviour. In other words, buying behaviour of a food retailer’s customers will improve if the retailer has a positive brand image. Brand image explains 48% of the variance in Customer buying behaviour.
Table 2: Influence of the intervening variable on Customer buying behaviour

<table>
<thead>
<tr>
<th>Intervening variable</th>
<th>Beta</th>
<th>t-value</th>
<th>Sig.(p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brand image</td>
<td>0.69</td>
<td>12.72</td>
<td>0.0000*</td>
</tr>
</tbody>
</table>

(*p<0.001)

Source: Calculated from survey multiple regression results.

Table 3 reveals significant positive relationships (0.000; p<0.001) between Official websites, Facebook, Twitter and Customer buying behaviour. Thus, a food retailer that actively engages in the use of these three social media tools is likely to positively influence the buying behaviour of its customers. The independent variables (Official websites, Facebook and Twitter) explain 57% of the percentage change in the dependent variable (Customer buying behaviour).

Table 3: Influence of the independent variables on Customer buying behaviour

<table>
<thead>
<tr>
<th>Intervening variable</th>
<th>Beta</th>
<th>t-value</th>
<th>Sig.(p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of Official websites</td>
<td>0.38</td>
<td>6.36</td>
<td>0.0000*</td>
</tr>
<tr>
<td>Use of Facebook</td>
<td>0.31</td>
<td>4.80</td>
<td>0.0000*</td>
</tr>
<tr>
<td>Use of Twitter</td>
<td>0.27</td>
<td>5.03</td>
<td>0.0000*</td>
</tr>
</tbody>
</table>

(*p<0.001)

Source: Calculated from survey multiple regression results.

Based on the empirical results above, hypotheses H₁, H₂, H₃ and H⁴ are accepted.

As this study considers social media tools, a fairly recent technological development and use for businesses, an ANOVA was conducted to investigate the impact of Age on perceptions of social media tools. To determine where statistically significant (p<0.05) differences lie between mean scores for respondents’ Age categories, post-hoc Tukey tests were calculated, and practical significance was assessed by Cohen’s d values. Results confirm that the Age of respondents significantly influence perceptions of social media tools. With regard to respondents’ perceptions of Official websites, respondents aged between 30 and 39 years (mean = 2.49) more regularly use Official websites of food retailers than respondents younger than 20 years of age (mean = 1.72). A Cohen’s d value of 0.96 indicates that this result is of large practical significance. Respondents between the ages of 30 and 39 years (mean = 2.15) are more likely than respondents older than 50 years (mean = 1.33) to use food retailers’ Facebook pages. A Cohen’s d value of 0.85 indicates this difference to be of large practical significance. Lastly, younger respondents between the ages of 20 and 29 years (mean = 1.60) generally consider the Twitter pages of food retailers more than respondents younger than 20 years (mean = 1.09) and respondents between the ages of 40 and 49 years (mean = 1.12). Cohen’s d values of 0.58 and 0.51 respectively indicate these differences to be of moderate practical significance.
A t-test was conducted to measure the influence of Gender on perceptions of social media tools. The reason for this decision is the general perception that the buying patterns and behaviours of males and females are different, and it is important to see how different genders view social media tools used by food retailers. Whether respondents are male or female has a significant influence on their perceptions regarding the use of Twitter (p-value = 0.0150). in the food retail industry. However, the Cohen’s d value of 0.38 indicated that this difference is of small practical significance.

Conclusions and managerial recommendations

The study’s primary objective was attained as the statistical analyses revealed significant positive relationships between each of the independent variables (Official websites, Facebook and Twitter) and the intervening variable (Brand image), as well as between Brand image and the dependent variable (Customer buying behaviour) in the food retail industry. Therefore, food retailers that effectively use the three social media tools will improve their brand image and ultimately customer buying behaviour.

The empirical investigation also showed that food retailers do not currently have positive brand images in the minds of customers. In addition, customer buying behaviour is not currently at levels satisfying food retailers. However, brand image significantly influences customer buying behaviour in the industry, and social media tools significantly influence food retailers' brand image. Therefore, food retailers should use social media tools for marketing communication purposes in ways that would positively impact their brand image and ultimately customer buying behaviour.

The following practical strategies are recommended to food retailers:

- Use social media tools to facilitate communication with customers regarding product information and special product offers as well as additional promotional opportunities, for example competitions for customers. If customers participate in retailers’ social media activities, retailers should reward customers, for example by offering them discount vouchers.
- Use social media tools to display business images and videos to display products, and thus invite and/or convince customers to purchase products.
- Use social media tools to regulate the post-purchase behaviour of customers. For example, retailers could encourage customers to comment on products and service levels online. This will provide customer satisfaction feedback and thereby allow retailers to make the necessary adjustments to products/services to ensure future customer satisfaction.
- Food retail customers mostly use Facebook. Retailers should encourage customers to use Facebook and “share” posts and updates made by the retailer. Customers sharing posts and updates with “Facebook friends” will allow the business to market to a wider range of customers. Retailers can in turn reward a customer who has shared the retailers’ posts and updates most over a time period, through prizes or additional discounts.
• Use Facebook to market “events”, for example special discount days. The Facebook “Events” feature can invite customers and provide important details such as the dates, venues and times of the events.

• Use Twitter for marketing communication efforts if the food retailer focuses on building a positive brand image.

• Use its Official website for marketing communication efforts if the food retailer focuses on improving customer buying behaviour.

• Use different social media tools to interact with customers of different age groups. For example, use Twitter for marketing communication campaigns aimed at reaching 20-29 year olds and use Official websites and Facebook to target customers older than 30 years.

• Use Twitter when marketing products and events to a particular gender, for example “tweet” to male customers about a relevant special of a product mainly consumed by males.

• Although some of these recommendations are used as social media strategies in other industries, most of the South African food retailers do not make use of these social media strategies as part of their marketing communication efforts. Currently, most food retailers use social media tools only for information sharing purposes (e.g. by sharing recipes on Facebook), and websites are used to facilitate online shopping. Food retailers should use social media tools more effectively by engaging customers more (through the recommended strategies above), to ensure mutual benefits for businesses and customers.

Future research and final conclusion

The extent to which food retailers make use of social media tools and the benefits thereof has been largely neglected, and this study confirms how social media tools can benefit these retailers specifically in terms of positively influencing brand image and improving customer buying behaviour.

Regarding limitations, by using the convenience sampling technique this study’s results cannot be generalised to the population, due to possible sampling bias (Gravetter & Forzano, 2012, p. 151). Researchers should consider an alternative sampling method and increase the size of the sample to gain a better representation of food retail customers. However, as the empirical investigation was conducted in areas where the largest South African food retailers trade it is possible that the sample’s perceptions are representative of South African customers in other geographical areas. This study focussed on the three most-used social media tools. Therefore, future studies should investigate how other social media tools (e.g. Pinterest) could influence brand image and customer buying behaviour.

In conclusion, this study attempted to provide food retailers with practical strategies on how to effectively use social media tools as part of a business’s marketing communication efforts. The study shows how food retailers can use social media tools such as Official websites, Facebook and Twitter to positively influence brand image and customer buying behaviour. A major contribution stems from the result that
customers in different age groups perceive social media tools of food retailers differently. Consequently, each marketing communication effort (e.g. promotion) of a food retailer via social media tools should be adapted accordingly, based on the relevant target market’s age category. The application of this study’s recommendations may lead to more successful food retailers having positive brand images as well as positively influenced customer buying behaviours.

References


