

Chapter 7

Neuromarketing as a Subject of Legitimacy



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Abstract Even though the concept of neuromarketing is relatively new, it already has numerous opponents. They stress that its interest in the consumer's subconscious is a clear example of manipulation and an invasion of individual privacy. Yet other authors postulate the countless advantages stemming from a better understanding of the consumers' wishes enabling organizations to design offers which are more adapted to their private and innermost desires. Due to the controversy that its development and application have created, the need to legitimize this new stream of marketing is therefore evident. However, there are no studies in this field, given the difficulty of appropriately measuring the legitimacy construct and the lack of consensus regarding the term neuromarketing. This work carries out a first approximation to this matter, analyzing the concept of neuromarketing and its evolution regarding its degree of acceptance and dissemination in the scientific community. The ultimate purpose is to determine if neuromarketing is a concept that needs to be legitimized. The results obtained will provide a basis for an in-depth study which will allow the establishing of neuromarketing's profile of legitimacy and tackle its legitimization in terms of the weaknesses and strengths of each of the dimensions and for each of the sources of legitimacy.

Keywords Legitimacy · Neuromarketing · Institutional theory · Measurement · Spain

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7.1 Introduction

Neuromarketing is a concept that has appeared recently, based on the application of neuroscientific techniques and physiological measurement devices to the study of consumer behavior (Bigné, 2015). Since its origins in 2002, it has sparked off a great controversy both in the academic world and in the area of research institutions. Its repercussion is such that it has gone beyond the field of the profession, and it has established itself in the appropriate debates of society in general. The mass media has made documentaries, and there are numerous general interest articles and information in the popular press which attempt to create a mind-set about this discipline. Everyone appears to have an idea about neuromarketing. There are many adepts capable of wielding compelling reasons which assure the usefulness and pertinence of neuromarketing. There is also a multitude of detractors who contribute solid arguments about its manipulative and privacy invasive character and about the need to regulate and restrict this application of neuroscience.

It is true that its beginnings were complicated. From 2002, the year in which Ale Schmidts, professor of Rotterdam School of Management, first used the term neuromarketing and two North American firms (Sales Brain and BrightHouse) started to apply the techniques of neuroscience to its commercial activities (Fisher, Chin, & Klitzman, 2010), neuromarketing has been continuously questioned. Its birth generated a great expectation, and firms of a different nature emerged which offered their knowledge in this field. Some were small firms with scant technological resources, very limited as to their scope and capacity. Others were small entrepreneurs without enough knowledge of neuroscience who only contributed to the generation of mistrust in the discipline (de Balanzo, 2015). Large companies did not back neuromarketing and in their majority tried to discredit it in comparison to established techniques and procedures. This scenario caused neuromarketing to be accused of having little transparency, a lack of ethics, and a minimum of rigor. So much so that the term started to be associated with a negative image. This led to its being gradually substituted by consumer neurosciences (de Balanzo, 2015).

The authors who maintain its defense allege that it contributes long-term benefits for both consumers and for firms. Bigné (2015) refers to some of them, such as its capacity to reveal unconscious reactions, the objectiveness of its measurement, and the immediacy of the results. It hence enables us to know, with noninvasive methods and without the need to ask people, the behavior of consumers from different contexts. All this also leads to an increase in the efficiency of marketing campaigns (Gang, 2012), thanks to the use of technologies based on obtaining images by RMI, eye tracking, or EEG, among others. Neuromarketing thus assists decision-making and can be applied to any marketing variable from advertising to the development of products, packaging or brands, and price fixing (Bigné, 2015; Eser, Bahar, & Metehan, 2011).

There are clearly also problems which can call into question its efficacy. For example, the brain activity registered with neuromarketing tools in a place of tests and experiments may not exist in reality when it is not under evaluation (Voicu, 2012). Moreover, the investigations require high budgets and may not be profitable

(Gang, 2012). Henrich, Heine, and Norenzayan (2010) determine the impossibility of drawing significant conclusions without the adequate samples. However, these difficulties are not the great dilemma which hinders the consolidation of neuromarketing. The main problem stems from the effect that an inappropriate use of these techniques may cause in consumers. The possibility of manipulation, through knowledge of people's conscience, may affect their freedom, and those who catalog neuromarketing as potentially immoral or illicit express themselves in this sense (Rozan Fortunato et al., 2014).

This last aspect is currently relevant, due to the importance that consumers and social groups are acquiring in the fight against behaviors and decisions which they consider inappropriate or harmful to society. These movements of social pressure, mainly driven by social networks, even lead to those in charge of firms and public institutions changing their stance, as they reconsider decision-making based on public opinion. Therefore, we can understand that the continued existence or success of a social innovation depends to a great extent on "social approval." This social acceptance is the essence of the concept of "legitimacy" and such is its importance that it influences the decisions and results of what is evaluated. In this way, if the general public perceives an innovation as desirable, correct, and appropriate in the framework of a socially constructed system of norms, values, beliefs, and definitions, its possibilities of development and future success will increase.

Based on the previous considerations, we propose an investigation which means to find out the main elements which will enable the legitimization of neuromarketing to be tackled. To do so, we begin with a review of the literature in which the state of play is shown. Then, we analyze the dimensions, the sources, and the subjects of legitimacy in the case of neuromarketing, and we propose a questionnaire to quantify legitimacy in this field. Finally, we discuss the study's implications and comment on the main lines of future research.

7.2 Legitimacy in Social Organization

Legitimacy is considered to be a fundamental process for social organization. The relevant literature in the field of social sciences has centered on two sociological streams: (a) studies focused on social psychology, centered on the legitimacy of social groups and the characteristics related with status, hierarchy, structures, and group practices, and (b) studies based on institutional theory, which spotlight the legitimacy of organizations and their practices (Johnson, Dowd, & Ridgeway, 2006). The first of these approaches attempts to understand the processes which lead to legitimizing inequalities within organizations and the labor market with the aim of modifying that legitimacy. The second approach centers on demonstrating that the survival and success of organizations depend to a great extent on their legitimacy (Scott, Ruef, Mendel, & Caronna, 2000). Within the institutional approach, to which this investigation adheres, there are both studies focused on organizations as entities and those which analyze processes, methods, theories, and concepts which can be developed or used by these organizations.

Concept and Dimensions of Legitimacy

In the first investigations in the framework of institutional theory, legitimacy is considered as the intersection between the norms, values, and expectations of a corporation and its activity and results (Ashforth & Gibbs, 1990; Dowling & Pfeffer, 1975). The relation between a firm's legitimacy and its capacity to obtain the necessary resources was already then posited (Starr & MacMillan, 1990). In this line, Baum and Oliver (1991) state that legitimacy leads to more easily obtaining customers and suppliers and that it improves relations with social agents in general.

In 1995, legitimacy is defined as a concept depending on the culture, norms, and laws of States (Scott, 1995). Scott places legitimacy in three dimensions called normative, cognitive, and regulatory legitimacy, thus encompassing the different branches which can influence an organization and postulates that an organization's or a procedure's legitimacy is obtained from the authorization or approval of specific actors of the environment in which the subject to legitimize is to be found.

In this same year, legitimacy is defined by Suchman as "a generalized perception or assumption that the activities of an entity are desirable, proper or appropriate within some socially constructed system of norms, values, beliefs, and definitions" (Suchman, 1995, p.574). In turn, Suchman defines three dimensions of legitimacy which he calls pragmatic, moral, and cognitive. Pragmatic legitimacy refers to the environment closest to the organization – that is to say, the stakeholders or interest groups – in such a way that pragmatic legitimacy is achieved when the aims of the organization are in consonance with the aims of the main groups of interest. Moral legitimacy covers value judgments of an organization and its activities (Aldrich & Fiol, 1994; Parsons, 1960), based on the correctness of their actions. Normally the outputs and the methodology of the organization are evaluated based on their experience and capacity. It should be noted that these judgment values are less manipulatable than the evaluations in pragmatic legitimacy, although they are more difficult to achieve (Suchman, 1995). Lastly, cognitive legitimacy entails all those actions which support and simplify the solving of problems or accompany decision-making. Cognitive legitimacy comes from the systems of beliefs of scientists and professionals. It seeks a rationalization of the activities through looking to improve them. To sum up, this legitimacy is not upheld by evaluation or interest but by knowledge (Aldrich & Fiol, 1994). This way, it focuses on what is the best possible way to carry out an action, system, procedure, or resource management. The aim of cognitive legitimacy is to facilitate decision processes by seeking the optimum level. Legitimacy is thus characterized according to the degree of difficulty in obtaining it (from more difficult to more easy) and according to its usefulness and sustainability (from more useful and sustainable to less). It thus moves from pragmatic legitimacy to moral legitimacy and from moral legitimacy to cognitive legitimacy.

Institutional theory relates legitimacy with the search for the acceptance of the stakeholders and their desirability of the organization's activities. According to this theory, social exclusion can be explained by the maintaining of behaviors diverging from those socially accepted. In this way, organizations maintain behaviors similar

to those of the leaders to obtain the legitimacy bestowed by doing things in accordance with the established know-how (Díez de Castro, Díez Martín, & Vázquez Sánchez, 2015). When a firm achieves the creating of a perception of the legitimacy of its activities, these are considered as more reliable, balanced, and predictable (Suchman, 1995). An affinity between the norms, beliefs, values, and principles of the system to which these activities belong is thus obtained. Furthermore, legitimacy facilitates the access to resources within the interest groups and is able to achieve a feeling of commitment in people, enabling the organizations to obtain the consent of the agents which make up their environment (Tyler, 2006). It even contributes to the compression of growth and the organization's survival (Diez-Martin, Blanco-González, & Prado-Román, 2010a, 2010b; Zimmerman & Zeitz, 2002). Although it is a concept which is still being built, various studies have shown the direct relation between the strategies of achieving legitimacy and the success of firms (Alcántara, Mitsuhashi, & Hoshino, 2006; Tornikoski & Newbert, 2007), and it has even been proved that the lack of or deterioration of legitimacy leads to the organization's failure (Ahlstrom & Bruton, 2001; Bianchi & Ostale, 2006; Chen, Griffith, & Hu, 2006).

Subjects, Sources, and Measures of Legitimacy

The subjects of legitimization are all those in which its acceptance is evaluated, such as structures, social entities, or actions. Johnson (2004, pp. 19–21) provides a list in which we find “an act, a rule, a procedure, a routine, a distribution, a position, a group or team, a group's status structure, teamwork, a system of positions, an authority structure, an organization, organizational symbols, an organization's form, practices, services, programs, a regime, a system of power, and a system of inequality (to name a few).” The founders of firms and top management teams can be added to them (Certo, 2003; Cohen & Dean, 2005; Deeds, Mang, & Frandsen, 2004; Higgins & Gulati, 2006). The importance of the media for its capacity to influence public opinion should also be mentioned (Fombrun & Shanley, 1990). To sum up, the subjects of legitimacy are of a very diverse nature and there is not a closed list; rather we may state that anything could become a subject of legitimacy.

The sources of legitimacy are the external or internal groups which observe organizations, and they evaluate them as to their legitimacy (Ruef & Scott, 1998, p. 880). According to Meyer and Scott (1983, pp. 201–202), the sources of legitimacy are “those groups who have the capacity to mobilize and confront the organization.” The external groups have the collective authority regarding what is acceptable as auditors, experts in the matter, or lawyers, while the internal groups, such as the government, have the legal control over norms. Many researchers consider society in general as a source of legitimacy (Cruz Suárez, 2012), in such a way that they condition the legitimacy to the number of followers. The basis of their arguments is mimetic isomorphism, which relates the dissemination of a practice with its social acceptance (Hannan & Carroll, 1992; Hannan, Dundon, Carroll, & Torres, 1995;

Wezel, 2005). Baum and Powell (1995), on the other hand, consider that the media also exercises a source of legitimacy. Finally, Suchman (1995) mentions that the sources are not restricted to any specific group; therefore it is necessary to investigate who has the authority concerning legitimization in each specific case and for each subject of legitimacy.

In the study of the measurement instruments, it should be noted that different ways of measurement have been proposed for each dimension of legitimacy. Thus, regulatory legitimacy can be measured via financial ratios and the number of sanctions received from the public administrations (Deephouse, 1996). It is possible to apply a supplementary evaluation for the press, valuing the acceptance of people (Deephouse, 1996; Hybels, Ryan, & Barley, 1994). On the other hand, Ruef and Scott (1998) contribute another measurement system: the accreditations and certifications of standards coming from external agents or the market. Environmental legitimacy, contributed by Bansal and Clelland (2004) and understood to be the perception of what environmental actions are accepted or desirable within society, can be evaluated via the public opinions and perceptions published in some social media.

To finish, we need to stress the existence of a debate about the dichotomic or continuous character of legitimacy. Different authors treat legitimacy as a dichotomic concept, that is to say, as a variable or decision-making term in which there is legitimacy or there is not (Aldrich, 1995; Scott, 1995). On the other hand, other authors, such as Deeds, Mang, and Frandsen (1997), propose that it is a continuous variable in which there can be lower or higher values of legitimacy. Some authors (Bansal & Clelland, 2004; Deephouse, 1996; Ruef & Scott, 1998) establish the methods of measurement for each one of them in general terms. For the pragmatic, moral, and cognitive dimensions, the contribution of Cruz Suárez (2012) stands out. She develops a questionnaire based on the three dimensions proposed by Suchman (1995) and applies it to the study of the legitimacy of the European Higher Education Area in the Community of Madrid (Spain).

7.3 The Legitimization of Neuromarketing

As we have pointed out in the Introduction, neuromarketing is in the experimental stage. It is still relatively novel in our society and needs legitimacy to consolidate itself as a discipline. But how is a social object legitimized, whether it be an organization, a procedure, or a new stream of thought? Johnson et al. (2006) develop a four-stage model – innovation, validation at the local level, dissemination, and general validation – which we will explain applying it to neuromarketing as a new discipline.

1. In the first stage, a social innovation is developed at the local scale to satisfy some proposal or aim. That is to say, the new concept is born to respond to a specific problematic. In the case of neuromarketing, innovation emerges in the professional area of research agencies. The research institutes are the ones who are beginning to apply the techniques of neuroscience to market research with the goal of offering their customers, large North American companies, more

objective and precise information. The area is localized exclusively in the sector of market research firms. These firms are clear about the proposal and aim to attain and disseminate neuromarketing as a discipline oriented toward knowing brain processes and their changes throughout the decision-making process. These brain activities explain the behavior and decisions of people in the fields of action of marketing: market intelligence, product and services design, commercial communication, price fixing, branding, positioning, targeting, channels, and sales. These firms' main goal is to understand the result of the driving, sensitive, and affective behavior of human beings in the face of all the stimuli brought about by marketing. They will then be able to plan more efficient and appropriate strategies for the different markets and consumers.

2. In a second stage, a validation of the innovation must be produced at the local level. To do so, the new discipline has to adapt itself to the cultural and social system of the community in which it is inserted (Walker, 2004; Zelditch, 2001). This involves those in charge of it having to be capable of explaining and justifying its value and its concordance with the established system of norms and beliefs. The local character must not be interpreted, in our point of view, as a geographical requirement, but local can be considered all that which is circumscribed in or focused on a community. This is either at the geographical level, the position in the value delivery chain, or sectoral. In the case of neuromarketing, the legitimacy of the community of commercial research professionals has not been obtained. Those in charge of the innovation fail as regards the necessary adaptation to the cultural and social system of the community in which they are inserted, as they introduce the innovation in the sector without "finding any anchoring with traditional research" (de Balanzo, 2015, p.14). This lack of familiarity with the elements of traditional research, with the established status quo, brings about a rejection by the local community, which sees neuromarketing more as a threat than as a supplement to traditional research.
3. The third stage of legitimization requires a dissemination of the innovation. This dissemination involves its introduction into other local environments which will tend to adopt it more easily if it is coherent with generally accepted aims. In this point, all the constituents of the marketing system should have information about neuromarketing. It is necessary for all the agents involved, customers, suppliers, consumer associations, academics, students, social media, and, in general, any person or organization which can be a player in the supply chain to accept the innovation of neuromarketing. In this phase, there still remains a long way to go. Though it is true that the concept is beginning to be disseminated, it continues to be far from being known and accepted by all the actors involved. Regarding the dissemination via publications, it is worth pointing out that a quick search in the ABI Inform (Proquest) database for the term neuromarketing shows only 932 hits. As Table 7.1 shows, 26% of the studies are scientific. The rest are publications that are professional (35%) and of general interest (39%).

Also noteworthy is that in a search for the term neuromarketing in the study plans of the nine public universities of Andalusia (Spain), only four of them introduce the concept in their teaching programs and in all the cases do so in

Table 7.1 References in ABI inform 2002–2016

Type of source	Number of references	Percentage of the total (%)
Professional journals	300	32.19
Scientific journals	218	23.39
Press services, newspapers, and general interest magazines	364	39.06
PhDs and dissertations	15	1.61
Congress presentations and proceedings	9	0.97
Reports, work documents, and other sources	26	2.79
Total references	932	

passing. None of them has a specific subject about neuromarketing, either at the degree, PhD or Master's level.

- As the innovation is accepted, the need to justify its suitability in the environment decreases, and it is this social acceptance itself that generates a spreading out which facilitates dissemination at a global level. The first adopters base their decision on objective and technical criteria, while the followers are guided by the legitimacy which stems from the imitation of the behavior of other actors. Once the innovation becomes an integral part of the status quo, the processes of legitimization maintain it relatively stable. The commitment of the organizations which incorporate it into their usual praxis endows it with a general validity which is not questioned. The authorization and the social and business backing, that is to say, the explicit or implicit support of actors who have posts of responsibility and social relevance, contribute to generating this validity. In this way, if the authorities, professionals, and social agents support them, social innovations become legitimate and are included in the social and cultural systems.

Therefore, and has been set out, neuromarketing as a discipline, as a procedure, or as a concept is in the initial phases of legitimization. Its future development and its consolidation will depend on its capacity to obtain legitimacy. To do so, it will still have to justify its usefulness and its fittingness with the norms and procedures of the organizations of the market research sector, and be disseminated among professionals, academics, the media, and society in general, and finally achieve general acceptance. It is this need of legitimacy which leads to defining the main elements to consider in the process of legitimization: the sources and dimensions of legitimacy for the case of neuromarketing.

7.4 Toward a Profile of Legitimacy of Neuromarketing

Legitimacy is not directly observable but must be quantified based on the valuations obtained from the different sources of legitimacy. To do so, the legitimization of a subject must begin by the clear and precise definition of the sources of legitimacy

and the variables or dimensions which are going to be considered in the analysis. Once these are defined, we will proceed to create a measurement instrument which will be given to the actors who have to judge the subject's legitimacy. Having obtained the information, it will be possible to draw the relevant conclusions and elaborate, where appropriate, the profile or profiles of legitimacy of the subject analyzed.

Basing ourselves on these considerations, we propose as an aim of this research the initial characterization of neuromarketing as a subject of legitimacy, defining the sources and dimensions of analysis. To this effect, we will base ourselves on the model proposed by Cruz Suárez (2012), according to which legitimacy is determined by the different dimensions which form it, in our case those proposed by Suchman (1995): pragmatic, moral, and cognitive legitimacy.

Subject of Legitimacy

Neuromarketing, as a new concept, process or research method is coming across significant barriers for its implementation. The research agencies doubt about the convenience of investing in the development of the techniques of this new application of neuroscience. The requirements as to appliances and equipment as well as qualified staff are high, yet the doubts do not arise so much from the investment necessary but from the validity that society grants to the results obtained. It is undeniable that to understand the emotions which guide people's shopping behavior can contribute value to the offers of firms to develop products and services adapted to these consumers. Neuromarketing also helps to fix more appropriate prices and enables a greater efficacy and efficiency of commercial communication, in this way improving the productivity of the marketing of firms and increasing the value which is offered to the customers. What, then, is the reason for not disseminating the innovation of neuromarketing in a more accelerated manner? According to our proposal, the motive is the lack of legitimacy which has not yet allowed neuromarketing to be accepted by the experts in the matter and society in general.

Sources of Legitimacy

The sources of legitimacy of neuromarketing must be selected from among the internal and external groups (see Table 7.2). All those actors who develop or apply the techniques of neuromarketing are considered as internal, in other words, the professionals of the sector. At this level appear both firms and institutions of commercial research and all the professionals who work in them, either consultants or experts in neuroscience. They are the first who must accept and support neuromarketing.

At the external level, and in a first phase, it is worth indicating the scientific and educational community in general. Researchers, by going deeper into the concept and the knowledge of the techniques, can help to solve the doubts that neuromarketing

Table 7.2 Sources of legitimacy of neuromarketing

	Internal	External
Firms, institutes, and in general any member of the market research sector	x	
Professionals of the field of neuroscience in charge of the technical procedures of neuromarketing	x	
Scientific and academic community		x
Consumers in general		x
Those in charge of firms and assimilated entities		x
Sectoral and consumer associations		x
Regulatory agencies		x
Media		x

generates in society, which bestows them with the credibility of experts in the matter. Likewise, if they incorporate the discipline into their teaching programs and transmit their knowledge about it, they will contribute to a great extent to the dissemination of neuromarketing. At the second level of external legitimacy, it is necessary to include those in charge of firms who can request studies carried out applying neuroscience, as well as the regulatory agencies and the social media. If firms demand it and apply it responsibly, if the press and the mass media accept the advantages it entails for society, and if the regulatory agencies defend the honest, transparent, and reliable use of neuromarketing, legitimacy will be practically attained. It will only remain to seek the acceptance of the consumers through their associations and ultimately society, in general, which will finish up by accepting it as something desirable, appropriate, and positive.

Dimensions of Legitimacy

To measure legitimacy is not an easy task. This explains the scarcity of empirical studies in the reference literature. One of the methods which have been used is the analysis of the content of newspapers (Bansal & Clelland, 2004; Barreto & Baden-Fuller, 2006; Li, Yang, & Yue, 2007). However, it is a method which requires the presence in the press of the subject to legitimize, and not all organizations obtain media coverage in the press. This matter has called into question the validity of this research method due to the difficulty of generalizing the results and the comparison between subjects when some of them do not appear in the contents of newspapers. Other authors have backed a combination of recruitment methods based on secondary sources, mainly databases and primary sources in the form of questionnaires or semi-structured interviews (Cruz Suárez, 2012; Human & Provan, 2000; Low & Johnston, 2008; Rutherford & Buller, 2007).

In this research, and following the postulates of Cruz Suárez (2012), we back the development of an ad hoc questionnaire using a 7-point Likert scale. On the other hand, the dimensions of legitimacy will be determined by the acceptability and

desirability of the aims of neuromarketing, taking note of the different dynamics of society's behavior. That is to say, the acceptability of the aims from a pragmatic dynamic will mean the evaluation of the pragmatic dimension of neuromarketing. In the same way, the evaluation of the aims from a moral or cognitive dynamic will enable the analysis of these dimensions (Cruz Suárez, 2012, p. 110).

To elaborate the list of aims, we base ourselves on the literature review of neuromarketing, as well as on preliminary conversations with experts in the matter, coming from both the academic area and professionals of the sector. As a fruit of this search, we propose the following variables to characterize the three dimensions of the legitimacy of the subject of neuromarketing.

Block 1: Pragmatic

What is the current degree of fulfillment of each of these aims of neuromarketing? Value your degree of agreement or disagreement on a scale where 1 signifies that the aim has not been fulfilled and 7 implies that it has been completely attained.

Block 2: Moral

Do you consider that neuromarketing must pursue each of these aims, although they do not yield a specific usefulness?

Block 3: Cognitive

Do you consider that the aims of neuromarketing could be attained more correctly, that is to say, that the way in which people work to attain them could be improved?

1. To guarantee the efficacy of organizations, contributing to attaining their aims
2. To maximize efficiency, reducing the consumption of financial, human, and material resources
3. To improve the welfare of society
4. To create value for people as customers
5. To create value for people as citizens
6. To know the functioning of the different *brain areas* when exposed to external stimuli
7. To contribute precise and reliable information for decision-making in marketing
8. To determine areas of improvement in marketing management
9. To help the choice of the best distribution channels and/or sales form
10. To know the unconscious desires of the individual as a consumer
11. To know the best way to connect with the individual's emotions as a consumer
12. To choose the advertising messages which most impact a person
13. To select the advertising media appropriate for each segment of consumers
14. To foster impulse shopping
15. To establish emotional connections with brands
16. To help the development of products and services adapted to the consumer's demands
17. To contribute information about the prices that the consumer considers appropriate for each product or service
18. To improve the atmosphere of establishments to foster an attitude favorable to shopping

19. To teach sales agents new ways of connecting with people to improve the number of transactions carried out
20. To know the exact opinion of consumers about the value offers which are presented to them
21. To improve satisfaction
22. To know the way in which shopping decisions are made
23. To create opinion leaders and brand ambassadors able to influence people's decisions thanks to the improvement in the comprehension of their desires and longings

In order to have a global valuation of the legitimacy of neuromarketing and of each of its dimensions, we propose including the following block of indicators in the questionnaire.

Block 4: Evaluate the Following Questions Regarding Neuromarketing

1. Do you consider neuromarketing useful?
2. Do you consider that neuromarketing should continue being applied and developed regardless of its usefulness?
3. Do you consider that the activities of neuromarketing could be done better?
4. Do you consider neuromarketing desirable, correct, and appropriate?

7.5 Conclusions

The study's main conclusions stem from the aims proposed. Firstly, the need to legitimize neuromarketing has been shown in order for it to thus become a subject of legitimacy. The process of disseminating innovations involves obtaining local and global acceptance as a requirement *sine qua non* to consolidate any innovation in society. But, as has been demonstrated in the preceding paragraphs, neuromarketing has not yet become accepted at the local level in the framework of the very organizations who have introduced it: the research agencies and institutes. There is, then, a problem of legitimacy which limits and conditions the possibilities of this discipline's survival and future development. Neuromarketing, therefore, must put into action strategies channeled at gaining legitimacy (Suchman, 1995). This involves enhancing all those efforts working toward acceptance by the environment. These are known as actions of compliance. It is a question of fulfilling the demands and expectations of the environment with which it interacts (Meyer & Rowan, 1977; Suchman, 1995), that is to say, to follow the norms of society without debating them, changing them, or infringing them.

Secondly, we have analyzed the sources from which neuromarketing must obtain its legitimacy. As the literature analyzed indicates, these have to be both external and internal. All of them have to accept the innovation that neuromarketing entails. This makes a work of information, communication, social awareness, and even education necessary for the different agents involved to accept the techniques of neuroscience in their application to marketing as safe, desirable, useful, and appropriate.

As Suchman (1995) postulates, it is a question of selecting the external agents which support neuromarketing, either in one environment or another.

Thirdly, we have developed a questionnaire model based on the three dimensions proposed by Suchman (1995) to measure the legitimacy of neuromarketing. Once it is validated by experts, it can be used to elaborate the profiles of legitimacy of neuromarketing, detect the areas which require improvement, and try to bolster a greater acceptance of the discipline in each and every one of its sources of legitimacy consulted: professionals, experts, the media, social agents, and society in general.

Finally, we point out that this investigation is a starting point in the search for the legitimization and future viability of neuromarketing. It does not pretend to contribute solutions or question research based on the techniques of neuroscience but to open the debate which leads to its acceptance and development within the scientific community.

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