MARKETING RESEARCH PROCESSES.
A PERSPECTIVE OF THE FUTURE
FROM A QUALITATIVE VIEW

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INTRODUCTION

The objective of this document is to resume the increasing importance of qualitative market research, which has shown growth not just in scientific journals but also has larger numbers compared to quantitative research. The first step was reflecting on research in marketing and the possibilities it offers to get to know consumers and purchasing habits. The methodology applied is divided in two moments: the first moment is based on bibliometrics, which reviews trends in publications, and in the second moment, different scenarios from marketing research are proposed based on experts’ opinions and prospective methods (Smic Prob-Expert method). The conclusion is that in the future, research will become a discipline that is largely associated to sensory and neurological studies, operated with social networking strategies and oriented to the description of specific phenomena, all of which will lead to a new scientific anthropo-marketing.

Research and development processes in marketing are very significant due to its impact on organizations: they are a liaison between the market and the company, thus connecting the company’s internal and external processes.

Both types of marketing strategies, *internal* (which allow employees to understand their organizational function, plan their professional future and get aligned with the company’s strategic objectives with action between HR and marketing aimed at organizational commitment (Bohnenberger, M. 2017)) and *external*, also known as rational marketing (which allow a connection and the generation of added value relationships to reach permanence and growth goals through brand loyalty (Cano, A. 2015)) are the daily tasks of organizations, forcing them to be updated in order to improve organizational performance (Farris, et al. 2015).

In order to conduct this task properly, it is necessary to acknowledge many aspects of the company and its surroundings, this requires constant research of all kinds to feed the marketing information system, known as MKIS (Lopez et al, 2015).

This system is a set of structured information and relations that provide reliable, accurate and timely information to make decisions within marketing areas (Layton, R. & Duan, Z. 2015). It must ensure information reliability; therefore its collection must be subject to quality criteria, and it has to be current and reality-adjusted, it must also provide information that is relevant for the organizational needs (Rowley, J. 2016).

The aforementioned requires obtaining information centers at micro and macro environment scale (Smith, L. & Wong, M. 2016, Leonidou et al, 2018).

The main functions of the marketing area directors are to analyze, plan, execute and control, which will attest the needs of the information and how it may be better
used to implement the marketing strategy for the target audience and in terms of competitors, stakeholders and all macro environment forces (summarized in the acronym PESTEL Political, Economic, Social, Technological, Environmental and Legal) (Grünig, R., & Kühn, R. (2015).

The environment search that comprises this marketing intelligence may have different types of sources:

- **Informal**: unstructured effort with the function of providing a general idea,
- **Conditioned**: when specific information is required, and
- **Formal**: planned and systematic search (Arias et al, 2016). Depending on the requirements, management may choose one or the other, or a mix of both.

Another additional element is competitors’ research (Arnett, D. & Wittmann, C. 2014) as a surveillance system, which is key to feed the MKIS, to observe changes taking place in companies in the same sector and to face the same changes and challenges offered by the environment to the company (Lopez et al, 2016).

Aside from the external elements, there are others that are directly related to the company’s capacity to fulfill the consumers’ needs, wishes and interests (East, R. el al, 2016, Barahona, et al, 2018), for which consumer behavior will try to identify:

- New needs
- Unfulfilled needs or needs that may be managed better
- Changes in the purchasing process
- Decision-making mechanisms in shopping
- Use or usage of products and services
- Impact of price changes
- Client satisfaction processes
- Brand positioning
- New distribution and communication channels with the clients
- Impact of social and environmental campaigns
- Regulation changes, among others.

All of the environment information will be entered by this area to be taken into account by the organizational strategic management (Solomon, M. 2014), this is precisely where market research as primary source of information becomes essential in the MKIS (Rani, P. 2014).

It may be said that market research as a scientific research process (Sekaran, U., & Bougie, R. 2016) must abide by methodological requisites to guarantee objectivity and rigor.
This enables information collection to solve questions formulated as part of the research process initiation, allowing it to recognize trends and relations in the system’s understanding (Gutierrez, 2007).

Table No. 1 contains the main definitions of this process.

Table No. 1 Definitions of Market Research

<table>
<thead>
<tr>
<th>Author, year</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malhotra, 2008</td>
<td>Market research is the “identification, compilation, analysis and dissemination of information in a systematic and objective way, with the purpose of improving decision-making processes that relate to the identification and solution of marketing problems and opportunities” p. 2</td>
</tr>
<tr>
<td>Kotler, Keller, 2009</td>
<td>It is the “systematic design, obtainment, analysis and presentation of data and findings that are pertinent to a specific marketing situation faced by the company” p. 23</td>
</tr>
<tr>
<td>Sandhusen, 2005</td>
<td>“A systematic compilation, record, analysis and distribution of data and information on marketing problems and opportunities. P. 33</td>
</tr>
<tr>
<td>American Marketing Association, 2017</td>
<td>“Market research is the function that connects the consumer, client and trader through information. This information is used to identify and define marketing opportunities and problems; as well as to generate, perfect and assess marketing actions, and improve the understanding of marketing as a process”</td>
</tr>
<tr>
<td></td>
<td>“Market research is a comprehensive part of marketing, in charge of collecting and analyzing key information related to a specific situation in the market. This information is used to identify and define opportunities and to support decision-making processes. Therefore, it is of the utmost importance in business decision-making since it steers the development of business strategies”</td>
</tr>
</tbody>
</table>

Source: research

These processes may take two routes: quantitative and qualitative (Brannen, J. 2017, Hanssens, 2018). The first methodological route (qualitative) searches for the why and the how, based on hermeneutics, phenomenology and social interaction: social applications such as ethnography, action-participation and using history research. It is based on direct methods, such as group sessions and in-depth interviews, or on indirect methods, applying techniques such as association, termination, construction and expression (Hussein, A. 2015, Burke, R. 2018).
The quantitative route examines the analytical, experimental or descriptive with a mathematical lens. It allows a generalization of results due to its statistical and probabilistic development (Figure No. 1).

Figure No. 1 **Types of Research**

<table>
<thead>
<tr>
<th>Qualitative</th>
<th>Qualitative</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Hermeneutics</td>
<td>• Analytical</td>
</tr>
<tr>
<td>• Phenomenology</td>
<td>• Experimental</td>
</tr>
<tr>
<td>• Social interaction</td>
<td>• Descriptive</td>
</tr>
</tbody>
</table>

Source: the research

The differences among both research alternatives are very appealing (Lipowski, et al, 2018), nonetheless, mixed analyses allow a complete observation of the outlook. Table No. 2 shows the limitations of each method.

<table>
<thead>
<tr>
<th>Qualitative</th>
<th>Quantitative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focuses on phenomenology and comprehension</td>
<td>Probabilistic induction of logical positivism</td>
</tr>
<tr>
<td>Subjectivity</td>
<td>Permanent and controlled measurement</td>
</tr>
<tr>
<td>Data inference</td>
<td>Inference that is posterior to the data</td>
</tr>
<tr>
<td>Exploratory, inductive and descriptive</td>
<td>Confirmatory, inferential, deductive.</td>
</tr>
<tr>
<td>Process-oriented</td>
<td>Result-oriented</td>
</tr>
<tr>
<td>Does not allow generalizations</td>
<td>Repeatable data that may be generalized</td>
</tr>
<tr>
<td>Changing and dynamic reality</td>
<td>Static reality</td>
</tr>
</tbody>
</table>

Table No. 2 Differentiation of the Research Methodologies. Source: Delgado, 2017. P. 1

With this environment in mind, this chapter aims at elucidating the main trends in research, highlighting the advantages of each through the analysis of secondary sources and prospective analysis.
In order to achieve the objective of establishing the main trends in qualitative marketing research, this document combines a methodology of analyzing the main academic contributions, especially those related to a quantitative analysis, followed by the qualitative analysis. With this purpose, the methodology throughout the analysis stages consisted in establishing which of the academic contributions had qualitative and which had quantitative characteristics, as illustrated in Figure No. 1.

**Figure No.1 Stages of the Analysis**

![Figure No.1 Stages of the Analysis](image)

Source: the research

Likewise, 4 article typologies were found in the academic material, which were useful to conduct this type of research, one focuses on quantitative analysis and three others are specifically related to the qualitative approach, as explained in Table No. 3.
Table No. 3 Characteristics of the Research Approaches in Marketing

<table>
<thead>
<tr>
<th>Type of document</th>
<th>Characteristics</th>
<th>Approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empirical-quantitative</td>
<td>Articles based on real data, whether exploratory, descriptive or explanatory, that analyze relations between different variables through quantitative analysis techniques.</td>
<td>Statistical, descriptive and inferential analysis, parametric and non-parametric tests, multi-variable analysis. Experiments are also included.</td>
</tr>
<tr>
<td>Empirical-qualitative</td>
<td>Articles based on real data, whether exploratory, descriptive or explanatory, that analyze real organizational phenomenon without resorting to quantitative analysis techniques.</td>
<td>Descriptions of histories, case studies and narratives take precedence, methodologies such as grounded theory may be considered. Overall, this theory may be summarized in observation, interviews / surveys, document compilation and research action.</td>
</tr>
<tr>
<td>Conceptual-applied</td>
<td>Articles that analyze theories or concepts and models suggesting models, approaches or recipes as practical guides to be used by management professionals.</td>
<td>Suggest new alternatives for reality analysis through analytical deductive methodologies.</td>
</tr>
<tr>
<td>Conceptual-theoretical</td>
<td>Articles centered on theoretical knowledge dissemination of existing theories or models or based on criticism or magnification.</td>
<td>Conceptual developments of analyzed realities that show alternatives.</td>
</tr>
</tbody>
</table>

Source: Adapted from Gantman, E. R., & Rodriguez, C. J. F. (2017) p. 5)

In Colombia, there is an association of companies that conduct market research and that are certified with UNE-ISO 20252:2012 Market, social and opinion research to guarantee product quality. These companies also divide their research in different typologies, and in qualitative and quantitative research, as seen in Figure No. 2. This proves that the methods are widely used in any of the research’s typologies required.
With the probabilistic findings, a probabilistic cross-reference impact matrix was created based on the contributions of a panel of 10 marketing management experts, 5 of them from the academic sector (McBride, et al, 2017). These results “were oriented towards determining simple and conditional probabilities of hypotheses and/or events, as well as the combination probabilities of the latter, taking into account the interactions between events and/or hypotheses” (Godet, 2017). This method, denominated SmicProb-Expert® was developed in 1974 by Michel Godet regarding nuclear power topics (Godet, 1997), the objective of the methodology is to determine probabilities to develop more likely scenarios and to evaluate low-impact combinations. Thanks to the methodology suggested by Godet, M., & Durance, P. (2007), Amer et al, 2013, variable prioritization is achieved in decision-making processes, as observed in Figure No. 2. The analysis herein is intended to achieve strategic architecture as a future project (Stratigea, Â, & Papadopoulou, C. A. (2013).
The methodology focuses on 3 stages (Figure No. 3), the first is where hypotheses are formulated and experts are selected, it is followed by a probabilization of scenarios in order to proceed with the suggested strategy to obtain the expected results.

Source: adapted from Godet, 2017
The Smic-Prob-Expert® program (a classic minimization program of a quadratic form with linear limits) allows the experts to conduct the analysis, eliminating opinions by experts that are not coherent or that affect the probability of each of the $2N$ possible combinations of the $N$ hypotheses (Sarpong, et al, 2013).

**RESULTS**

**Marketing Bibliometrics Analysis According to Research Focus**
Marketing research has grown both ways in the fields of qualitative and quantitative research; overall in the marketing field, publications in the Scopus® database in 1980 amounted to 858 per year and by 2016 to 10,456 (Figure No. 4), however, a decrease was experimented, which it shall be analyzed in years to come.

![Figure No. 4 Documents Found in the Marketing Formula](https://example.com/image.png)

Source: Scopus® Date: November 7th, 2017

From these articles, Figure No. 5 shows a comparison between the two large methodologies, articles with quantitative methodology have a significant increase between 2000-2015, with an approximate peak of 345 articles in 2015, the qualitative methodology shows a similar growth rate but with a higher number of publications, its peak exceeded 500 in 2017.
By observing the Figures, it is clear that both cases present a trend of growth, the difference lies in the number of publications: quantitative had peak of 344 in 2016 out of a total 4,079 since 1936, qualitative had a peak of 513 in the same year out of a total of 5,547 since 1962. There are more publications with qualitative analysis.

Analysis of the Experts’ Results
When the experts were inquired regarding the development and research possibilities in the fields of qualitative research, they identified 5 research fields that are expected to lead marketing research.

Focusing on the qualitative type of research, different variables may arise in the research (Gutierrez, J., & Delgado, J. M. (1999), with the fields proposed, Bibliometrics were reviewed, the findings appear in Figure No. 6, reflecting special growth in ethnography, networks, neuromarketing, and sensory marketing research, interest in the aforementioned has grown (elected by the experts), the case of research related to interactive surveys (Hulland, et al (2018) has had increase and decrease intervals, but it was taken into account due to its importance in the future.
Figure No. 6 Main Articles in Qualitative Research

Source: Scopus © Date: November 7th, 2017
Once these 5 research fields were decided, the experts were asked for the definition of each one by outlining a future hypotheses describing the expectations in a 15-year horizon. These hypotheses indicate the way each research approach is expected to be oriented towards the future. The descriptions describing the hypotheses are summarized in Table No. 4.

<table>
<thead>
<tr>
<th>N°</th>
<th>Long title</th>
<th>Short title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Research on social networks</td>
<td>SocialN</td>
<td>More automatic social networks in devices of contextual use, so as not to interrupt the interrelation of the consumer with the environment. Not only generators of data and likes, but of identification of patterns of tendencies of repurchase.</td>
</tr>
<tr>
<td>2</td>
<td>Research on ethnographic studies</td>
<td>Ethno</td>
<td>Ethnographies focused on fictional designs to explore not only learning from experience, but also from the imagination.</td>
</tr>
<tr>
<td>3</td>
<td>Research in neurophysiology for marketing</td>
<td>Neuro</td>
<td>Consumer evaluation technology less invasive and at the time of decision-making.</td>
</tr>
<tr>
<td>4</td>
<td>Sensory research in marketing</td>
<td>Sens</td>
<td>Development of interfaces for better use of the human senses (consumers).</td>
</tr>
<tr>
<td>5</td>
<td>Development of interactive surveys</td>
<td>Survey</td>
<td>Everyday applications of surveys with virtual and applied reality.</td>
</tr>
</tbody>
</table>

Source: the research

The experts were explained that the Smic-prob-expert® method would be applied (cross-reference impact analysis), intended to inquire the experts about their opinion regarding the occurrence of some future hypotheses or events in a defined timeline and its mutual influences. The hypotheses turned out to be descriptions or explanations that seek to foretell the future state of a process.

Once the hypotheses were outlined, the panel members were asked to express their opinion regarding the probability of occurrence of each hypotheses (H1, H2, H3, H4, H5) in the timeline. They were asked to score each one as very likely, likely, uncertain, unlikely or very unlikely (0.9, 0.7, 0.5, 0.3, 0.1 respectively).

The probabilities of each hypothesis are known as $P(i)$ of the hypotheses or simple scores. Afterwards, the experts proceeded to score the positive and negative conditioned probabilities as a structural analysis through the cross-reference matrix evaluation, in order to appreciate their opinion regarding the probability of occurrence of a hypothesis, if another hypothesis were probable (positive) or not (negative). Conditional probabilities are taken against each other, as follows:
According to the help manual of the SMIC application, the following conditions have to be fulfilled:

“These raw opinions must be such that the net results respect the following conditions:

\[ a) \ 0 < P(i) < 1 \]

\[ b) P(i/j).P(j) = P(j/i).P(i) = P(i,j) \]


The principle of the Smic method consists of correcting the raw opinions expressed by the experts in a way that obtains coherent net results (meaning, satisfying the classic problems on probabilities), the closest to the initial estimates” (Smic-prob-expert® help)

With this strategy, the application obtains net probabilities on the hypotheses with a median of probability distribution. The solution is obtained with a quadratic minimization; this way, the application classifies the possible scenarios based on the experts’ scores.

Figure No. 7 shows the future scenarios for a 15-year horizon, it can be observed that only a few scenarios turn out to be very likely based on the scores allocated by the panel of experts:
These scenarios present different alternatives:

Scenario 11111 is the one perceived as most likely, in which it is expected that in 15 years, all of the hypotheses take place and synergies between the hypotheses acknowledged for each research field are generated. Marketing will be a discipline that is highly associated with sensory and neurological studies, operated with social networking strategies and oriented towards the description of specific phenomena with an ethnographic approach.
The second most likely scenario is 11101, which acknowledges that almost all the proposed hypotheses will take place, but challenges may arise in fulfilling the sensory research field hypothesis due to difficulty of having sophisticated functional interfaces that are articulated to the human sensory system. This scenario acknowledges a future challenge in the research agenda associated with the development of science and technology that enables communication and control processes between the human brain, the nervous system, devices, the sensory system and its organs, and its connections, as well with the ethical and engineering aspects involved in an agenda such as this one. It could result in consumers rejecting the use of prosthetics and/or relatively invasive additions to enhance the human sensory experience.

10111 is the third most likely scenario. In the future, all of the hypotheses take place except the one regarding ethnographic studies research. This specific difficulty may be associated with the strong trend of social groups’ diversification, it could be particularly difficult to recognize homogeneous groups within the investigation and for them to keep stable patterns in time, or for studies to result in possible adaptations to a dominant vision in an in-depth neoliberal consumption model. Progress in the neurological and sensory fields may lead to group experiences becoming significantly particular to the individual consumption experience.

The fourth likely scenario is 01111. It acknowledges the difficulty of having more automated social networks in devices of contextual use. As well as the difficulty of being able to identify patterns of tendencies of repurchase with these networks. Aspects such as ethical and respectful usage of consumers’ personal data in highly automated networks, the exhaustion of the technological addiction model based on gratification deriving from social networks and the perception of time loss or lack or reality could affect this research field. The scenario could show that the development of better networking requires identifiable group consumption, and that limitations in the sensory agenda or neuromarketing studies could affect novel ways of social network interaction, its contextual use and automation.

A fifth relevant scenario implies all the hypotheses taking place in 15 years, except for marketing neurophysiology. It is unclear if accessible and affordable evaluation technology that is not extremely invasive for consumers can be in place. It is also difficult to appreciate the power of understanding the consumer better, as well as the aspect related to the moment of decision-making. This scenario acknowledges that a future challenge for the development of the research agenda is the field of neurophysiology for marketing, seeing as its absence will determine the diversified or successful development of the other hypotheses.

After the scenarios are differentiated, it is possible to conduct a sensitivity analysis to appreciate how, as a result of the scores, the ΔPj variation of a Pj probability of the j event, as a result of a variation in the ΔPj probability of the i event. The results are in the form of an elasticity matrix in the eij form.
\[ e_{ij} = \frac{(P(i). \Delta P(j))}{(P(j). \Delta P(i))} \]

The additions that accumulate effects on each hypotheses, measured with the \( e_{ij} \) coefficient, may make up a matrix in which the additions of the absolute value generate a measure of the influence of hypothesis \( i \) on the others. Consequently, additions per column account for the dependence of the hypotheses. (Source: Smic-prob-expert® help)

The values are seen in Figures No. 8 and 9 (Histograms of sensitivity of influences and dependences):

**Figure No. 8 Histogram of Sensibility of Influences**

<table>
<thead>
<tr>
<th>SocialN</th>
<th>Sens</th>
<th>Neuro</th>
<th>Ethno</th>
<th>Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.929</td>
<td>0.8</td>
<td>0.715</td>
<td>0.62</td>
<td>0.355</td>
</tr>
</tbody>
</table>

Source: Smic-prob-expert®

**Figure No. 9 Histogram of Sensibilities of Dependences**

<table>
<thead>
<tr>
<th>Ethno</th>
<th>SocialN</th>
<th>Neuro</th>
<th>Sens</th>
<th>Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.85</td>
<td>0.765</td>
<td>0.662</td>
<td>0.553</td>
<td>0.48</td>
</tr>
</tbody>
</table>

Source: Smic-prob-expert®
This way, a table to summarize the scores of the influences and dependences was compiled, determining the location of each trend, as follows:

Table No. 5 **Matrix of Dependence and Influence of Described Trends**

<table>
<thead>
<tr>
<th></th>
<th>Dependence</th>
<th>Influence</th>
<th>Zone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Socialnet</td>
<td>0.765</td>
<td>0.929</td>
<td>Strategic</td>
</tr>
<tr>
<td>Sens</td>
<td>0.653</td>
<td>0.8</td>
<td>Challenge</td>
</tr>
<tr>
<td>Neuro</td>
<td>0.662</td>
<td>0.715</td>
<td>Challenge</td>
</tr>
<tr>
<td>Ethno</td>
<td>0.86</td>
<td>0.62</td>
<td>Effect</td>
</tr>
<tr>
<td>Survey</td>
<td>0.48</td>
<td>0.355</td>
<td>Autonomous</td>
</tr>
<tr>
<td>Average</td>
<td>0.684</td>
<td>0.6838</td>
<td></td>
</tr>
</tbody>
</table>

Source: the research

Scores can be placed in a graph in a plane of dependences and influences (x and y axes, respectively). Therefore, it is possible to have 4 areas or regions, as follows:

- An area with major influence hypotheses and minor dependences, configuring future challenges, it is the power area of the graph and the most influential.
- An area with major influence hypotheses and major dependences. This is known as an area of conflict, and it usually includes strategic aspects on others.
- An area with major dependences and minor influences, known as exit or effects area.
- An area with minor influences and minor dependences, leading to an area of autonomous hypotheses.

In Figure No. 10 of dependences and influences, the values adding the sensibility analysis are placed in the graph, and the hypotheses are classified in four areas:

The hypotheses of the sensory and neurological fields are in the power area, meaning these will be the most relevant fields in the future, the ones with the capacity to influence on the others and, relatively, the most independent.

Social networking is in the conflict area, it is influenced by the sensory and neurophysiology fields. This area also influences others, especially ethnographic studies.

The ethnographies hypothesis is the most dependent, while the surveys hypothesis is relatively autonomous.
Analyzing the types of marketing research, it is found that qualitative research has been developing with more intensity than the quantitative research; although an in-depth review may reveal one phenomenon being studied using a mixed tactic: first, a qualitative analysis to approach the problem, followed by a quantitative analysis to determine the true relations and be more accurate in the studies conducted.

Five important development areas are found when focusing on qualitative research: neuromarketing and nano-marketing research, sensory marketing research, social networks and Internet analysis, ethnographies and different ways of interactive interviews.

When experts were asked about these 5 trends, and having to score them with the Smic-prob-expert® prospective method, it was found that marketing research will be a discipline that is highly related to sensory and neurological studies, operated with social networking strategies and oriented to the description of specific phenomena with an ethnographic approach, which may be called scientific anthropo-marketing, meaning the study of the most social and human behaviors from the perspective of sociology and anthropology, but grounded on results obtained by neurosciences. After the hypotheses were located in a matrix, it was clear that the sensory and neurological fields are in the power zone and will lead research without leaving social and fundamentally human approaches behind. More and more, there is a need to corroborate social and impact analyses on others in consumption with scientific and technological advances.
REFERENCES


