ABSTRACT

Purpose: to understand how small companies located in a technology park make use of strategic actions and digital marketing tools to promote their business.

Methodology/approach: an exploratory data collection was systematized, with a qualitative approach, through in-depth interviews with entrepreneurs in the technology park.

Main results: the research demonstrated that entrepreneurs have difficulties in the formation and execution of digital marketing strategies. The knowledge they retain about each tool reflects their use.

Theoretical/Methodological contributions: a framework was built, demonstrating how small companies execute their digital marketing strategies, together with the role of knowledge of the tools and their metrics, in the use and actions performed by organizations.

Relevance/originality: to understand how companies inserted in innovation environments use the different strategic actions that digital marketing offers and how they perform the proper monitoring of these actions.

Social/management contributions: from work, small business managers can recognize what are the barriers encountered in the execution of digital marketing strategies, seeking solutions to overcome these challenges, in the light of their knowledge and the potential impacts on business.

Keywords: Marketing Digital. Marketing Digital Strategic Actions. Metrics.
1 INTRODUCTION

The quick expansion of the internet and the increase in the number of people who access it have changed consumer's behavior when searching for references of a given company, which influences their purchase decision (Winer, 2009). This change has also caused great impacts over the corporate world, especially because the speed and the convenience with which consumers have access to information made companies rethink their approach and marketing strategies, with the use of digital marketing as a way to be close to their clients and suppliers, thus being able to establish a closer and more dynamic relationship (Chaffey & Patron, 2012).

The digital environment provides organizations with the use of several strategies so that they may reach their objectives, concerning both sales increase and brand promotion (Crescitelli & Freundt, 2013). Since it deals with something dynamic, digital marketing enables the choice of the strategic action to be changed in real time, and it can change the actions’ direction in order to adapt to the target audience’s engagement concerning the campaigns performed (Wymbs, 2011). However, more important than understanding the target audience’s behavior is to make the right choice concerning the strategy to be used, and understand whether the message that is sent out is reaching the consumer the way the organizations expect it to (Felix, Rauschnabel & Hinsch, 2017).

Besides the new opportunities that digital technology made possible when selling products and services, it also brought in a certain type of clients and consumers’ control, which caused some change in the marketing dynamics (Wymbs, 2011), for it made the company no longer act as the brand’s protagonist, and allowed clients to control how it must behave before their comments and reactions in digital platforms. This change made the organization pay attention to what is happening to it by monitoring its digital participation – in order to promote or encourage positive interactions or even to respond to negative questions – while there is still time left (Ryan & Jones, 2016). For such, knowing which metrics to use for the strategy chosen and properly monitor the actions taken is extremely important for, only then, will the company be able to measure the public response concerning what is being proposed and executed (Leeflang, Verhoef, Dahlström & Freundt, 2014; Järvinen & Karjaluoto, 2015).
Based on the above, this study tried to check and understand how small enterprises located in a technological park use strategic actions and digital marketing tools. The opportunity arose to understand how the small enterprises that are inserted in innovation environments use the various strategic actions that digital marketing offers, and how they monitor the actions taken (Ryan & Jones, 2016; Winer, 2009; Okada & Souza, 2011; Felix, Rauschnabel & Hinsch, 2017). However, the contributions of this study lie on the digital marketing approach applied to the current context of entrepreneur.

2 THEORETICAL BACKGROUND

2.1 DIGITAL MARKETING

Digital marketing is an evolving process (Wymbs, 2011). Through technology’s quick advancements and the appearance of new platforms, digital marketing becomes the tool with the largest diversifications concerning promotional actions, which reflects on the promotional practice revolution and on the growth of academic research in digital marketing (Lamberton & Stephen, 2016). Kim, Kang and Lee (2020) point to this direction in their research as they show the evolution of the topic in two decades of research. Companies have the great challenge to know how to use these changes in their favor (Day, 2011). The speed with which the changes happen in digital means and the possibility to measure results in a shorter time make digital marketing get an advantage over traditional marketing (Day, 2011).

One of the objectives of digital marketing is to enable the client to search for various suppliers, thus facilitating the process of purchase and sale of several products and/or services. Social media contribute so that companies are able to follow market trends, search for new ways to reach its target audience, and promote actions to build customer loyalty, besides enabling companies to follow their image on the internet (Trainini & Torres, 2014). By reinforcing this statement, Rosa, Casagrande and Spinelli (2017) emphasize that, with the use of digital platforms, companies might have a closer interaction with consumers by trying to understand the internet user’s behavior in the virtual environment, which awakens user’s interest and, consequently, reaches a higher number of people, with a cost that is lower than when using traditional marketing. However, in order to expand the brand, it is necessary to have a very well designed strategy and good attitude.
According to Ogdgee and Crescitelli (2011), digital marketing has various advantages when compared to traditional marketing. The authors state that financial investments and digital marketing actions are important for the companies’ growth. These actions enable the reach of a higher number of users and, thus, the contact with the target audience. It is important to emphasize that, despite the structure or the company’s line of business, these investments are essential for the companies to keep in a market that is very competitive.

2.2 DIGITAL MARKETING METRICS

Metrics are methods used to measure, evaluate, compare, analyze and understand the results of a given marketing action, enabling companies to quantitatively understand, measure and analyze the results of actions (Pelsmacker, Tilburg & Holthof, 2018). Marketing metrics are sources of literature attention (Knowles & Ambler, 2009). Understanding metrics and digital performance is seen as a new research field (Leeflang et al., 2014; Järvinen & Karjaluoto, 2015).

The use of marketing metrics is important to analyze on-line consumer’s behavior, measure their responses to digital marketing stimuli, and optimize the organization’s future actions (Nakatani & Chuang, 2011). Kannan and Li (2017) defend that organizations try to improve their metrics with the objective to ensure return over the investment made with the actions proposed by the company. Järvinen & Karjaluoto (2015) summarize the process of online measurement in the following phases: data collection, data analysis and interpretation, results report, metrics’ system action and update. In the first phase, the objective is to collect data through multiple methods, facing the challenge of collecting accurate, standardized and objective data. Further on, companies need to analyze the data and turn them into reasonable actions. The results reported encompass a file with the main ideas reached from the analysis. The taking of decision concerning an action and its feedback to improve the metrics system closes the process.

Chaffey and Patron (2012) emphasize that, for each type of action used, there is a specific monitoring strategy. No matter what it is, monitoring marketing actions is important so that the company is able to understand which actions are bringing the desired return, as well as to optimize promotional actions by allocating the investment for the best actions of digital marketing.
Companies need to know how to choose the right metrics according to their type of business and focus. Moreover, it is important to group up and categorize the metrics so that the data are used to boost business performance (Chaffey & Patron, 2012). In some situations, sales realization may not be the target but brand promotion, and it is necessary to define the analyses and the monitoring frequency so that the strategies may be amended in due time (Rappaport, 2014).

3 DIGITAL MARKETING IN SMALL ENTERPRISES

According to Leeflang et al. (2014), consumers’ interaction with companies’ digital participation results in a great volume of data to be analyzed by the organization. Such data can be turned into useful information for the taking of decisions. However, most companies don’t master this process (Järvinen & Karjaluoto, 2015; Pelsmacker et al. 2018). According to Fernandes and Rosa (2013), internet progression enabled small enterprises to estimate the results of the marketing actions taken, leading to a better management and companies’ professionalization, which, in turn, causes more visibility, customer loyalty and increase in profits.

According to Järvinen and Karjaluoto (2015), Web Analytics is efficient to measure the organizations’ results. With this tool, it is possible to check the number of accesses to the website, the time and the pages accessed and how long the user stayed on the page. However, the author warns that these data alone are not enough for a detailed analysis about marketing strategy results. Okada (2011) defends that the correct application of the Web Analytics tools may be turned into a competitive differential for companies.

To Calais and Santos (2016), due to the progress of digital platforms and the communication convenience offered with the use of social media tools, where the user is a medium generator by sharing information and creating content, some companies still face difficulties concerning the use in its favor, for they prefer not to invest in these tools for promotion (especially individual micro-entrepreneurs, due to existing barriers).

Mazzinghy (2014) defends that small enterprises try to use digital marketing strategies. However, the great challenge concerns financial investments and restricted, specialized labor. According to Royle and Laing (2014), organizations face several difficulties to include digital marketing actions and analyze the metrics of the actions.
taken. The main question is that a digital marketing plan is not usually made due to the lack of qualified professionals in the company.

However, based on Leeflang et al. (2014), it is possible to see that small enterprises still haven’t adapted to digital marketing. Among the major difficulties found by small enterprises’ managers is the lack of knowledge and interest to learn about new strategies and marketing tools that can be used, and also lack of time to plan marketing strategies.

According to Calais and Santos (2016), digital marketing tools and social networks are essential both to increase sales and to strengthen bonds with the client. However, it is important to set strategies according to the company’s target audience by always trying to adapt social network contents to this public, understanding how they interact and following up on the strategies so that they may get a better result. As a complement, Ferreira et al. (2019) state that, when social networks are used strategically, by promoting the products and the company’s image or by advertising offers, they are extremely important for the development of micro and small enterprises.

To Santos et al. (2019), managers of small enterprises know the benefits and the importance of digital marketing. However, they face several problems, such as financial restrictions, and lack of time and qualified professionals to perform their function. However, it is not easy to find professionals with wide knowledge of strategic planning. For this reason, there is the need to develop skills and the main qualities that are necessary from digital marketing professionals. The lack of these professionals in the market makes companies set strategies not being sure they will be efficient for the business. Another point to be taken into account is the need to analyze, assess and evaluate the results obtained from the actions taken, especially to assess investment return. Among the skills that are necessary, there is communication, writing skills, good customer relations, ethics, legislation and metrics’ monitoring and evaluation (Royle & Laing, 2014).

4 METHODOLOGY

Concerning its nature, this article deals with a research that is applied and exploratory with a qualitative approach. Besides in-depth interviews with a semi-structured script, data were collected from entrepreneurs of micro and small
enterprises located in a Technological Park. In order to select the participating companies, activities in social media networks from every organization located in the park were watched. Firstly, the study analyzed whether all the organizations had an institutional website and if it had information concerning social networks (Phase 1). Then, the activities in these social networks were observed. The number of posts from the companies in social networks was used as a criterion selection, for the study intended to understand why some of these companies had a high number of posts and others had practically none and, from this analysis, the participating organizations were selected for the interviews (Phase 2). Only micro and small enterprises were considered for this article’s data collection. The number of employees was used as a cut-off point (which considered up to 49, according to classification from the Brazilian Service of Support for Micro and Small Enterprises – SEBRAE). Figure 1 shows the phases covered during research development, as well as the selection criteria for the participating organizations.

This study used a semi-structured script that addressed the importance of digital marketing, the strategic actions used, the content produced, social media networks and their monitoring, the measurement and the evaluations of the strategic actions used.

Interviews took place between March 23rd and April 6th, 2018. Each interview lasted for approximately 15 to 25 minutes and they were all recorded with the researchers’ smartphones. Besides, they all took place at the park, except for two of
them, which happened at the college headquarters that house the park, and one other, which happened through Skype. The criterion concerning data saturation was observed in order to determine the number of interviews performed (Glaser & Straus, 1967), given the interviewees' homogeneity. Figure 2 shows the data collected concerning the interviewees and the company.

<table>
<thead>
<tr>
<th>Company</th>
<th>Operational Area</th>
<th>Facebook</th>
<th>Instagram</th>
<th>LinkedIn</th>
<th>Twitter</th>
<th>Employees</th>
<th>Time at the park</th>
<th>Market time before the Park</th>
<th>Interviewee</th>
<th>Marketing involvement</th>
<th>Role/Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Environmental Sciences and Renewable Energies</td>
<td>17 posts</td>
<td>Not found</td>
<td>1 post</td>
<td>Not found</td>
<td>2</td>
<td>1 year</td>
<td>0</td>
<td>IA</td>
<td>No</td>
<td>Director</td>
</tr>
<tr>
<td>B</td>
<td>Health Sciences and Biology</td>
<td>5 posts</td>
<td>Not found</td>
<td>0 posts</td>
<td>Not found</td>
<td>12</td>
<td>8 months</td>
<td>1.8 year</td>
<td>IB</td>
<td>Yes</td>
<td>CEO</td>
</tr>
<tr>
<td>C</td>
<td>Creative Industry</td>
<td>24 posts</td>
<td>Not found</td>
<td>16 posts</td>
<td>Not found</td>
<td>9</td>
<td>3 months</td>
<td>3 years</td>
<td>IC</td>
<td>Yes</td>
<td>Commercial/Strategic Director</td>
</tr>
<tr>
<td>D</td>
<td>Creative Industry</td>
<td>Not found</td>
<td>Not found</td>
<td>1 post</td>
<td>Not found</td>
<td>1</td>
<td>2 months</td>
<td>0</td>
<td>ID</td>
<td>Yes</td>
<td>Designer</td>
</tr>
<tr>
<td>E</td>
<td>Materials and Nanotechnology</td>
<td>Not found</td>
<td>Not found</td>
<td>Non-entrepreneurial page</td>
<td>Not found</td>
<td>5</td>
<td>3 years (resident)</td>
<td>5 years</td>
<td>IE</td>
<td>Yes</td>
<td>Director</td>
</tr>
<tr>
<td>F</td>
<td>Materials and Nanotechnology</td>
<td>2 posts</td>
<td>Not found</td>
<td>1 post</td>
<td>Not found</td>
<td>27</td>
<td>8 years (resident)</td>
<td>13 years</td>
<td>IF</td>
<td>Yes</td>
<td>Director</td>
</tr>
<tr>
<td>G</td>
<td>Information and Communication Technology</td>
<td>5 posts</td>
<td>1 post</td>
<td>1 post</td>
<td>I tweet</td>
<td>15</td>
<td>1 year</td>
<td>4 years</td>
<td>IG</td>
<td>Yes</td>
<td>Commercial Director</td>
</tr>
<tr>
<td>H</td>
<td>Information and Communication Technology</td>
<td>Not found</td>
<td>0 posts</td>
<td>Non-entrepreneurial page</td>
<td>89 tweets</td>
<td>2</td>
<td>1 year</td>
<td>0</td>
<td>IH</td>
<td>Yes</td>
<td>CEO</td>
</tr>
<tr>
<td>I</td>
<td>Information and Communication Technology</td>
<td>Not found</td>
<td>0 posts</td>
<td>Not found</td>
<td>4</td>
<td>8 months</td>
<td>2 years</td>
<td>II</td>
<td>Yes</td>
<td>Founding partner</td>
<td></td>
</tr>
<tr>
<td>J</td>
<td>Information and Communication Technology</td>
<td>0 posts</td>
<td>41 posts</td>
<td>12 posts</td>
<td>81 tweets</td>
<td>22</td>
<td>2 months</td>
<td>10 months</td>
<td>IJ</td>
<td>Yes</td>
<td>New deal administrator</td>
</tr>
</tbody>
</table>

Figure 2. Companies’ Interview at the Technological Park
Source: Elaborated by the authors (2020)

The questions were designed based on the theories studied and previously validated by a digital marketing specialist. In order to analyze the interviews’ content, the audio tracks recorded during the interviews were transcribed. After this process, the key points from the interviewees’ speech were highlighted and coded (Bardin, 2009). From this coding, categories were created to group up mutual codes. Categorization enables the researcher to classify the codes and regroup them by topics, besides exploring and investigating mutual aspects between their elements (Bardin, 2009). The counting technique was also used as an aid to further understand the findings (Hannah & Lautsch, 2011).

5 RESULTS’ ANALYSIS AND DISCUSSION

The following sections present the analyses performed according to the dimensions that came up from the content analysis done from the interviews’ transcriptions. From coding and categorization, it was possible to come to three
dimensions concerning the use of digital marketing by micro and small enterprises in the technological park studied.

The first dimension is **Knowledge**, which is composed of two categories: Importance, which shows the entrepreneurs’ knowledge of the need and relevance to be digitally present, even if this doesn’t translate into a wider use of the digital marketing’s strategic actions; Metrics, which corresponds to codes from the knowledge of the metrics’ entrepreneurs available to measure actions and strategies. **Use** was the second dimension identified. It encompasses two other categories: Barriers, which highlight difficulties concerning time and the entrepreneurs’ skills to develop digital marketing actions; and Content Production, which showed the difficulty concerning the development of publishable material by the entrepreneurs. The last dimension was named **Reflection** and it is composed of three categories: On-line actions, Offline actions and Future strategic actions. The two first categories elicit what is already done by the entrepreneurs. The last category reflected that which is envisioned by small entrepreneurs as the next steps concerning their digital participation. Besides these points, the figure also mentions a very interesting finding, which is not catalogued as a category: a potential impact the type of business may cause, both to the **Use** and to the **Reflection** of digital marketing. It was possible to see that certain products (or companies) don’t need to be digitally present in order to have a good marketing performance, which goes against several literature topics (Winer, 2009; Wymbs, 2011; Pelsmacker, Tilburg & Holthof, 2018). These codes, categories and dimensions are summarized in Figure 3.
<table>
<thead>
<tr>
<th>Codes</th>
<th>Categories</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital marketing is essential;</td>
<td>Importance</td>
<td>Knowledge</td>
</tr>
<tr>
<td>Digital marketing is not important for our segment;</td>
<td>Metrics</td>
<td></td>
</tr>
<tr>
<td>Extremely important, all my sales are done through the internet;</td>
<td>Barriers</td>
<td></td>
</tr>
<tr>
<td>Digital marketing is indispensable. Without it, there would be no sales.</td>
<td>Content Production</td>
<td>Use</td>
</tr>
<tr>
<td>I know analytics well, but it is a heavy load I can't manage;</td>
<td>On-line Actions</td>
<td></td>
</tr>
<tr>
<td>I know the tools but we are not monitoring anything currently;</td>
<td>Offline Actions</td>
<td>Reflections</td>
</tr>
<tr>
<td>Yes, we are aware, we use them with our clients and we know how to apply them;</td>
<td>Future Strategies</td>
<td></td>
</tr>
<tr>
<td>We use analytics a lot to monitor where the accesses to our site come from and to know about ROI;</td>
<td></td>
<td>Business Type</td>
</tr>
<tr>
<td>We monitor the likes on Facebook and the clicks from sponsored adds;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Too many things for only two partners to take care of;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The cost to hire a company that is specialized in our business is too high, so we create our campaigns internally;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I can't follow up on everything, so the external consulting will do it;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Too many things, we can't follow up on everything;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>There is someone in the company who creates all the content, but when we can't handle it, we hire on-demand consultancy;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>We create everything internally and, when we need something more well produced or which demands more time, we go to external consultancy;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>We have an internal marketing department that takes care of all the actions;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>We need professionals to take care of our marketing;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>We use marketing e-mail. We use Facebook very little. The site is just to show the company exists;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Twitter is our strong support;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social networks marketing is done based on the company’s product because promoting what I do is not interesting;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>We strongly use organic search and social networks as a support to increase site traffic;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>We promoted some actions in the past but they produced no results, so we only have our site;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>We focus on our search engines, on Google Adwords;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>We use Facebook and Instagram;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Our marketing is done more in area congresses, we take part in events in our segment;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>We sell more in visits and events;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Our product is very specific, marketing is mostly by word of mouth. We sometimes sponsor something;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>We take part in small events by giving lectures;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Our fair stats have our site URL displayed, so we take the client to them;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>We want to structure our marketing area;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>We recently hired an agency to take care of our marketing;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>We want to provide our client with an experience and not only sell a service;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>We will focus on short Instagram teasers because Brazilians do not spare time reading the things we post.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Figure 3.** Digital Marketing Framework – Technological Micro and Small enterprises (Research Codes, Categories and Dimensions)
Source: Elaborated by the authors
5.1 KNOWLEDGE

In the dimension concerning knowledge, the objective was to investigate whether the interviewees had knowledge about digital marketing, monitoring metrics and, especially, about the importance of digital marketing to their business.

It was possible to see that the companies interviewed have some type of knowledge concerning digital marketing and their strategic actions. However, to some of them, being digitally present is not important due to the fact their type of business doesn’t require digital participation, which goes against the statement by Turchi (2012). Pelsmacker, Tilburg and Holthof (2018) present data that show how effective digital participation becomes for the success and growth of companies.

The interviewee named IF states that being digital is not important due to his operation segment, saying that “as we work with very punctually on solutions the companies have, in certain situations, I don’t see [digital marketing] as something important for us”. This company has only one website, where it posts news and events it attended but they don’t see it as an opportunity to make new deals or to prospect the market. Thus, the analysis and the observation from the interview with company F go against the theory brought by author Torres (2009), who says it is of fundamental importance that the company is digitally present.

On the other hand, there are companies that find digital marketing to be extremely important but which, in the current situation, is not their focus since the contact with their clients is totally on-site, and the clients don’t miss digital actions. This is also due to the fact they are turning their limited resources to selling and promoting their products and not to promoting the brand, as stated by interviewee IB: “It is important but not our focus today as a company. It’s because we are sorting out the operations that are a little divided, you see, between the company and our product”.

Unlike what has been presented, to other companies digital marketing is the fundamental key in their trades and becomes extremely important for the promotion, the prospections and the closing of new deals, thus confirming the statement by Torres (2009), who said that the client becomes the center of the company with the objective to satisfy needs and create relationships between them. Moreover, the author also reinforces the idea that, in digital media, the interaction between client and company is immediate. The author’s concept can be confirmed by the statement from interviewee IJ, who says that digital marketing is “Key. It is the first channel we use to
capture partners and clients in cities. [...] the first contact is through social media, Facebook and Instagram", and by the statement from interviewee IC, who says that “To us it is essential; we wouldn’t be able to sell anything without any tool”.

From these analyses, it was possible to see that the relevance of digital participation depends on the company’s type of business, its operation sector, the client’s need to have the company in an on-line platform and, in some cases, on some non-disclosure agreements where products’ disclosure is not allowed. It was possible to see that, among the companies analyzed, those concerning Creative Industry or Information and Communication Technology use digital marketing more than the organizations which deal with Materials and Nanotechnology, for example.

The metrics were divided into two approaches: knowledge about its existence, and how to apply them. Concerning having knowledge about the existence of metrics, it was possible to see that all the companies interviewed know about them, have knowledge of the tools that help monitor the actions taken and are also aware of how important it is to carry out this monitoring. However, more respondents stated they don’t know how to use them and don’t monitor them properly. This number of people goes against the theory that says the company needs to monitor its actions in order to know which ones are being more effective, if they are reaching the objective suggested and if the investment is being applied properly concerning the return obtained (Pelsmacker et at 2018). Moorman and Day (2016) emphasize the importance of a competent analysis of marketing metrics as an important point for the organization. However, what the accounts show seems to go against this judgement, with the companies choosing to advance little over the topic on the metrics of their strategic actions (Knowles & Ambler, 2009). Accounts that lead to this impression were collected from the H company, which commented on the excessive number of metrics and the impossibility to manage them, and from the B company, which leaves this monitoring of digital metrics in the hands of an external agency. The A, E and F companies also stated they don’t monitor any digital media and chose to follow up on the number of accesses to the company’s website only.

Unlike this setting, there are companies that try to pay attention to the metrics of their digital actions. Interviewee IJ, responsible for the J company, said that
“In the end of the month, we always analyze how the previous month went in order to create the next campaigns for the following month and even concerning investment issues. We decide whether we will invest more in Facebook or more in printed material” (Interviewee J, Company J).

As emphasized by Turchi (2012), measurement is important in order to assess whether the investments made are bringing the expected return to the company. Moreover, according to Farris (2012), monitoring becomes essential since, only then, will the company be able to transform the actions taken into numbers and implement the due measurement, as expressed in the concern of interviewee IG to know how many registrations his website had during a given campaign.

Based on the interviewees’ accounts, it is possible to say that few companies researched effectively monitor their strategic actions of digital marketing and check if the return obtained complies with the investments made. Such situation contradicts authors like Torres (2009), Farris (2012), Järvinen and Karjaluoto (2015) and Moorman and Day (2016), when they state that choosing the metrics that will be used in the actions taken is important due to the company’s focus, whether it is on sales or only promotion. Without this control, organizations come adrift and don’t see what is actually working out and attracting new clients.

5.2 USE

The objective of the dimension concerning use is to understand how companies set up their contents and what barriers were found when creating them. During the interviews, it was possible to see that the main barriers against the use of digital marketing are time and the investment necessary for its establishment. Most of the interviewees claimed they don’t have time to properly follow up on their digital marketing, and the fact many of them are start-ups with a low number of employees (most of them are only partners), this confirms these statements (Calais & Santos, 2016).

Interviewee IH clearly translates this statement when he says that

“I think sometimes it is a “blizzard” of things for one or two partners in the start-up mode and there is no time for that, it’s a discrepancy. The ‘guy’ will either learn it slowly or the guy will learn it not knowing much or the guy will simply leave it, right?”.

In this case, the respondent admits the importance of digital marketing for his business and also admits that he spends his time taking care of producing and creating the
product offered, while his partner will focus on the commercial area, and none of them is able to give the proper attention to the company’s marketing. The environment of start-ups, which are entrepreneurial initiatives that try to create products or services in uncertain environments (Ries, 2012), provides this tension in the application of marketing tools. Since many of them follow a very quick cycle of construction, measurement and learning, the focus turns to the development of the offer along with other organizational activities in the background. The companies inserted in these environments see digital marketing actions as a great cost-benefit investment (Taveira, 2018). However, time seems to be one of the major obstacles faced by this type of entrepreneurship.

On the other hand, interviewee IA states that many start-ups take actions the way they can, especially because they only have the partners who are responsible for everything in the company, and due to the costs of hiring external consultancy to help them create and keep their contents. Besides this interviewee, IC mentions the high demand of work and the extensive information about marketing to justify the lack of time in following up on some of the actions taken: “the problem is that we work with such a huge amount of information that it is complicated for us to keep an eye on them [the actions]. We do the work little by little.”

Even those companies which have the help from external consultancy fight against the difficulty to have time to give the proper attention to the service provider, as stated by interviewee IB: “I really haven’t had the time to follow up more closely to see how things are […]. I haven’t been able to follow up on this process closely. Sadly.”

Due to these accounts, it is possible to state that the start-up type of business requires a lot of attention from their partners and, even if they are aware of the need to follow up on the company’s marketing, it demands an amount of time that should be dedicated to product/service and to the commercial area instead of to the actions themselves. Unfortunately, this observation slips out of the ideal digital marketing team presented by Royle and Laing (2014). Moreover, upon its creation, the start-up has no initial capital to make the investments that are necessary in the marketing area. That’s why many companies take their actions according to their time and need (Calais & Santos, 2016).

Another point that came up from the analyses about the use of digital tools of communication referred to messages’ content. Content production was a category that
was identified in order to understand whether the companies situated at the park produce the content that is internally used in the digital marketing actions or if they have the help of external consultancy, according to the concept by Kannan and Li (2017), in which content production should be done in a way that is relevant to the consumers and help them find the company through the various existing digital media.

Due to the investment in external consultancy, which is sometimes very high, some companies alone take care of their digital marketing by choosing to internally produce simpler contents, and ask help from third parties only when there is the need for something more elaborate or that demands more time to be designed, as explained by interviewee IG about content elaboration: “It is shared; some things are done with the team and others are outsourced”. Moreover, the company states it prefers to produce its content internally, for, although consultancy plays a fundamental role in saving time from the internal team, many of them don’t have the expertise about their business and, those that do, need a high investment from start-ups, which, probably, don’t have it. Leeflang et al. (2014) highlight that the lack of resources is one of the major challenges against communication in the digital era.

As stated by Morais (2015), digital participation is more than simply feeding a website or a social network. It is about being where the target audience is and being able to establish a rapport with it. Taking into account the author’s statement, interviewee IC says that “it’s a lot of things to deal with and to take care of; at the same time you have to create content, you have to post, you have to post the right way in each network”. Because of this precaution, company C chose to internally train someone to be able to feed the platforms used. In case it is necessary, they will ask for help from agencies when the demand is higher than their production capacity: “we have an internal editor and also external editors who work for us when we need more production”.

Since there are no internal personnel to perform these tasks, other companies end up delegating all their responsibility concerning digital marketing to consultancy. Interviewee IH mentions the lack of partners’ skills to deal with digital marketing and their little expertise as a justification to use external consultancy. Likewise, interviewee IB delegates all the tasks concerning content elaboration and media maintenance to a third party and only approves that which will be posted.
5.3 REFLECTION

Based on the explanations of the dimensions concerning knowledge and use, the dimension concerning reflection was created as a way to assess which are the real actions used by the companies interviewed, with categories that belong to such dimension, such as on-line and offline actions and planning for the future of the organization. With the objective to contribute to the analysis, a procedure for counting the actions done by the interviews was adopted. The supplementary count style was chosen since it aims at helping explain the findings (Hannah & Lautsh, 2011). Table 2 was designed to better display the actions informed during the interviews (and the frequency with which they appear), which will, then, be explained and discussed.

Table 1

<table>
<thead>
<tr>
<th>Offline Actions</th>
<th>On-line Actions</th>
<th>Future Strategic Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Events</td>
<td>Social Networks</td>
<td>Social Networks</td>
</tr>
<tr>
<td>Fairs</td>
<td>Website</td>
<td>Client experience</td>
</tr>
<tr>
<td>Lectures</td>
<td>SEM/SEO</td>
<td>Marketing area structure</td>
</tr>
<tr>
<td>Word of mouth</td>
<td>Sponsored links</td>
<td>Organic growth</td>
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<tr>
<td>Sponsorships</td>
<td>E-mail</td>
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</tr>
<tr>
<td>Banner</td>
<td>Mobile</td>
<td></td>
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<tr>
<td>Newspapers</td>
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Source: Elaborated by the authors (2020)

During the interviews, it was possible to see that some companies don’t take digital marketing actions and that they saw in offline marketing the best way to promote, prospect and make new deals. Since most of these companies aim at other organizations (B2B sale), their participation in some specific events in their operation segment, as well as their participation in lectures, fairs and congresses, end up becoming more effective than digital marketing. Counting helps with this comprehension, for it shows that events, fairs and lectures were the actions with the highest periodicity rates. Interviewee IB assures his business doesn’t miss digital actions in order to be promoted and that the company currently has a website and a Facebook page with little interaction. According to him: “The participation in events is very important because it is a moment to get together [with professionals from the area]; it is a very specific way to promote and that brings interesting returns.”
As stated by interviewee IF, word-of-mouth marketing and the participation in specific area events are what have produced the best results: “we really have to keep doing the word-of-mouth marketing and my visits [...] what we do is take part in specific events when they happen, we go there, give lectures, and eventually sponsor interesting events in the area”. The interviewee assures that his clients don’t miss digital forms of interaction and claims many of them don’t allow the access of their collaborators to certain digital platforms and, as a consequence, no campaign is created on social media, marketing e-mail or website. This idea helps with the understanding that the companies’ operation segment is what defines whether offline actions will have more satisfactory results than on-line actions, according to statement by Torres (2009), who defends that consumers and their behavior define the company’s actions.

Literature shows that strategic actions and digital platforms can be used to strengthen brand visibility and contribute to increasing the sales or any other objective of the company. This way, the interviews questioned which digital marketing actions were used by the companies and which of them brought the expected return. The interviewees’ accounts, along with the count performed, showed that the strategic actions the companies in the park used the most were social networks, despite the fact that some of them interact very little, followed by their website. Feeding social networks, websites, or even sending out marketing e-mails needs to be done so that the target audience have a higher interaction and engagement with the brand and, consequently, promote it.

Torres (2009) explains that social networks are able to transmit content and information to a group of mutual interests, and encompass several tools that promote the companies’ relations with their followers, which involves message exchange and other types of interactions, such as groups and communities. Following this trend, company J takes advantage of the convenience provided by social networks concerning customer’s relation and uses Facebook and Instagram as its main communication channels with their partners and clients with a special focus to the latter network, which had more posts in the time period analyzed than Facebook. The company uses a specific platform of digital marketing management, where its social networks actions (concerning engagement and sponsored ads), marketing e-mail, SMS and website are interconnected.
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Unlike company J, company C adopts organic search as its main strategy, besides working with content marketing as well. This company operates in the Creative Industry area and had 24 Facebook posts during the time analyzed. They also invested in sponsored ads as a way to generate traffic to their site, for, according to the interviewee, social networks serve as a support, an environment that IC claims to be the most important for the company since it can be shaped up according to his brand:

“If you have no site traffic, you won’t sell anything to anyone, right? Social network is a support for the site. […] I think every channel you use will serve as a support for the site, and your site is what really matters, because you can set it up the way you want”.

To Interviewee IG, concerning future strategic actions, people in general, especially Brazilians, don’t have time to read ads and many of them are not used to reading; that is the reason why videos and photos are more appealing. Since Instagram is a more visual social network, different from Facebook, which is a mix of photos, videos and texts, company G noticed an opportunity for new deals with the use of short videos (teasers) in this social network. The company noticed a great opportunity to reach its target audience through these teasers, which made its objective to be satisfactorily reached, that is, to bring in new site registrations.

Company I, which hasn’t posted anything yet, besides the traditional institutional site, intends to create a Facebook and an Instagram profile. They don’t see any advantages of having a Twitter profile and they may create a LinkedIn profile after some time in the market. According to the interviewees, the company’s main objective lies on creating new users’ experiences, an exchange correlation, and more involvement with the client through small personal actions. As an example, they mention the case concerning RedBull, whose product is drink distribution but they sponsor events, encourage healthy competitions between people and use clever ads to promote their product.

Just like company I, company D is also taking the first steps concerning structure and, according to the interview, there will be on-line sales through the site, Instagram and Facebook. Interviewee ID is fully aware of the digital strategic actions and of what will be the best metrics for future campaigns. He believes Instagram will be his main sales channel since he sees Facebook as a network that is overloaded and lacks the dynamism that is necessary for his product – which confirms the same logistics concerning information dynamism that company G also noticed in relation to Instagram.
6 FINAL REMARKS

The use of strategic actions concerning digital marketing has grown as the organizations feel the need to come closer to their clients, besides being able to have other channel options to promote their brand (Felix, Rauschnabel & Hinsch, 2017). The digital world provides entities with the quick spread of information and content by promoting more engagement with digital actions (Okada & Souza, 2011). Although speed is one of the advantages of digital marketing, the company needs to properly monitor the actions taken, especially in order to make sure that the message sent hits the target audience correctly (Chaffey & Pattron, 2012). Moreover, measurement also becomes necessary concerning the investment assigned to digital marketing campaigns (Kannan & Li, 2017).

This article aimed at analyzing how the companies located in a Technological Park use the actions concerning the strategies, the tools and the metrics of digital marketing to promote their business. As additional contributions, there is the perception that the digital marketing strategic actions are present in the daily activities of the companies located in that park. However, there are issues concerning its operationalization. Barriers such as time and skills to create content and monitor the actions taken in the digital world impair entrepreneurs. Taking into account the fact they are small and, as such, they have a reduced number of employees, it was possible to see that the companies located in a highly technological environment don’t know how to or can’t manage to be digital. Digital marketing is a reality that is present in the contemporary economic society. Pelsmacker et al. (2018) and most of the literature dedicated to digital marketing imply that the companies inserted in innovation environments need to communicate digitally with the objective to increase their performance. However, the results of the present work point out to other realities. There is a considerable number of companies that can survive without the use of digital marketing as their form of communication. This leads to a new opportunity for future researches. To what extent should a company be digital? Which communication practices lead to the results obtained by the company? The entrepreneurs who run start-ups face several problems, such as lack of skills and time for the development of more assertive actions concerning digital marketing (Royle & Laing, 2014).

The main contribution of this study is the initial framework of analysis on digital marketing in small companies located in a technology-based park. This primary tool
presents the layout of the variables that must be taken into account upon analyzing the strategic actions concerning digital marketing. However, since this is an exploratory research, it becomes necessary to test it quantitatively. For such, a scale from the layout created should be designed and tested. Moreover, start-ups entrepreneurs’ innovation environment, pressure and work are prone to new researches, since such conditions may inhibit the full development of the organization’s activities, especially digital market.

Also, as an opportunity for future researches, there is the question as to how the marketing process of these entrepreneurs comes to be. It is known that start-ups are companies that focus on a small niche, with few people working and who, oftentimes, hold more specialized technical knowledge (Ries, 2012). How can this be translated into the managerial practice of these companies? Can digital marketing, in particular, help them with their demands? Wymbs (2011) and Spiller and Tuten (2015) defend that digital marketing should be at the core of marketing teaching programs, given its importance. It’s worth mentioning that teaching daily actions is not enough. One needs to advance and relay to the students the questions concerning more important metrics’ monitoring and analysis so that the real digital marketing management can take place (Chaffey & Patron; 2012; Järvinen & Karjaluoto, 2015).

Concerning the limitations found, and due to the fact this is a research with a qualitative approach, it is not possible to generalize the results achieved and say that every company in the park goes through the same situations found in the interviews performed. Thus, here is the suggestion that a quantitative research should also be performed by involving a higher number of organizations in the park analyzed, and also in other parks throughout Brazil. As results achieved from this research, there is the conclusion that the application of digital marketing on start-ups is related to the operational area and the type of product or service offered. The importance and the use of digital marketing vary according to the entities’ needs and target audience, and, consequently, the metrics and the monitoring end up not being given due relevance.

References


