EXPLORING THE EFFECTS OF BRAND PROMOTION AND BRAND IMAGE PERCEPTION ON BUSINESS OUTCOMES OF SMALL-SIZED AGROBUSINESS FIRMS

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Abstract


To date there is hardly any empirical evidence in academic literature that branding, particularly brand promotion and brand image perception, plays any significant role in the performance of small-sized agribusiness, especially those in the Sub-Saharan (SSA) region. This study was triggered by the need to fill this vacuum. Survey data were collected from small-sized agribusiness firms in one of the SSA economic ‘powerhouses’, which is Nigeria. Employing a contemporary research technique, specifically the Consistent Partial Least Square Structural Equation Modeling (denoted as PLSc), the study found that both brand promotion and brand image perception are instrumental for enhancing the organizational performance of small agribusinesses. In sum, the findings lend empirical support to the extant literature on brand promotion and brand image perception as precursors to the performance of firms regardless of its size and business location. The implications of study, limitation and future research directions are further highlighted in the concluding section of the paper.

Keywords: branding, brand promotion, brand image perception, Nigeria, organizational performance, small-sized agribusiness, SSA

INTRODUCTION

In the developing world, especially in the Sub-Saharan Africa (SSA hereafter) region, the agricultural sector serves as the major backbone of the economy (Tomšík et al., 2015; UNIDO, 2011). It is also interesting to know that a majority of the firms operating in the agribusiness sector of the world’s economy could be categorically described as a blend of micro and small-sized agribusiness firms (UNIDO, 2011). As a matter of fact, studies have shown that agribusiness (agricultural) led growth has the highest potential of reducing poverty levels in the SSA region (see Fig. 1).

Meanwhile, in Africa’s largest economy, Nigeria, the contribution of micro, small to mid-sized agribusinesses as a whole to the country’s GDP from the perspectives of the agricultural sector is currently estimated to be 42.02 percent (see National Bureau of Statistics, 2015). Agreed that several small-sized agribusinesses in SSA are faced with the challenges of obtaining affordable credit facilities coupled with other institutional challenges (see UNIDO, 2011; The Financial Times Limited/This is Africa, 2013). On the other hand, there is little or no empirical evidence on whether the development of marketing competency or more specifically, the adoption
of certain marketing concepts such as branding could be one of the pathways through which small-sized agribusiness firms could unlock marketing opportunities in spite of the hostile business environments that permeate the SSA region likewise several developing regions of the world.

The branding concept is obviously one of the viable pathways that small businesses, especially small-sized agribusiness firms could adopt in order to survive and grow to their ‘full’ market potential amid an increasingly volatile business environment (Boomsma and Arnoldus, 2008; Hanf and Kuhl, 2005; Minten et al., 2013). While it is true that a brand or the branding process could be best described as a multidimensional marketing construct (Kapferer, 2008; de Chernatony and Dall’Olmo Riley, 1998), the major essence of branding per se, is to distinguish an entity (e.g., a firm), product and/or service from the rest of the competition (Aaker, 1996; Urde et al., 2013; Osakwe et al., 2015a). Without doubt, branding is a multidimensional construct that consists of numerous dimensions such as brand promotion, brand orientation, customer-based brand equity (e.g., brand image perception), employee branding, and marketplace brand equity, among others. Therefore, in order for us to present a fine-grained empirical analysis of the role of the branding concept to small-sized agribusinesses, we focus our attention on two pertinent branding dimensions, that is, brand promotion and brand image perception of small-sized agribusiness firms; albeit based on the perspectives of the decision-makers of these agribusinesses.

The study focused on small-sized agribusinesses since these agricultural enterprises are key to the socioeconomic empowerment of the majority of people living in the rural communities and peri-urban centres of SSA countries (see UNIDO, 2011). To this end, this study attempted to explore the structural interrelationships among brand promotion, brand image perception, and organizational performance of small-sized agribusiness firms in SSA’s most populous and ‘influential’ economy, Nigeria. Thus, the motivation behind this study is to fill the vacuum in the academic literature given that most studies to date lack any empirical evidence on the significant role that branding, particularly brand promotion and brand image perception play in the performance of small-sized agribusinesses, especially those in developing world such as the SSA region.

Against this background, and importantly based on the fragmented information in existing studies (see Hanf and Kuhl, 2005; International Institute for Environment and Development/Sustainable Food Lab, 2012; Minten et al., 2013; Roucan-Kane and Peake, 2007) about the critical role that branding could play in upgrading the performance outcomes of firms in the agribusiness sector; this leads us to propose the following research questions:

RQ1. To what extent does the intensity of brand promotion influence a small-sized agribusiness firm’s brand image perception?

RQ2. To what extent do brand promotion and brand image perception of a small-sized agribusiness firm influence its organizational performance (e.g., customer loyalty, satisfaction with financial performance)?

RQ3. To what extent does the customer loyalty of a small-sized agribusiness firm relate to the firm’s satisfaction with its financial performance?

Likewise, the aforementioned research questions could be reformulated as hypotheses thus:

H1. A significant positive relationship exists between brand promotion and brand image perception of a small-sized agribusiness firm.

H2a. A significant positive relationship exists between brand promotion and a small-sized agribusiness firm’s customer loyalty.

H2b. A significant positive relationship exists between brand promotion and a small-sized agribusiness firm’s satisfaction with financial performance.
H2c. A significant positive relationship exists between brand image perception and a small-sized agribusiness firm's customer loyalty.

H2d. A significant positive relationship exists between brand image perception and a small-sized agribusiness firm's satisfaction with financial performance.

H3. A significant positive relationship exists between customer loyalty and a small-sized agribusiness firm's satisfaction with financial performance.

To reiterate, the main goal of this study was to explore empirically the effects of brand promotion and brand image perception on the performance outcomes of small-sized agribusinesses in the context of SSA region. Since this article could at best be described as an exploratory study, we only focus on depicting the structural relationships amongst the selected variables through the use of a parsimonious model (see Fig. 2) with one or two items to capture the corresponding constructs in the model. This perhaps might appear to be ‘too simplistic’, but it sure provides a strong basis for more rigorous measures and/or approaches that could be developed and debated upon in future studies. By and large, the use of single item constructs or measures is well-established in the empirical literature, particularly its extensive usage in soft modeling approach (e.g. Partial Least Squares Structural Equation Modeling –PLS-SEM) by social scientists (see Ashok et al., 2014; Baumgarth and Schmidt, 2010; Petrescu, 2013; Santos-Cumplido and Linan, 2007).

First and foremost, the outcomes of the study could help shape further academic discourse in this topical area of research that has remained unexplored, especially in the context of agribusinesses in the SSA region. Besides, the findings are expected to provide insights into the manner through which small agribusinesses can improve their overall brand competitiveness and performance measures in a hostile business environment.

This paper is structured as follows. First, we describe in detail the research methods/materials in the ensuing section. Second, we present the results of the analysis together with a concise discussion of the results in one of the subsequent sections. We wrap up the paper by presenting our concluding remarks while pointing out the implications of the study, limitations and directions for further research.

MATERIALS AND METHODS

In this section of the article, we articulate all the steps and techniques taken to accomplish the research objective through addressing the research questions/scientific hypotheses.

Research Setting, Sample Objects and Relevant Sources

As reported earlier, the study was conducted in one of SSA's countries, precisely in the Southwestern part of Nigeria. By means of a structured questionnaire, a cross-sectional field survey was carried out amongst small-sized agribusiness firms between the months of December, 2014 to February, 2015. Although a total number of 89 small-sized agribusinesses participated in the study, two of the returned questionnaires did not have any form of identification which led to their removal from the collection. Thus, 87 small agribusinesses served as the effective number of valid responses. The key informants in the study were business owners, CEOs/MDs, and managers of these firms. For the purpose of clarity, we defined small-sized agribusiness firm in line with the World Bank's classification of micro, small and medium-sized enterprises (see Osakwe et al., 2015b), specifically, a small-sized agribusiness firm is an agribusiness that is manned by 10 to 49 staff. About 55 percent of
the firms had been in the agribusiness sector for at least seven years while the rest of the firm has spent between one to six years in the sector. Surprisingly, a majority of the small-sized firms stated that most of their employees had at least a higher national diploma qualification. It is important to state that apart from using primary data for this study, we consulted ‘widely’ in the academic literature through the use of relevant secondary sources such as textbooks, working papers, articles, and online databases. By and large, we would like to stress that the study's sample size exceeds the ‘ten times’ rule of thumb that is commonly reported in empirical literature, especially studies dealing with regression analysis of which our proposed research technique is a higher-order member of the ‘regression family’ (see Peng and Lai, 2012).

Survey Instrument

More specifically, the measurement items in the structured questionnaire that were used to elicit salient responses from the key informants in the study were often as the case in most academic research obtained from previous studies with the exception of one construct that was developed for the purpose of the study. Stated differently, in order to ensure face validity of the constructs in the research model, we adopted most of the items that were used in measuring the constructs from the extant literature. The reflective measures for brand image perception, organizational performance (i.e., customer loyalty and satisfaction with the firm's financial position/performance) were either obtained or slightly modified from Eggers et al. (2013) and Wu et al. (2003), respectively. These three reflective measures were operationalized using a single-item construct (for reasons for using single-item constructs, we refer you once more to Petrescu, et al. 2014, p. 7).

The single-item measuring brand image perception was originally stated in the questionnaire as – “We are perceived as ‘real’” while the single-item measuring customer loyalty was stated as – “Within the last two years, our company has been quite successful at retaining most of our existing/new customers”. The item measuring satisfaction with the firm’s financial position/performance construct was stated as – “In the last two years, we have become more satisfied with our company's financial position”. These two latter measures (i.e., the two organizational performance constructs) could be conceived of being ‘proxy’ lagged variables since they took into consideration the time lag of two years. The brand promotion construct was defined as a formative construct using two items that we developed for the study. These two items were “We usually set aside some amount of money for advertising our products/services” and “We use electronic marketing channels such as the use of company website, blogging services... customized SMS, and email marketing to promote our brand image”. All the items in the close-ended questionnaire were based on a 5 point Likert scale and thus reflected in the research model (see Fig. 2).

Analytical Framework

In this study, we made use of SmartPLS 3 (Ringle et al., 2014) software for our path modeling of the research constructs. As it was previously mentioned, we made use of PLS-SEM but more specifically a more consistent and asymptotically algorithm of variance-based SEM, often denoted as the Consistent PLS (abbreviated as PLSc) (avid readers might want to look up Dijkstra and Henseler, 2015 for further readings on PLSc and/or PLS-SEM). The use of PLS path modeling is strongly justified in this study given that we aimed at maximizing prediction of focal variable(s) in an emerging research area and for which psychometric scales have not been fully developed/tested (see, Hair et al., 2011; Ringle et al., 2014). More so, PLSc and/or PLS-SEM is more suitable for sample size, and therefore strongly assumed to be robust to non-normality and very efficient at handling formative constructs (Hair et al., 2011; Peng and Lai, 2012).

Recall that in this study, our sample size is fairly small (i.e., 87 valid responses) while the only exogenous predictor in the model (see Fig. 2) is a formative construct, this again provides the justification for using PLS path modeling. Specifically, we made use of a more robust methodological consistent PLS algorithm, that is, the PLSc (Dijkstra and Henseler, 2015). We relied on the consistent PLS bootstrapping, precisely 500 bootstrap subsamples in order to detect the statistical significance of the estimates in the model such as path coefficients, outer weights and outer loadings. In addition, we have used a two-tailed test. In line with the suggestions of Hair et al. (2011) and Peng and Lai (2012), we examined the measurement model as well as the structural model. Firstly, the single-item reflective measures, including the formative items do not suffer from multicollinearity (see Tab. I). The indicators and latent variables’ correlations are also presented in Tab. II (Panel A and B respectively).

Moreover, since the reflective measures are theoretically distinct from one another, we can assume the convergent validity of these measures, albeit these are single reflective indicators. With regard to the discriminant validity of the reflective measures, we used the ‘novel’ prescription of Henseler et al. (2014), that is, the Heterotrait-Monotrait (HTMT) ratio of correlations, the results of the HTMT suggested the discriminant validity of the reflective measures in the model (see Tab. III). Furthermore, the weights of the formative items are at least 0.48 and both outer weights are statistically significant (p <= 0.01). We also found out that the outer loadings of the formative items were also statistically significant and importantly, that the weights of the formative indicators carried the a priori signs (Peng and Lai, 2012). Against this background, we can assume the convergent
validity of the formative construct in the research model. To an extent, the routine for performing the discriminant validity of formative constructs as prescribed by Peng and Lai (2012) was also followed. That is, the average intra-construct item correlations of the formative construct was found to be greater than the average inter-construct item correlations with other constructs in the model, albeit this prescription by Peng and Lai (2012) is somewhat similar to the Fornell and Lacker's (1981) criterion with regard to the discriminant validity of reflective measures.

Likewise, in line with the suggestion of Peng and Lai (2012), we checked for the nomological network validity of the formative construct, and the results of the structural model established that the formative construct (i.e., brand promotion) indeed has a significant impact on the focal variables in the structural model. Kindly refer to Tab. IV for the results of the structural model estimate. Put more concisely, the R-squared of the endogenous latent variables are 0.36, 0.27, and 0.01 for satisfaction with financial position/performance, customer loyalty and brand image perception, respectively. Regarding

I:  **Collinearity Statistics of Measures (Indicators and Latent measures)**

Panel A: Indicators only

<table>
<thead>
<tr>
<th>VIF</th>
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</thead>
<tbody>
<tr>
<td>FinSatis/Postn</td>
</tr>
<tr>
<td>Loyal</td>
</tr>
<tr>
<td>Perceptn</td>
</tr>
<tr>
<td>Promo</td>
</tr>
<tr>
<td>ePromo</td>
</tr>
</tbody>
</table>

Panel B: Latent Measures

<table>
<thead>
<tr>
<th>Brand Image Perception</th>
<th>Brand_Promo</th>
<th>Financial Performance</th>
<th>Loyalty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brand Image Perception</td>
<td>1.40</td>
<td>1.01</td>
<td></td>
</tr>
<tr>
<td>Brand_Promo</td>
<td>1.00</td>
<td>1.15</td>
<td>1.01</td>
</tr>
<tr>
<td>Financial Performance</td>
<td></td>
<td></td>
<td>1.57</td>
</tr>
<tr>
<td>Loyalty</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Own work (output extracted from SmartPLS 3, student edition)

II:  **Indicator and Latent Variable Correlations**

Panel A: Indicator Data Correlations

<table>
<thead>
<tr>
<th>FinSatis/Postn</th>
<th>Loyal</th>
<th>Perceptn</th>
<th>Promo</th>
<th>ePromo</th>
</tr>
</thead>
<tbody>
<tr>
<td>FinSatis/Postn</td>
<td>1.00</td>
<td>0.27</td>
<td>0.20</td>
<td>0.44</td>
</tr>
<tr>
<td>Loyal</td>
<td>0.27</td>
<td>1.00</td>
<td>0.52</td>
<td>0.32</td>
</tr>
<tr>
<td>Perceptn</td>
<td>0.20</td>
<td>0.52</td>
<td>1.00</td>
<td>0.04</td>
</tr>
<tr>
<td>Promo</td>
<td>0.44</td>
<td>0.32</td>
<td>0.04</td>
<td>1.00</td>
</tr>
<tr>
<td>ePromo</td>
<td>0.38</td>
<td>0.24</td>
<td>0.10</td>
<td>0.41</td>
</tr>
</tbody>
</table>

Panel B: Latent Variable Correlations

<table>
<thead>
<tr>
<th>Brand Image Perception</th>
<th>Brand_Promo</th>
<th>Financial Performance</th>
<th>Loyalty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brand Image Perception</td>
<td>1.00</td>
<td>0.07</td>
<td>0.20</td>
</tr>
<tr>
<td>Brand_Promo</td>
<td>0.07</td>
<td>1.00</td>
<td>0.49</td>
</tr>
<tr>
<td>Financial Performance</td>
<td>0.20</td>
<td>0.49</td>
<td>1.00</td>
</tr>
<tr>
<td>Loyalty</td>
<td>0.52</td>
<td>0.34</td>
<td>0.27</td>
</tr>
</tbody>
</table>

Source: Own work (output extracted from SmartPLS 3, student edition)

III:  **Discriminant Validity of Reflective Measures (HTMT ratio*)**

<table>
<thead>
<tr>
<th>Financial Performance → Brand Image Perception</th>
<th>Original Sample</th>
<th>Sample Mean</th>
<th>Bias</th>
<th>2.5%</th>
<th>97.5%</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.20</td>
<td>0.20</td>
<td>−0.01</td>
<td>0.02</td>
<td>0.36</td>
<td></td>
</tr>
<tr>
<td>Loyalty → Brand Image Perception</td>
<td>0.52</td>
<td>0.52</td>
<td>−0.01</td>
<td>0.35</td>
<td>0.67</td>
</tr>
<tr>
<td>Loyalty → Financial Performance</td>
<td>0.27</td>
<td>0.27</td>
<td>−0.00</td>
<td>0.07</td>
<td>0.46</td>
</tr>
</tbody>
</table>

*Note: Bias-Corrected and Accelerated (BCa) Bootstrap
Source: Own work (output extracted from SmartPLS 3, student edition)
the overall model's predictive relevance, we used the blindfolding procedure as recommended by Hair et al. (2011), omission distance was set as \( d = 7 \); the Stone Geisser's construct cross-validated redundancy index values (\( Q^2 \)) of 0.17 and 0.34 for satisfaction with firm performance and customer loyalty, respectively; provided further support for the predictive relevance of the research model (see Tab. IV). The meaningful effect sizes (Cohen's \( f^2 \)) are also reported in Tab. IV.

**RESULTS AND DISCUSSION**

Although, we found out that brand promotion positively influences brand image perception of a small-sized agribusiness firm, our data however suggest that this relationship is not statistically significant \( (p > 0.1) \). Thus, we reject H1. Regarding hypotheses H2a and H2b, we found strong support that brand promotion is a prerequisite for a small-sized agribusiness firm's customer loyalty and financial performance. Therefore, we accept H2a and H2b. Furthermore, the results provided statistical support for H2c while the positive relationship between brand image perception and a small-sized agribusiness firm's satisfaction with financial performance was found to be statistically significant at \( p = 0.13 \) (see Tab. IV). Thus, we 'initially' reject H2d, but we shall briefly revisit this particular finding in the later paragraphs of this section. Likewise, we found out that customer loyalty positively relates to the financial performance of a small-sized agribusiness firm but there was no further statistical evidence for this finding \( (P > 0.7) \). Thus, we reject H3, and equally make some side comments regarding this finding. Overall, three of the six hypotheses were supported, importantly all the hypotheses were seen to carry the right theoretical (a priori) signs.

Thus, the research findings as a whole align itself with past studies that have been largely based on conceptual research, particularly in the context of agribusiness sector in the developing world such as SSA. The results of this study represent an incremental breakthrough in the academic literature especially as far as small-sized agribusinesses are concerned in SSA and Nigeria in particular. In the light of the reported findings, we would like to briefly discuss the results of the research.

First, our result has clearly shown that although brand promotion could have an incremental influence on the brand image perception of small-sized agribusinesses, its overall effect is infinitesimal as far as the sample data suggested. The result clearly shows that for small agribusinesses to achieve and/or enjoy a favourable top of the mind ‘feelings’ amongst their customers and other stakeholders, they must not only promote their brands but more importantly invest their scarce resources in building their reputational resources such as product reputation, customer service reputation and firm reputation (see O'Cass and Sok, 2014). In addition, small-sized agribusinesses could engage more with their immediate community through participation in social causes that promote the well-being of their community.
Second, our empirical results have also shown that brand promotion is a prerequisite for a small-sized agribusiness firm's business outcomes, that is, customer loyalty and financial performance. This result is consistent with the extant literature on the vital role that branding (such as brand promotion) can play in the agribusiness sector, especially as it pertains to improving the performance of agribusinesses regardless of a firm's demographics (see, Hanf and Kuhl, 2005; Minten et al., 2013; Hampton et al., 2007; Roucan-Kane and Peake, 2007).

Third, our findings have demonstrated empirically that brand image perception is key to a small-sized agribusiness firm's capacity to retain its customers. Put differently, brand image perception was found to significantly contribute to small agribusinesses customer loyalty. This result is equally consistent with past studies (e.g., Boomsma and Arnoldus, 2008; Kim, 2012). Therefore, we can only re-echo what past literature has stated within the past two decades that it is important for firms to invest their resources in building a good image perception or positioning especially among the firm's target audience (see Boomsma and Arnoldus, 2008; Byars and Coman, 2012). On the contrary we could not establish statistical evidence on the direct effect of brand image perception on a small agribusiness firm's financial performance outcome (i.e., satisfaction with financial position).

However, a further inspection of the total effects (output omitted) of brand image perception on financial performance indicated that brand image perception positively correlates with financial performance ($P < 0.07$). Taken together, even though we initially rejected H2d based on the result of the direct effect; we would like to still state that cultivating a good brand image perception is very important for small agribusinesses overall financial performance outcomes. In light of the findings of the total effects, we wish to digress a bit by stating that researchers should also consider reporting total effects aside (direct) path coefficients since this may have a rich and/or more nuanced implications especially as it pertains to model complexity in structural equation modeling (SEM).

Finally, our results show that customer loyalty does not significantly influence a small-sized agribusiness firm's financial performance. On one hand, this result might not be so surprising given the manner the question was initially framed (i.e., in the last two years, we have become more satisfied with our company's financial position). Although, satisfaction with financial position could be argued to be a good proxy variable for financial performance but it is also likely that the key informants in the study might have completely misconstrued the meaning of the question. On the other hand, customer loyalty might not necessarily lead to improved financial performance, especially when a firm's ‘retinue’ of loyal customers are very price sensitive. In such an instance, a firm will be very careful not to charge premium price even when economic situation might warrant it since it is most likely that under ‘normal’ business circumstances, such a firm might not be too willing to let go of its ‘bandwagon’ of price sensitive loyal customers. What this result illustrates is that customer loyalty especially among price sensitive customers could increase a small-sized agribusiness firm's sales turnover but not necessarily its profitability and/or the overall satisfaction with its financial position/performance. This finding presents an interesting area for further research.

CONCLUSION

In concluding, the findings of the research imply that it is paramount for small-sized agribusinesses to promote their brands, especially in the form of advertisements of their products or brand names through conventional channels (such as newspapers, radio, posters, banners, flyers, and sandwich board) and/or using a contemporary tool, that is the Internet. Brand promotion was found in the study to contribute to a small agribusiness firm's performance. In addition, agribusiness firms should as a matter of priority and/or necessity seek to improve on their brand image perception/positioning on an ongoing basis since it was found in the study to contribute significantly to a firm's customer loyalty performance. Improving a small-sized agribusiness firm's brand image, especially customers' perception of the firm's brand or product should be one of the firm's topmost priorities so that the agribusiness firm will be more relevant amid the growing competition for customers in the firm's business environment. Although we do not have sufficient statistical support that customer loyalty is a prerequisite for a firm's satisfaction with its financial performance measure(s), especially among small-sized agribusinesses; it is important that these firms recognize ab initio that enhancing a firm's customer loyalty strongly correlates with the realization of the firm's financial objectives in the marketplace. Taken together, this study has demonstrated empirically the strategic role that branding plays in the performance of small-sized agribusiness firms in the SSA region, and particularly in Nigeria. Similar to most quantitative studies, this study has its own limitations. The major limitation has to do with the sample size. The sample size that was used for the realization of the study's objective could be described as sufficiently small for the study, but readers should also be aware that the research technique employed in this study compensates for this particular weakness of the study. Also, recall that this is an exploratory study; therefore, this provides room for future research. One future research direction that could be quite interesting and perhaps deepen our
knowledge of the branding concept and the organizational performance of the agribusiness sector in the SSA climate and other ‘backward’ economies would be the need to expand the scope of the research to micro and mid-sized agribusinesses and/or the broader spectrum of the agribusiness sector.

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REFERENCES

ASHOK, M., NARULA, R. and MARTINEZ-NOYA, A. 2014. End-user collaboration for process innovation in services: The role of internal resources. Maastricht Economic and Social Research Institute on Innovation and Technology (UNU-MERIT) & Maastricht Graduate School of Governance (MGSoG).


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