AN ANALYSIS OF THE USE OF MARKETING 4.0 PRINCIPLES FOR MANAGING CUSTOMERS RELATIONSHIPS IN MICROBREWERIES IN THE CAPITAL CITY OF PRAGUE

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ABSTRACT
Technological progress also affects the development of marketing, currently known as Marketing 4.0, which is characterized by digitization and indicates a connection with Industry 4.0. With digitization, companies can use a variety of tools and methods to collect useful customer data and then use it. Marketing 4.0 is mainly characterized by the fact that the customer wants to be part of the product development and wants to share her information and opinions and experience on the product. Thanks to the Internet, customers can get all the information from other customers. The aim of this analysis was to verify that microbreweries in Prague use Marketing 4.0, use digitization and adapt to the latest trends in marketing and define what methods they use to manage customer relations. The analysis is suitable for long-term monitoring of the development of this issue. Corresponding conclusions and recommendations for the future were drawn from the research findings.

Keywords: CRM; Marketing 4.0; Microbreweries; Czech Republic; Prague

INTRODUCTION
The trend today is digitalization, which has reached both marketing and other fields. In connection with the fourth technological revolution, i.e. Industry 4.0, Marketing 4.0 was created. Thanks to digitization, many new activities and procedures have been introduced into marketing, mainly thanks to the development of the Internet and social networks, which gave the customer access to information and opinions of other customers. Customers want to be part of the process and share their experiences. (Jara et al., 2012). The number of microbreweries in the Czech Republic is growing every year. At the end of the 19th century, 800 to 1,000 breweries brewed beer in Bohemia and Moravia. A study on microbreweries and tourism marketing was published in 2017, while the author Dunn and Kregor (2017) states that the new era of marketing, i.e. the marketing era 4.0, introduced in 2017, was also reflected in the brewing industry. It is mainly thanks to social networks that made microbrewery's communication with customers is important, and this caused strengthening loyalty, sharing information and engaging customers in the brewing process. Moreover, microbreweries should also focus on different alternatives to delivering beer to customers and address the specific needs of their customers (Dunn and Kregor, 2017). In the area of Prague there are 46 microbreweries that are located throughout the city. Some of these microbreweries are in the very center of Prague near Wenceslas Square, such as the Two Cats Brewery, Na Národní Brewery, or U Fleků. Other breweries are located on the outskirts of Prague, such as the Počernický Brewery. Most of these microbreweries have an on-site restaurant where meals are served together with their beer. One of the microbreweries, the Lajka microbrewery, is also usually connected with coffee. Each of these microbreweries brews its original beer with its original name and original ingredients. As Prague is a frequent tourist destination, microbreweries also use a variety of ways to attract tourists. This especially applies to microbreweries in such destinations where there are many tourists. These tourists are attracted by microbreweries for originally crafted beer, various tastes, and mainly the possibility to buy beer in a PET bottle, in a glass bottle, buy a souvenir, or attend interesting events.

The trend of microbreweries in the Czech Republic is still on hold. In 2018, there were already 451 microbreweries in the Czech Republic and according to current trends the number will increase (Stratilík, 2018). In 2015, there were 330 microbreweries in the Czech Republic experiencing a boom in the field. The top level of the Czech beer boom is out of sight and beer producers themselves claim that they do not compete with each other, and as there is a high demand for beers from microbreweries on the market, these microbreweries can still exist. There is a rather friendly atmosphere among the breweries, and they can also help each other. The only thing that can stop this boom in the field of microbreweries is the lack of hops, which is ordered more than a year in advance (Ekonom, 2015). Compared to Europe, the number of microbreweries is the highest in the
UK, with up to 2378 microbreweries in 2018. The Czech Republic holds the top ten in the number of microbreweries (Brewersofeurope, 2019). There are also large industrial breweries in the Czech Republic, including Přelévky Prazdroj, Budějovický Budvar, Staropramen, and Zlatopramen (Pivni.info, 2019). Beer as such is one of the most consumed alcoholic beverages in the Czech Republic, 141 litres of beer per citizen were consumed in 2018 (Kolářová and Kolářová, 2019).

To support customer relationship management, microbreweries need to realize the importance of increasing customer loyalty and strengthening their business image. Today, unpredictable customer trends may occur. It is necessary to respond to these trends to keep the company interesting for its customers. This is also crucial for microbrewery businesses (Porter and Donthu, 2008).

Marketing 4.0

The technological development of digital media is a historical necessity. These developments have affected cultural, educational, social and political dimensions, which also affect digital media (Priyowidodo et al., 2019). Developments in technology that have occurred in recent decades have greatly changed the world and also the marketing industry. Thanks to this development, you can be labeled as participants in the age of Marketing 4.0. Today's customers require something EXTRA; they want more to satisfy their needs. Customers are looking for values that are defined by Marketing 3.0 and want to be part of marketing and to be directly integrated with the product. These customers use information technology to share their experience and that is why marketing is not focused on the product but the customers (Łukowski, 2017). Marketing has evolved from Marketing 1.0 to 4.0. Marketing 1.0 was focused on the product and on increasing its sales only (Łukowski, 2017). These products were manufactured in rather small numbers and were intended for a large group of customers. The best example is the Ford T strategy designed by Henry Ford (Fuciu and Dumitrescu, 2018). Marketing 2.0 already addressed the needs of customers. There were more products on the market and the customer could choose from and be getting well informed about the products (Łukowski, 2017). Marketing 4.0 was based on technology development and can be defined as meeting the needs and wishes of customers (Fuciu and Dumitrescu, 2018).

Kotler, Kartajaya, and Setiawan (2017) described Marketing 2.0 as being focused on customer and marketing. A turning point occurred in Marketing 3.0, when customers were already people with specific feelings and desires (Kotler, Kartajaya and Setiawan, 2017). Emotions and a kind of emotional marketing were also included in this era of marketing. This was to place consumers on the level of thinking and sentient beings that have certain wishes and values (Kotler, Kartajaya and Setiawan, 2010). Thus, the term Marketing 4.0 is related to the fourth industrial revolution. You can also see this designation in Industry 4.0 (Drath, Horch, 2014). This Marketing 4.0 was introduced in 2017 and according to Kotler, Kartajaya and Setiawan (2017), it combines offline and online marketing. It is a combination of existing marketing and digital elements. These digital elements represent social networks, for example, which can be used as a tool for communication with customers, but also for evaluating and sharing customer opinions (Nowacki, 2014).

Marketing of the new era is also reflected in the marketing of breweries. In the study published by Dunn and Kregor (2017) stated that in order to support and develop the brewery, there must be support breweries via social networks, having different alternatives of supplying beer to its consumers, and address the needs of their visitors to secure their reputation and build awareness of the brand in tourism (Dunn and Kregor, 2017).

Customer Relationship Management

There are many definitions in the literature and scientific articles of what Customer Relationship Management means. Customer Relationship Management can also be defined as a method or strategy to increase customer loyalty through communication and information gathering by the company (Swift 2000). Customer Relationship Management is an effective marketing strategy that is a key process that is needed to sustain growth and maintain existing and attract potential customers (Lizbetinová et al., 2019). According to Parvatiyar and Sheth (2002), Customer Relationship Management is considered to be a strategy. This strategy targets particular potential customers that the company wants to acquire. This strategy works only with the support of marketing, customer center and sales. The aim is to bring more added values to the customer.

Payne and Frow (2005) point out that Customer Relationship Management is seen as a direct mail rather than a targeted customer loyalty strategy. With this view, the correct use of Customer Relationship Management may be compromised, as managers often think of loyalty programs or the database created in the Call Center. Thanks to digitization and progress, it is also important to keep in mind the social networks, which today play an important role in terms of customer loyalty (Holsing and Olbrich, 2012).

Microbreweries

The brewery can be distinguished from one another according to the amount of beer that the brewery brews. Breweries can be divided into five categories, which vary according to the annual beer production. Domestic breweries have up to 10 litres of beer per batch.

Table 1: Number of microbreweries in European countries (Brewersofeurope, 2018).

<table>
<thead>
<tr>
<th>Country</th>
<th>No. of microbreweries</th>
<th>Country</th>
<th>No. of microbreweries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Great Britain</td>
<td>2,378</td>
<td>Spain</td>
<td>502</td>
</tr>
<tr>
<td>France</td>
<td>1,000</td>
<td>Sweden</td>
<td>332</td>
</tr>
<tr>
<td>Germany</td>
<td>824</td>
<td>Denmark</td>
<td>157</td>
</tr>
<tr>
<td>Switzerland</td>
<td>818</td>
<td>Austria</td>
<td>129</td>
</tr>
<tr>
<td>Italy</td>
<td>693</td>
<td>Portugal</td>
<td>115</td>
</tr>
</tbody>
</table>
These amateur beer enthusiasts are very important in microbreweries, since many of these amateurs may eventually become founders of microbreweries. Other breweries are also microbreweries that have an annual beer production of up to 10,000 hl, a brewery with a restaurant of up to 200,000 hl, regional breweries of up to 500,000 hl and industrial breweries of over 500,000 hl of annual beer production (Kozák, 2017).

The number of microbreweries in the Czech Republic has varied over the years. At the end of August 2018, there were 451 microbreweries (Stratilík, 2018). In comparison with the Czech Republic, in 2017, there were microbreweries in the following European countries (Table 1). Compared to European countries, the Czech Republic was placed 7th in 2017 with 402 microbreweries (Brewersofeurope, 2018).

Like other industries, brewing is developing. Most Czech mini-breweries brew bottom-fermented beer, but there are also many mini-breweries where they experiment in beer production. One of these experiments is spontaneous fermentation, where the spontaneous process requires a completely different approach from microbreweries and puts more emphasis on hygiene (Stratilík, 2018). As such, brewing contributes significantly to the economy. In the EU between the years 2008 and 2013, excise duty on beer of around EUR 10 billion was levied. Compared to the US in 2014, total excise tax and VAT revenues were $ 11 billion (Ignacio and Higgins 2016). In the Czech Republic, the income from an excise tax on beer was CZK 4,775,528 thousand (State Treasury, 2019) and in comparison, with the USA in 2014, the Czech Republic's income from excise duty on beer was CZK 4,593,399 thousand (State Treasury, 2019).

Scientific hypothesis
Hypothesis $H_0$ – More than 80% of microbreweries in Prague use Marketing 4.0 to manage the customer relationship.
Hypothesis $H_1$ – Less than 80% of microbreweries in Prague use Marketing 4.0 to manage customer relationships.

In view of the fact that a small amount of specific information has been processed on the subject under consideration yet, great attention needs to be paid to the collection and processing of basic data.

Research questions:
- Do microbreweries have their restaurant?
- Do microbreweries use SEO?
- Do microbreweries use social networks?
- Do microbreweries use content marketing?
- Do microbreweries have websites?

MATERIAL AND METHODOLOGY
The article deals with the marketing of microbreweries in Prague. The basic questions dealt with whether microbreweries in Prague have their restaurant, use SEO and other analytical methods, whether they use social networks, have websites, use content marketing, customize products, sell souvenirs, provided restaurant reservations, delivery and whether they use loyalty programs. From a theoretical point of view, microbreweries should also use Marketing 4.0 as part of customer relationship management.

The data were collected using qualitative research, structured interviewing, and interviewing in person at microbreweries in Prague. Thanks to the chosen research methods, the data were obtained, analysed and statistically processed, followed by conclusions and recommendations. The main aim of this work was to find out whether microbreweries in Prague are using Marketing 4.0 for customer relationship management. The research was conducted in October 2019 in microbreweries in the city of Prague.

There are 46 microbreweries in Prague, all of which were included in the research. And this makes this sample complete. Statistical methods were used for complex research sample.

Microbreweries in Prague:

Statistical analysis
Another method we used to reject or not reject the hypothesis $H_0$ is Pearson's Chi-Squared test. The basic assumption was that 80% of microbreweries use 4.0 marketing to manage customer relationships, focusing on research questions and significance level $\alpha = 0.05$ and conducting a significance test. The critical value of the chi-square at a number of freedoms 4 is 9.49. The calculated chi-square value is 9.21. This value is less than the critical value and therefore we do not reject our hypothesis $H_0$ and reject the hypothesis $H_1$. For statistical analysis was used Social Science Statistics, the year 2020.

RESULTS AND DISCUSSION
In a complete sample of microbreweries, data were collected concerning the restaurant itself, the use of SEO and other analytical tools, the use of content marketing, product customization, souvenir sales, distribution and the use of loyalty programs.

The first research question was whether microbreweries run a restaurant. Some microbreweries have their restaurant where they brew very well and have a microbrewery only as a supplement.
Some microbreweries only brew beer and do not have a place or restaurant where they can tap their beer. Results are presented in Figure 1. 80.4% of microbreweries have their restaurant where they top their beer and only 19.6% of microbreweries do not own the restaurant or there sell their beer to other restaurants where they top their as well as types of beer.

The use of SEO sites in microbreweries is almost even. Results are presented in Figure 2. 52.1% responded positively that they use SEO on their webpages and also use other analytical methods such as Google Analytics. 47.9% of microbreweries do not use these analytical methods at all. Microbreweries should use these analytical methods to find out important information regarding their customers. SEO is a necessary system for every business owner who has a website (Berman, Katona, 2013). Thanks to SEO, it is possible to improve your website and also have an overview of consumer behavior (Yang and Ghose, 2010). This allows microbreweries to find out what customers are doing and looking for on the web.

Another part of the research concerned social networks, i.e. what social networks microbreweries use. The results are presented in Figure 3. Most microbreweries use social network Facebook. The second most used social network is Instagram. Four of the microbreweries surveyed do not use social networks at all. For these microbreweries, the website is also at a poor level. Some microbreweries also use a social network to share YouTube videos. Most microbreweries combine social networks Facebook and Instagram. According to (Clark et al., 2017) if social networks are maintained and communication is maintained, social networks are very beneficial for business. Here you can give events that happen in microbreweries but also photos and more. It is therefore important that microbreweries communicate via social networks.

As for the use of social networks it was also examined whether microbreweries use content marketing. The results are presented in Table 2. The research found that five microbreweries do not use content marketing at all. Other microbreweries as for the use of this type of marketing, hire a special person to take care of their social networks or manage to create this content that is of interest to their customers themselves. The use of content marketing was evaluated on a five-point scale, with 1 - not fully utilized and 5 – fully utilized. Rowley (2008) argues that content marketing is particularly important for strategy and marketing communications. Thanks to this content marketing we can use it well in communication with customers. According to research, most microbreweries use content marketing, which is good for their communication with the customer.

The statistical processing shows that the arithmetic mean is 3.217 and occurs in the range of "neither use nor uses" and “rather uses”. On a scale of 1 to 5, the median is 3.

<table>
<thead>
<tr>
<th>Table 2 Using content marketing on scale.</th>
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<tbody>
<tr>
<td>1 - not fully used</td>
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<tr>
<td>Content marketing</td>
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<table>
<thead>
<tr>
<th>Table 3 Microbrewery websites rated on scale.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - completely outmoded</td>
</tr>
<tr>
<td>Website</td>
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</table>
The standard deviation is 1.478 and indicates that most microbreweries do not deviate from the average 1.478. Another part of the research dealt with the website. All microbreweries surveyed have websites. The results are presented in Table 3.

The research analysed web pages of microbreweries in terms of modernity and suitability for customers. The website was ranked on a five-point scale, with 1 – completely non-modern and 5 – completely modern. For microbreweries that lively communicate on social networks, the website was “very” or “completely” modern. For microbreweries that do not communicate so often on social networks, or their posts are not of interest to users, the website is more neutral or out of fashion.

The statistical processing shows that the arithmetic mean is 3.326 and occurs in the range of “neither modern nor modern” and “rather modern”. On a scale of 1 to 5, the median is 4. The standard deviation is 1.857 and indicates that most microbreweries do not deviate from the average by 1.857. 21.8% of microbreweries on the scale were rated as “completely modern” and “neutral”. Most microbreweries, namely 28.2% of microbreweries, were rated as rather modern. All websites provide contacts, opening hours on where the microbrewery can be found, and in many cases, a menu is also provided.

The graph shows the evaluation of the other questions examined.

![Figure 4 The evaluation of the remaining questions.](image)

In the last part of the inquiry, the microbreweries were asked whether they customize products, sell souvenirs, whether they have a reservation form for a restaurant and whether they offer a loyalty program. The results are presented in Figure 4. None of the microbreweries responded positively to the customization of their products. The brewing process depends on the demand and the brewer, but microbreweries do not include services such as customized labels or beer on the client’s request. 50% of microbreweries sell their souvenirs. The most interesting souvenir is a cycling jersey of the microbrewery Hostivá H1, which is sold in the style of beer with the logo of the microbrewery. The most frequented souvenirs are glasses with the brewery logo, as well as trays, pencils, or baseball caps. Restaurants having a microbrewery as a supplement to the restaurant do not usually have such souvenirs; people can only buy their beers bottled into PET bottles. Souvenirs in the travel industry have a strong symbolic value associated with pleasant travel experiences and memories (Baizerman et al., 1994). As beer tourists can buy a souvenir, they can also take away something that reminds them of a microbrewery. According to (Collins-Kreiner and Zins, 2011), souvenirs can affect the tourist experience and enhance the emotion that can affect the tourist.

A reservation form is a form that can be used to make a restaurant reservation on a website without having to call the restaurant just by filling in the name, time, contact and number of people and the microbreweries arrange a table for the hour. If the restaurant is already full, they call the contact person to inform that the reservation is no longer possible to be made. None of the microbreweries have an interactive restaurant map where the customer could choose the specific place they wish to have. Only four microbreweries use the loyalty program. The loyalty programs for all these microbreweries work on the principle of points. They earn points for the beer they drink, and they can either buy a souvenir or beer for those points. To support customer relationship management, microbreweries need to realize the importance of increasing customer loyalty and enhancing its business image. Today, unpredictable customer trends can occur. It is necessary to respond to these trends to keep the company interesting for its customers. This is also crucial for microbrewery businesses (Porter and Donthu, 2008). Microbreweries in Prague use various possibilities to increase customer loyalty. In particular, the sale of souvenirs. These loyalty programs have only 4 microbreweries. Youjae Yi and Hoseong Jeon report in the Journal of the Academy of Marketing Science that loyalty programs are important for perceived value and brand loyalty (Yi and Jeon, 2003). According to (Zakaria et al., 2014) is an important relationship between loyalty program and customer satisfaction, loyalty, and customer satisfaction, and they also work against the customer’s transition to competition. As already mentioned, microbreweries do not prefer these loyalty programs yet.

The trend of microbreweries is still growing and as Stratilik et al. (2018) said, microbreweries will continue to grow. Because the microbreweries can feed themselves and there is a demand for the beer that is brewed in microbreweries, this boom has no end. The only thing that can stop microbrewery is the lack of hops, which is ordered more than a year in advance (Ekonom, 2015). There is also a boom in microbreweries in the United States; from 8 to 2768 (Moore, Reid and McLaughlin, 2016). The boom of microbreweries is not limited to Europe, but also other countries. As in Britain, where the number of microbreweries is increasing, and microbreweries gain a larger market share (Cabras and Bamforth, 2016). It can be argued whether microbreweries with such growth rates compete with large breweries in the future.

When the research questions are included in the statistical processing, we get to the average use of Marketing 4.0 at 84.88%, thus not rejecting the hypothesis $H_0$. To not reject or reject the hypothesis $H_0$, it is assumed that more than 80% of microbreweries use Marketing 4.0 and $\chi^2$ chi-square statistic has been used. The critical value of the chi-square $\chi_2$ at the number of freedoms 3 is 9.21. This value does not reject our hypothesis $H_0$ and rejects the hypothesis $H_1$. 

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Recommendation

Today, there is a boom in food delivery applications. Some microbreweries, but a relatively small part, use the option of delivery via the Dámejkdlo.cz or Uber applications, but through these applications only food from the restaurant can be ordered. Microbreweries should extend their offer to the distribution of beer products. For example, in the Dámejkdlo.cz application, customers can only order a beer in PET bottles, or special large sets, such as a celebration.

Several microbreweries have poor website status. In today’s digital era, the microbrewery web presentation should be a calling card for a new potential customer and an existing customer, too. For these microbreweries, it would be advisable to have a professional form of the website with SEO for search engines.

Three of the microbreweries bought an application for their smartphones, where the current menu, phone contacts, and information about the microbrewery are available. In some applications, there are also updates and links to social networks. None of these microbreweries have loyalty points that could be maintained in the mobile app. The users would log in to this app and be able to monitor the status of their points which they would receive for drinking beer and could choose their reward either in the form of free beer or souvenirs directly in the application.

The microbreweries, which are in the center of tourism in Prague, offer tours of their microbreweries. However, the microbreweries that are located in parts of Prague where tourists do not travel much do not organize these tours or organize them in exceptional cases only. For local customers who drink beer from the local microbrewery, it might be interesting to look at the microbrewery, or link it to, for example, a newly brewed type of beer.

CONCLUSION

The article set out scientific questions that were answered by microbreweries about their restaurant, the use of SEO, social networking, content marketing, and websites. Over 80% of the microbreweries have their restaurant where customers can order something to drink or eat.

Over 52% of the microbreweries use SEO and other analytical methods. Microbreweries use social networks, especially Facebook and the second most used social network is Instagram. Two of the microbreweries also use the social network Pinterest. On these social networks, microbreweries post messages containing photographs of food, events that are going to be in the microbrewery, or photographs from the microbrewery background.

All microbreweries have websites that have been rated on a five-point scale. Some microbreweries have outdated and old websites. Other microbreweries have very modern and new websites. Three microbreweries have purchased mobile applications for their customers, where they can find out the current menu and news.

When the research results are included in the statistical processing of research questions, we get to the average use of Marketing 4.0 at 84.88%, thus not rejecting the hypothesis H₀. Not to reject or reject hypothesis Hₐ, it is assumed that more than 80% of microbreweries use Marketing 4.0 and a chi-square statistic has been used. The critical value of the chi-square at the number of freedoms 3 is 9.21. This value rejected the H₀ hypothesis and rejects the Hₐ hypothesis.

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