Rethinking the information dimension of marketing

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Abstract

This article discusses the information dimension of marketing from a technical, theoretical and behavioral perspective. It also comments on the relationship between marketing and the library and information science (LIS). It is an exploratory and descriptive study and its qualitative approaches are carried out through classic documentary analysis. From the technical perspective, it addresses the presence of information in all marketing management processes, from market research to the final preparation of the marketing plan. From the theoretical perspective, it addresses the frameworks for marketing information processing, the influence of the information value theory and the application of techniques from dissimilar areas of study to analyze the information. From the behavioral perspective, it shows empirical evidence of human information behavior of marketing managers and other actors, based on cognitive and social viewpoints. Regarding disciplinary relations, marketing and LIS share theories related to information behavior, information management, and systems analysis and design. The marketing approaches is more noticeable on LIS studies than LIS approaches on marketing studies, considering the analysed literature. Information, as a link between both disciplines, makes way to delve into new research, academic and practical scenarios.

Keywords
Information management; Information Marketing; Library and Information Science; Market information; Marketing; Organizational processes.

Repensando la dimensión informacional de la mercadotecnia

Resumen

En este artículo se aborda la dimensión informacional de la mercadotecnia desde una perspectiva técnica, teórica y comportamental. También se profundiza en las relaciones entre la mercadotecnia y la Bibliotecología y la Ciencia de la Información (BCI). Es un estudio exploratorio-descriptivo, cuyos abordajes cualitativos se realizan mediante el análisis documental clásico. Desde la perspectiva técnica se aborda la presencia de la información en todos los procesos de gestión mercadotécnica, desde la investigación de mercados hasta la confección final del plan de mercadotecnia. Desde la perspectiva teórica se hace alusión a los marcos para el procesamiento de la información de mercado, la influencia de la teoría del valor de la información y la aplicación de técnicas provenientes de disímiles áreas de estudio para analizar la información. Desde la perspectiva comportamental se exponen evidencias empíricas de comportamiento humano informacional de los gestores de mercadotecnia y otros actores, a partir de las aristas cognitiva y social. Relativo a las relaciones disciplinares, se percibe que la mercadotecnia y la BCI comparten teorías asociadas al comportamiento informacional, la gestión de información y el análisis y diseño de sistemas. El enfoque de la mercadotecnia es más notable en los estudios de BCI que en enfoques de BCI sobre estudios de mercadeo, considerando la literatura analizada. La información, como nexo entre ambas disciplinas, abre un camino para profundizar en nuevos escenarios investigativos, académicos y prácticos.

Palabras clave
Bibliotecología; Ciencia de la Información; Gestión de información; Información de mercado; Mercadotecnia, Mercadotecnia de la información; Procesos organizacionales.
1. Introduction

Information has become an object of interest for many disciplines, but for marketing, it acts as a change factor of its theoretical and practical frameworks (Glazer, 1991; Brady, Fellenz & Brookes, 2008). After searching through the Journal of Marketing, the leading journal of the American Marketing Association (AMA), it was identified that the first article that explored something related to the information phenomenon was published in 1949 by Miles Bredvold, and was titled: "Farmers’ Sources of Information" (Bredvold, 1949). Here, the author classified the information sources used by farmers to be informed about the new events. The scientific productivity presented by this area of knowledge is already thorough; mainly addressing issues related to direct marketing, information technologies, internet, market information, information search, and information systems.

Although the AMA dictionary (2007) does not offer an exclusive concept for the information category, it is taken into account as part of processes such as: information control, information processing, information search/seeking, informational advertising, informative label, and informed stage. The point is that marketing works based on the exchange principle (Hernández & Rodríguez, 2003), therefore, the information that flows through possible market channels has a strong bond with structural and behavioral aspects of its activity, and the actors related to it (Mohor & Nevin, 1990). This determining factor makes marketing a highly intensive information activity.

Particularly, Library and Information Science (LIS), the object of study of which is information, is an area that gives approaches and models to address this element in its multiple contexts. However, since it has a different significance for many fields, most approaches of the scientific literature are not carried out from the LIS perspective. This is proven by studies that have explored the information dimensions in areas such as Economy (Melody, 1987), Physics (Morris, 1987; Wei et al., 2014; Pennington, Van den Broek & Koch, 2014), Neuroscience (Li et al., 2007), and Oncology (Petricoin et al., 2006), to mention just some cases.

Upon request of González-Valiente, León & Rivera (2014), marketing has addressed, in general, three important aspects of information: 1) information processes and definition, scope and implication of them for the organizations, 2) information objects and structures in the market context and 3) information behavior of people (organizations/consumers) who handle it. This means that this discipline had to adjust its information research perspectives according to the context of its practical future directions, either using their own contributions or adopting notions from other fields. Based on these premises, we can ask the following research questions (RQ):

- RQ 1: Which information content becomes a management object for marketing?
- RQ 2: Which models, methodologies or approaches has marketing conceived or adopted for the information study?
- RQ 3: Are there empirical evidences proving the information behavior of marketing managers and other associated actors?
- RQ 4: Since marketing and LIS are interested in information, which disciplinary relations do these areas have?

These research questions are oriented to three perspectives: technical, theoretical and behavioral, which will be taken into account in this article which aims to highlight the information dimension of marketing by integrating conceptual, methodological and empirical frameworks and notions extracted from the literature of marketing and mainly from LIS. Finally, the relations between Marketing and LIS will be explored.

2. Methodology

This research has been exploratory and descriptive and has discussed qualitative approaches based on the classic documentary analysis. Upon request of the authors, several sources mostly from marketing and LIS areas were consulted to answer the research questions made. Information of other areas of study was also consulted to the extent that their object of study was related directly or indirectly to the research purpose.

The arguments shown in the results and discussion were structured according to the RQ asked in the introduction section. For example, RQ 1 was framed within the technical perspective, from which the information
was explored from an instrumental viewpoint, where evidences shown refer to marketing as a work process or activity. To go in depth, issues from proposals focused on strategic and operating aspects, such as contents, elements or information resources requiring management were shown.

On the other hand, RQ 2 shows a theoretical perspective and the content developed considers ideas from conceptual and methodological frameworks. Here, there was no summary of the theoretical proposals found, but details of some issues of concern with respect to the definition of information processes, how it added value, the methods used, as well as the principles followed to transform it into a new marketable resource.

RQ 3 focuses on the behavioral perspective, arguments about information behavior and some processes of such behavior. Here, merely empirical evidences of the behavior of marketers and other associated actors were shown. Finally, from RQ 4, which does not belong to any of the three perspectives above mentioned, issues connecting marketing and LIS, and that are also a high potential to the practical, academic and research activity of both disciplines.

3 Results and Discussion

Below is a descriptive analysis made by integrating ideas from literature and taking into account the interpretative fundamentals of the authors. The arguments will be structured based on the three perspectives mentioned and defined in the introduction and methodology section (technical/theoretical/behavioral), and the information dimension of marketing could be consolidated, in a certain way, with these perspectives.

3.1 Technical perspective: Information as a marketing management object

Information is taken into account as a resource of concern for marketing from the emerging “information age”, where information technology and telecommunications production became a paradigmatic factor for the organizational strategy area (Glazer, 1991). Since it is a resource, it indicates that it is another asset that must be managed by the organizations. However, it is addressed as any element in this study, regardless the presentation (product, service, raw data, non-structured information), that requires management to meet or respond to a specific organizational need or a problem. It is worth explaining that information management (IM) and information technology management are not the same. Both are strongly related since the latter gives infrastructure that supports, processes and redirects pure information. The IM requires better cognitive and analytical capabilities due to the several ways in which it can be presented. For that reason, here the management activity is illustrated from people’s perspective and not from technological systems perspective; although the idea of the important role that these systems play for dealing with this resource is not abandoned.

Choo (1997) operationalizes the IM in a network of 6 interrelated processes: (1) identification of information needs, (2) information acquisition, (3) information organization and storage, (4) development of information products and services, (5) information distribution, and (6) information use. It is based on the premise that organizations behave as an open system that transforms information into knowledge, processes and structures that in turn generate new products and services (Choo, 1996). Ponjuán (2011) affirm that this activity must be understood and managed as an institutional strategic function, and not as an operating process that ensures the information processing and service provision. González-Valiente (2014a, p. 43) states “each one of these processes can take place independently of one another and can be within the conceptual frameworks of information behavior assumed by people when handling information, which does not imply that it only refers to IM”. In the interrelation between marketing management and information management, there is a high compatibility of processes due to the management approach of both activities. Alves & Duarte (2015) states that the IM is the interrelation point between LIS and Management Sciences in general, fields where marketing is subclassified.

According to marketing, “information has the pragmatic role of reducing uncertainty” (Keegan & Rolf, 1996, p. 1999), which allows changing relations between producers (marketing managers) and consumers in the market (Repo, 1989). Among other properties are its great capacity of showing market situations (White, Varadarajan & Dacin, 2003), observe future events (Chen, Mullen & Chu, 2006), provide competitive advantage (Glazer, 1991; Porter & Millar, 1985) and give experience and learning to organizations (Sinkula, 1994).
According to Kurowski & Sussman (2011), a marketing project comprises three dimensions in its design: (1) know the market based on its research, (2) determine a method that gets people interested in the project purpose through a strategy and (3) integrate a plan or a system to implement such a strategy. In these phases making up marketing management, it is implicit that the IM helps to define the results, since the information plays a key role in obtaining, analyzing, integrating and documenting the procedures (see Table 1). According to Fleisher, Wright & Allard (2008), there are 4 IM techniques that must be assumed by marketing managers for planning and execution of their duties: competitive intelligence, customer relationship management, data mining, and market research.

Table 1 - Role of the Information in Marketing Management Processes

| Marketing management processes | Definition                                                                                                                                   | Information role                                                                                                                                                                                                                                                                                                                                 |
|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (1) Market research           | “Systematical design, gathering, analysis and presentation of data related to a specific marketing situation faced by an organization” (Kotler & Armstrong, 2003, p.160). | “Data and other information obtained through research are used to assess the current levels of market potential and market volume” (Kurowski & Sussman, 2011, p. 73), which is useful for the short- and long-term decision-making process in organizations.                                                                                     |
| (2) Marketing strategy        | “The strategy provides decisions and direction regarding variables such as the segmentation of the market, identification of the target market, positioning, marketing mix elements, and expenditures. A marketing strategy is usually an integral part of a business strategy that provides broad direction to all functions.” (AMA, 2007). | “This information from market research and analysis is the foundation for strategic planning and application of marketing instruments to achieve sales objectives and desired position in regard to product and target groups” (Kurowski & Sussman, 2011, p. 78).                                                      |
| (3) Marketing organization and control | Organization and control are the way marketing department relate with the areas of the organization and define how strategies must be carried out (Kotler, 1996). | The information about the strategy provided by the marketing department is comprehensive, taking into account the annual plan, profitability, efficiency or the strategic aspect (Kotler, 1996).                                                                                                                           |
| (4) Marketing plan            | “A document composed of an analysis of the current marketing situation, opportunities and threats analysis, marketing objectives, marketing strategy, action programs, and projected or pro-forma income (and other financial) statements. This plan may be the only statement of the strategic direction of a business, but it is more likely to apply only to a specific brand or product. In the latter situation, the marketing plan is an implementation device that is integrated within an overall strategic business plan” (AMA, 2007). | Documentation of the whole information activity derived from the previous processes, which are timely related, according to Kurowski & Sussman (2011), with the resources, activities, objectives and purposes of the organization.                                                                 |

Source: The authors.

In the market, as a core scenario, there are variables, that according to Glazer & Weiss (1993), provide much information to a lesser or greater extent. Therefore, the management of each piece of information and its assessment can be critical for planning the whole project. It is not easy in many cases, since “the number of variables that a company can analyze or control has grown dramatically” (Porter & Millar, 1985, p. 152). Oppenheim, Stenson & Wilson (2003a, 2003b) timely define new information contents that must be managed for the business area, and they include:
Data or pieces of information managed at relevant levels are obtained from these contents. This determines in a certain way the classifications of the sources of information and its typology. There have been dissimilar proposals such as the proposal of Aaker & Day (1980), Keegan & Rolf (1996) and Kurowski & Sussman (2011), who refer to the differentiation of areas and their information categories where operations must be executed. The proposed frameworks meet the criteria related to the primary and secondary sources, personal and impersonal sources, as well as the relevant information typology for market research works and business systems, such as linked industries, the market environment, competition, product data, current consumption, consumer group or population segment, foreign exchange, and economic factors, among others. These categorizations were not only formulated based on the work knowledge of marketing managers, but they were also extrapolated and defined based on the context of external actors such as consumers, buyers-sellers and others. The evidences are perceptible in works of Jarvis (1998), Teisl, Levy & Derby (1999), Schaefer, Stephen & Hermans (2009), and Deeter-Schmelz & Kennedy (2004).

The management of every information element, already determined or not, contributes to the design, implementation, monitoring and update of the information systems for decision-making (Rowley, 1994). The mission of these systems to effectively implement the tasks corresponding to marketing management, supported by the Marketing Information System, the Marketing Intelligence System, the Marketing Research System, and the Decision Support System, which, according to Kotler (1996), must be integrated into the work processes in the organizations.

### 3.2 Theoretical perspective

#### 3.2.1 The organizational market information processes

According to Xu & Zhang (2013), marketing information is just the quantitative and qualitative information about the environments of the organizations published through media. Processes for this information management have been studied based on organizational domain and the market. From the methodological perspective, some proposals have been validated and designed but largely aimed at the study of consumers, in which very particular models for information search (Schmidt & Spreng, 1996; Sohn, Joun & Chang, 2002; Yang, Toubia, & De Jong, 2014), systems analysis and design (Wright & Ashill, 1998), information processing (Hagerty & Aaker, 1984; Malhotra & McCort, 2000; Mishra & Kumar, 2012) and information integration (Smith & Swinyard, 1982; Norman, 2012) have been defined, just to mention some relevant examples.

Christine Moorman (1995) carried out comprehensive work by reducing the use of market information to four merely organizational information processes:

1. **Information acquisition processes**: Primary or secondary data collection from the external environment of the organization. This can take place through research market surveys, competitive intelligence activities or
consumer satisfaction studies. The processes can also be informal, that is, through sellers interacting with consumers or competitors sharing information in meetings of industrial associations.

(2) **Information transmission processes:** Level at which the information is disseminated between users within organizations, that can occur through formal ways, that is, through policies, training sessions, research presentations and meetings. Informal transmission takes places during interpersonal interactions.

(3) **Conceptual utilization processes:** includes behaviors and focuses on how organizations process the information and how they are committed to it. Here Moorman conceives two subprocesses: the first one is *information commitment*, which is the way than an organization recognizes the importance of information for decision-making. While the second one is a function of information supply, since it has a direct effect on distribution, interpretation and storage of information, as well as on organizational learning (Sinkula, 1994). This is called *information processing* and it refers to giving meanings which are the result of reasoning, comprehension, interpretation, categorization or preparation of information using the organization memory, a collective scheme or shared mental models. This last subprocess can include informal processes such as analytical models or other types of reports such as team meetings where appropriate interpretations occur.

(4) **Instrumental utilization processes:** refers to the extent to which the organization directly applies market information to influence the marketing-strategy related actions. It comprises three subprocesses: the use of information in 1) making, (2) implementing, and (3) evaluating marketing decisions. These three subprocesses result in the formulation, application and confirmation of strategies.

The definition of these processes has served as a sound conceptual support for many research works, showing the validity of Moorman’s proposal (1995). For example: Cillo, De Luca & Troilo (2010), who based on Moorman’s theoretical framework, constructed two approaches to discuss market information: *retrospective approach* (RAMI) and *forward-looking approach* (FAMI). Both of them are based on generation, dissemination, and use of tasks. RAMI is based on the systematic analysis of the information existing in the company. FAMI is based on the continuous creation of new types of interaction between the company and the market. An empirical analysis of both of them, along with the product innovativeness and firm performance, was carried out in the study of Cillo, De Luca & Troilo (2010). According to the authors, these approaches are complementary with firm performance, so that *retrospective* has a positive relation with product innovativeness; while *forward-looking* seems to have a slightly negative relation.

### 3.2.2 Information value in the market

The value theory is an important area of study from the economic thinking and that has largely been adopted by marketing. This theory is very interested in the value-in-use and the value-in-exchange (Bartels, 1976). Regarding information, such theory “begins with an appreciation of the peculiar attributes of information as a *commodity*” (Glazer, 1991, p. 3), and this is thanks to the idea that “every value activity creates and uses information of some kind” (Porter & Millar, 1985, p. 152).

However, the main challenge of this theory is the definition of a method that makes effective measures in the practical context of organizations after interacting with people. This caused Aatto Repo (1989) to develop a research that highlights that the value of information has a dual approach: the first is the value exchange of products and services and the second is their value of use. The author states that from the first approach, it has been suggested the application of measures from the postulates of cost-benefit analysis (CBA), which is used “for planning and evaluating varying possibilities in information acquisition, processing, transmitting and use” (Repo, 1989, p. 79). In the second approach, the definition of a method becomes even more difficult since the individuals are the only ones capable of adding value to the information through use.

Repo (1989) claims two basic differences, the first refers to the information system (exchange of information products and services), which has been feasibly studied based on the models and principles of the economy, and the second refers to the meaning (use of information) discussed in a theoretical manner based on cognitive frameworks, since the object of analysis is the person and their relation with market information.

Sometimes in practice it is difficult to measure such value-in-use, since this is part of the result of perception, interpretation and reasoning and it is only present in human knowledge structures, which can be seen in specific acts such as consumption. However, it is indisputable that suggesting and applying cognitive methods have been crucial, since “the conceptualization of marketing phenomena grew to recognize the importance of situational
context, the subjectivity of perception, and the constructed nature of human reality” (Hirschman, 1986, p. 237-238).

It is worth mentioning that the most commonly used methodologies for measuring the value of information are “regression analysis, factor analysis, cluster analysis, analysis of variance, and others” (Charnes et al, 1985, p. 96). And the most commonly used models include the Minimum Discrimination Information (MDI) estimation, the Logit, the Multiplicative Competitive Intercation (MCI), the stochastic models, the bayesian analysis, the loglinear model, the entropy model, among others (Brocket et al., 1995). Specific results of the use of this theory have been highlighted in the analysis and design of new strategies, products and services, programs, markets and information systems (e.g.: Baye, Morgan & Scholten, 2003; Jankovic-Milic & Radukic, 2005; Archer-Brown, Piercy & Joinson, 2013).

According to Glazer (1991), the measure of information value is conducted in those elements processed based on the relations between the organization and consumers, the organization and suppliers, and with itself. All these relations occur from the exchange between people, groups and forces that make up the organizational system, through which data flow. From these relations, a main process for marketing occurs, transaction, which is a superior way of materializing the exchange of products and services with strong information intensity. This has led some to consider the common transaction instead of other that is even more based on information. Glazer (1991) says that this information basis will help income of future transactions be better, reducing costs and making information a marketable object (see figure 1). Such an idea is issued by Choo (1996), who said that the use of information could be applied to the design of new products and services, the improvement of existing offers, and the perfection of organizational processes.

![Information transaction process](image)

**Figure 1 - Information transaction process**
Source: Authors based on Glazer’s ideas, 1991.

### 3.2.3 Information marketing

Rowley (2002) states “an information product is any product whose core or primary product is information or knowledge” (p.353). Marketing is becoming a practice that is increasingly more frequent and appropriate. Rowley (2016) defines information marketing as “the marketing of information-based products and services”, where attention lies on the marketing in contexts where the essential products and services are based on information (p. XIII).
A sector of the economy, “information industry”, produces this type of goods for excellence. But beyond this sector, almost all the organizations oriented toward the market are offering this type of product as a result of internal organizational practices. This occurs because of the way in which marketing managers transform the information used, thus contributing to the generation of a new one that can be object of sale and consumption (see figure 2).

These products, according to Rowley (2002), can be even more than the goods and services because in addition to being a marketable category, the information itself can be considered as a component that increases them. From the conceptual point of view, it is worth stating that an information product or service is not the same as an information-based one. The second exhausts all of its possible informational properties relating to their later use, as well as other elements of marketing communication. Freiden et al. (1998) consider that they should be treated as unique products, as well as any other existing typology. This consideration assumes equally unique market strategies because a part of the particularities of information as a commercial product/service reside in the following:

- From its production to its positioning in the market, very different agents that may alter or not its content intervene.
- The same content can be offered in different physical forms.
- Its impact on individuals depends on the context of use since the information product/service satisfies desires and needs that others fail to satisfy (e.g.: lack of knowledge, need to be aware of).
- May be consumed by different people at the same time and from different physical spaces (if present in virtual environments).
- In some cases obsolescence or lifetime may be a factor that defines or not its presence in the market.

These determining factors have an impact on the work of marketing professionals, who must be directed to the design, analysis and evaluation of markets from the informational structures that comprise it. From the point of view of the design of systems, Feigenbaum et al. (2005) propose a model that accentuates the main components which must include information markets, for example: the information structure, the market mechanism, and agent behavior; considering all of them as essential objects of human appreciation.
3.3 Behavioral perspective: Information behavior of marketing managers and other associated actors

Approaches on literature on informational behavior of marketing managers, in accordance with De Alwis & Higgins (2002), are mainly in the areas of Business Management, Organisational Behavior, Psychology, Information Technology, and recently in the field of the Information Science. Wilson (1997) clarifies that the domain of the LIS does not have the monopoly on these issues, but various disciplines are equally approaches, mainly associated with “the study of personality in psychology, the study of consumer behavior, innovation research, health communication studies, organizational decision-making, and information requirements in information systems design” (p.551).

Pettigrew, Fidel & Bruce (2001) conceive that the information behavior is “the study of how people need, seek, give, and use information in different contexts, including the workplace and everyday living” (p. 45); Although this behavior also takes into account other processes such as information sharing, accidental discovery, serendipitous discovery, and passive search, as considered by other contributors. These authors propose a conceptual framework for this theory from three large approaches: (1) cognitive, (2) social and (3) multifaceted. It will be examined here a part of what marketing have treated from the first and second approaches, because in a certain way, the third one is a combination of the two first ones.

Cognitive views focus on the attributes of individuals, and inquires about their motivational and cognitive perspectives towards information, leaving aside the context. In this regard, White, Varadarajan & Dacin (2003) state that the cognitive style of the marketing managers associated with the use of information is one of the factors that influences and determines its way to interpret and respond to any market situation. Those situations are translated into “descriptions” that propose the categorization or classification of the elements fluctuating there (e.g.: physical objects, opinions, events). From this point of view, it has been explored how marketers process information and construct mental representations from what they perceive from the environment. Walsh (1988) studied these representations under the category belief structures and exposes, in addition, the way in which they can affect specific domain information. In the same sense, a work to point out is that of Yeoh (2005), who contributed to the establishment of a multidisciplinary analytical approach to export the acquisition of information regarding the identification of variables as motivation and cognitive ability at the time that business users search for information.

The second of these approaches, the social one, “focus on the meanings and values associated with social, sociocultural, and sociolinguistic aspects of information behaviours” (Pettigrew, Fidel & Bruce, 2001, p. 54). There is a consideration of the context from an interpretative and holistic view, leaving aside the cognitive frameworks. Some of their interests of study have been directed to the production of information flows in different environments, the behavior of virtual consumers, the way in which discursive and interaction elements take place when information is shared, the appropriate description of how people get information, and what variety of this type of resources are used.

From this point of view, we can mention the Du’ study (2012) which, considering how information use and sharing among professionals in marketing has been investigated, identified and described such behaviors through daily work practices. His research showed that 97% of individuals use the information obtained, while 89% use information immediately and 8% manage information in appellate instances. Du (2012) also found that the information is mostly distributed among people from other units within the organization and other colleagues of the work team.

On the other hand, Ashill & Jobber (2001), based on empirical results of literature and on studies on information systems, showed that the identification of information needs of the decision-makers contributes to the effective design of marketing information systems. Its results indicated that the needs could be defined by using six information characteristics:

- Broad scope information
- Timely information
- Current information
- Aggregated information
Inside marketing, the information behavior has been studied from the perspective of its professionals, but it has been also taken as an object of interest for the people who are part of the external environment of the companies (e.g.: consumers, agencies, competitors, etc.). For instance, Lynch (1985) examined how information integration paradigm can be used to study consumer’ overall evaluations of choice alternatives. This paradigm “construes numerical ratings of overall evaluation to result from a tree-stage process: valuation, integration, and information output” (p.2). With this, Lynch (1985) establishes a comparison with the numerical conjoint measurement, the axiomatic conjoint measurement and the compositional correlational approaches for the multi-attribute modelling assessments.

On the other hand, Tybout, Calder & Sternthal (1981), through experimental sessions, showed that the value of the theory of consumer information processing is feasible to guide specific marketing strategies, as well as other managerial practices. While Capon & Lutz (1979), based on the identification of information needs of the consumers from different segments of the market, provided a conceptual and methodological framework for the design and implementation of information programs. They argue “consumer market segmentation can be identified and served with market offerings of information defined in terms of the marketing mix variables of product, distribution, promotion, and price (p. 66)”.

The information behavior has in general become a factor of analysis in many articles (e.g.: Gronhaug, 1972; Du et al., 2013); however a part of its processes have been also explored independently, as in case of the information use (Schaefer, Stephen & Hermans, 2009; Du, 2012), information sharing (Gal-Or, Geylani & Dukes, 2008; Du, 2012), information search (Jarvis, 1998; Junqueira & Rodrigues, 2009), and information acquisition (Hopp, 2012; Garri & Konstantopoulos, 2013). It is valid to narrow down that such behaviors have not been addressed in all cases from individuality. For instance, Moorman (1995) makes a distinction in the use of information at the organizational level and its processes are defined under this nature. Whil Sinkula (1994) has investigated how organizations use market information through the theory of information processing as a whole, and not individually. Thus, it was decisive that the way these organizations acquire, distribute, interpret and store information, will help to provide new constructs and models for processing.

4 Disciplinary relations between marketing and LIS

Alves & Duarte (2015) conceive that inside interdisciplinary relations of the LIS with Management, from which marketing sub-classifies, “a process of exchange of knowledge, whose interaction surfs the basic problems of the understanding the application of information, its representations and the human informational behavior in the context of organizations” (p. 38). This takes place because, thanks to the perspective of the LIS in treating informational processes, the interaction of the individual in the organizational context, as well as the search and use of information to meet the required needs is highlighted (Junqueira & Rodrigues, 2009).

In this same sense, Holland & Naudé (2004) state that Information Science is one of those areas involved in general activities e.g.: market analysis and data collection; customer analysis, segmentation and targeting; product marketing, strategy and objectives; communication with economic partners, and implementation. With empirical evidence, it is evidenced that the informational disciplines provide the skills necessary for the performance of marketing tasks, among them the management of sources of information, decision-making, and the solution of problems based on information, teamwork, management of information, documents and knowledge, and the domain of processes associated with the information (González-Valiente, León & Rivera, 2014).

Theoretical-practical notions relating to marketing have become a curricular subject of necessary interest for the LIS in multiple contexts (Gupta, 2003; Obaidjevwe, 2012), so that it has been also found within the twenty-eight schemes of classification on the map of knowledge of the Information Science integrated by Zins (2007). Although, from a realistic view, “the incidence of the marketing on the LIS has been occurred in the manner in
which the elements of the market can be applied to products and services of information generated in organizations” (González-Valiente, León & Rivera, 2014, p. 235).

Dissimilar bibliometric studies on LIS have examined the patterns of scientific productivity on marketing (e.g.: Gupta, 2006; Gupta & Jain, 2009), where it has been shown that the generated literature is significant. In some cases, they have revealed as usually addressed topics, marketing of the information professional in the labour market, the marketing in libraries, marketing of information products and services, and the marketing information management (González-Valiente, 2014b); as well as the systems for data management and marketing information, the use of internet in the business processes, marketing in the industrial sector, patent information marketing, online service marketing, and marketing through e-commerce (González-Valiente & Linares Herrera, 2014).

In general, the marketing interest for informational studies has also occurred thanks to the fact that “market-oriented enterprises must have three fundamental characteristics: (a) capacity to generate information about consumers, competitors and the business environment; (b) be competent in the dissemination of such information by the organization; and (c) internal capacity to plan and implement appropriate and consistent responses to information generated and disseminated” (Junqueira & Rodrigues, 2009, p. 223).

5 Conclusions

Classifying proposals of information resources achieves great diversity in studies, highlighting informational categories that are conditioned by the external and internal environment of organizations, its functions, strategic projections, and ways to orient itself to the market. This assumes a challenge for information managers, who must unite the IM with marketing management, due to the beneficial practical implications of the use of the information in this context.

Singularly, Moorman’s contribution (1995) appears as one of the most integrating, as it summarized the isolated use of market information in four key processes that are very well contextualized in the organizational domain. These processes are similar to the IM processes defined in some of the models assumed by the LIS field (e.g.: Choo, 1992; Páez Urdaneta, 1992; Butcher & Rowley, 1998; Ponjuán, 1998).

In another sense, informational value theory, in spite of being very questionable, it is taken as the phenomenon under which those methods that are highly applicable to information underlie for the implementation of operational activities, mainly against consumers. Generally, informational studies in the marketing context are characterized by the presence of mathematical-statistical, cognitive, computational, systemic and behavioral approaches, which have been supported in fields such as psychology, economics, information systems, information science, and others.

The analysis of information search was further explored. In this sense, the consumer’s behavior and other external players (companies, suppliers, buyers) were more frequently examined than that of marketers.

Marketing and LIS share similar theories associated with information behavior, IM, and information systems analysis and design; however, considering the analysed literature, the adoption of approaches of marketing is more noticeable on LIS studies than LIS approaches on marketing studies. This can be conditioned by the pragmatic context of the work activities of both disciplines. Higher projections among them may depend on the way in which business information and scientific activity interact, as well as the information and marketing scientists and practitioners.

Although this research has been very qualitative, it fails to provide a descriptive summary of how much information has been explored by the marketing domain. Therefore, a bibliometric study, with a highly quantitative approach, would be appropriate to elucidate what subjects are the most addressed, which are the most representative authors, and what methodological approaches characterize research works, among other aspects that respond to publication analysis. Also, a citation analysis could be appropriate to reveal how much LIS and marketing are cited among them through an analysis that shows patterns relating to which theories of each discipline is cited by the other. This would open opportunities to enrich the scientific and interdisciplinary development of two fields that from science many contributions would be made between them.
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**Recibido - Received:** 2016-02-22  
**Aceptarado - Accepted:** 2017-03-31