THE “KNOWLEDGE MARKETING”: A NEW TREND IN A MANAGEMENT SCIENCE WORLD
(through the application of the Smell Web by the City of Grasse)

Introduction.
Marketing, as it was theorised beginning in the 1950s, and summarised in 1960s, entered turbulent times beginning in the late 1970s. Its universality and very relevance were challenged by the emergence of a multitude of different marketing movements and innovations which Cova and al. (2006) organise around various perspectives either upstream (the environment) or downstream (the customer, the customer relation) of markets: environment, niche, customer loyalty, customer’s life experiences and customer’s competence. The Delphi prospective study on the ‘future of relational marketing by 2015’ has shown the relevance of marketing based on ‘customer competence’.

First, we will review the literature on the evolution of the links between marketing and the concepts of information, knowledge, and competence. Knowledge Marketing seems to be a fruitful outcome bringing together a series of creation processes for customer competence and that of members of the company. From an academic point of view, this raises the question of which conditions are necessary to switch to ‘customer/company competences and customer/company intelligence’ perspectives, which appear to be the common denominators of new emerging theoretical approaches. Creating and studying a “Scented Web” project will help us understand how these perspectives are structured around Knowledge Marketing.

Links between marketing and the concepts of information, knowledge, competence.
First, we will identify the links between marketing and the concepts of information, knowledge, competence. Each of these links is part of the evolution of marketing research: from “market information use” to “marketing knowledge management”. In the new approaches based on the co-creation of value in marketing, the concept of collective competence (customer competences and company competences) overrides the concepts of information and knowledge specific to the company. This leads us to introduce a new perspective, that of customer/company intelligence, as yet little explored in the value co-creation process.

– Marketing based on information
Until the early 1980s, marketing research used only the concept of “information” serving the activities of the company and its actions on the market. Beginning in the 1980s, research that dealt with the use of market information, as well as the dominant movements of marketing management and of market orientation, paid great theoretical attention to this concept. This research helped to establish a bridge between marketing and information: they take into consideration the principle of collecting information on the market and analytically processing it in order to satisfy the needs of consumers and to improve company performance. The market, consumer, company, and its various departments are in closed worlds. Marketing's job is to transfer information between these distinct entities. However, this dominant informational approach does not work for marketing services characterised by the relational aspect of interactions between the market and the company, and the co-production of services.

– Marketing based on knowledge
The marketing practices of departments and of dyadic and relational models have provoked changes in how information generated through co-production and interactions between players is interpreted. It is interpreted in different ways by customers involved in co-producing services and by the individuals who are involved in intra-organisational processes and the various company functions. These information interpretation processes translate information into knowledge held by those individuals in the intra- and extra-organisational levels. The new current dominant logic of services is characterised by “the application of specialized competences (knowledge and skills), through deeds, process, and performances for the benefit of another entity or the entity itself” (Lusch and Vargo, 2006, p.283). In this logic, the company should learn from the market, in interaction with its players. Achrol and Kotler (1999) propose “know-how marketing” that is, using knowledge about customers (their preferences in terms of products, distribution channels, etc.) in order to create new products. In order to deal with the market in an increasingly complex environment, the company should thus focus its strategy on better managing the organisation’s explicit knowledge (Day, 1994; Morgan, 2004). But we find ourselves once again faced with the problem of the separation between the customer and the company: knowledge is produced only by the company.
The appearance of information and communication technologies can broaden the scope of relations between the company and the customer. The CRM approach, Customer Relationship Management, automates the collection and interpretation of data, and their transformation in customer knowledge, serving the company’s relational strategy.

Much of the literature focuses on sources of research and access to external knowledge. Still, studies in Knowledge Management let us discover other sources of knowledge creation on two levels: epistemological (tacit or explicit) and ontological (individual or collective). More attention is paid to tacit knowledge, which is contextual and non-formalised by speech, and which is also difficult to separate from its context of production experiences. Thus, contributions to marketing in the 1990s were marked more by modes creating new knowledge at the group/network organisational level and by studies on organisational learning which consider the internal marketing department as being cross-disciplinary. Initial works in marketing knowledge management is oriented more toward creating internal knowledge and especially toward the multiple ways of interpreting, creating and assigning meaning to the knowledge which is generated. Nevertheless, these models are not interested in how customers learn or in collective learning based on the knowledge from customers.

- **Marketing based on competence**

  The acceptance of a multiple meaning assigned to the generated organisational knowledge as well as the influence of the post-modern interpretive movement of marketing, contributed to fragmenting marketing. Cova and al. (2006) identify 15 marketing innovations (stakeholder marketing, ethical marketing, geomarketing, CRM, experiential marketing, sensory marketing, authentic marketing, tribal marketing, etc.) which involve different ways of creating knowledge in the company and from customers. In the tradition of the work of Prahalad (2004), we learn FROM customers, based on THEIR knowledge and competences, and THEIR expertise. In the European Journal of Marketing, (vol. 40 number 9 / 10), the authors designated ‘Customer Empowerment’ as being a marketing approach which can give power to customers in their relationship with the company in terms of controlling marketing variables and consumption experiences. However, according to the Foucauldian interpretation of Customer Empowerment: “Knowledge is Power”. Organisational processes aiming to integrate the customer in the organisational process of knowledge creation have created “Knowledge Marketing” which is defined as the set of processes creating the competences of the customer and of members of the company (Curbatov, 2001, 2003); company competences are created simultaneously with those of customers, and become collective knowledge.

  The concept of Knowledge Marketing encompasses various value co-creation processes: co-imagination, co-production, co-promotion and co-innovation. The co-creation of products/services and of knowledge/competences flexibly combines different situations in which the customers and the companies find themselves in order to reach an innovative solution. The first vision of Knowledge Marketing is based on the “customer/company competence” perspective, by physically involving the customer in the company’s activities or through specific tools, such as the semantic web.

  **The “Knowledge Marketing” as service logic on co-creation**

  The Service Dominant Logic (S-D Logic) introduced by Vargo and Lusch (Vargo and Lusch, 2004; Lusch and Vargo, 2006; Vargo and Lusch, 2008), by contrast with a product dominant logic (G-D Logic) centred on the maximization of the profit and the efficiency of the functions of production and marketing, offers a theoretical anchoring to current phenomena like co-conception, co-production, co-determination or co-innovation of services.

  Indeed, for these authors, the consumer is always a co-creator of value (Vargo and Lusch, 2008a). Their opinions stand in contrast to views of conventional marketing, which targets and captures consumers. More exactly, the dominant logic of service suggests that the value creation is the result of a combined effect of “operant resources”, defined as a set of knowledge, skills, expertise, activated both by the company and the consumer (Vargo and Lusch, 2008b) in Knowledge Marketing process (Curbatov, 2003, 2009). However, for Brown (2007), S-D Logic suffers from the absence of empirical evidence which would permit to enrich the knowledge on the way the consumers engage themselves in a co-creation process.

  Hilton and Hughes (2008) suggest that value co-creation is the output of a series of tasks realized partially by the consumer. Thus, an intermediate stage has to be considered by companies which try to manage better the process of value co-creation: the consumer task performance. The analysis of this preliminary stage is all the more crucial, in a context where the coproduction of service, component of value co-creation (Vargo and Lusch, 2008a) widespread via self-service technologies (eg. Forbes, Lukas, 2008; Cunningham et al., 2008; Reinders et al., 2008; Curran and Meuter, 2007). Indeed, consumers are playing such an increasingly active part in the production and delivery of goods and services that they sometimes, at least partly, stand in for distributors, booking and printing their plane tickets on Internet, choosing and creating fragrances on the web, etc, all
those activities requiring some “operant resources” . These new elements involve for companies the necessity to build frameworks to understand which knowledge, know-how or abilities their consumers require and how these latter acquire them in order to build associated learning curves (Hilton and Hughes, 2008) . However, the concept of “operant resources” does not seem relevant enough to report completely the dynamics of realization of these tasks from the point of view of the consumer. Indeed, it consists of some number of heterogeneous elements (skills, knowledge, know-how, expertise) among which the structure, the contents, the links which they maintain remain relatively vague. The notion of competency seems to be more relevant to re-articulate the diverse elements composing the concept of “operant resources” .

What does mean the fact that consumers bring into play competencies in general way and, more specifically, in the context of sensorial marketing? In this framework, how can one understand a consumer experience or the activity that consists in choosing and consuming a product or service? This paper aims at clarifying the idea of consumer competencies and enhancing current theories on the topic.

First, the focus will be on marketing research integrating the idea of competencies and research in the management and education sciences in order to propose a lens through which the consumers’ competencies use can be read. Then, we propose to illustrate the analysis through the use of “Exhalia smell Web” which requires special competencies.

Consumer competencies: a poor conceptualisation in marketing research

Eight theoretical currents (lead users, meet of service, resistance of the consumer, experience of consumption, consumers’ communities, consumer empowerment, consumer agency, working consumers) shaped the face of the consumer co-worker (Cova and Dalli, 2009) . If these currents - and each of these currents - take a different epistemological otherwise ontological point of view and are distinguished themselves by the aspects of the consumer’s activity (generation of ideas, coproduction of the service, immaterial work, production of narrative, etc.) , they form, however, a rather complete and composite reading framework. Furthermore, beyond the heterogeneousness of these theories, the notion of competency seems to be the tacit common denominator.

The consumer empowerment movement (Denegri-Knott, Zwick and Schroeder, 2006) advocates rebalancing power in the relationship and urging consumers to take responsibility. In this scenario they have more control over their choices and the relationship by taking part in defining its terms. In the consumer agency current (Arnould and Thomson, 2005) , consumers restructure the narrative of the theatre performance in which they participate. That performance requires them to create meaning for their consumption activity and for its movement in a given market world based on narrative resources they explain. The working consumer current (Zwick, Bonsu and Darmody, 2008) met underscores the deviant form of co-creation viewed as a two-pronged approach enticing consumers to implement their ability to re-appropriate the capital and means of production traditionally held by the company. The idea of the company and customers orchestrating competencies and resources lies at the core of those theories, but no sound conceptualisation of them exists yet (MacDonald and Uncles, 2007) . After developing conceptual thoughts about competencies brought into play in consumption activities by consumers, we will describe which competencies are required when firms implement sensorial marketing tools.

A proposed conceptual framework of consumption activities through the lens of competencies consumers bring into play

– A dynamic view of competencies or the “process-competencies”

In the framework of consumption, we propose viewing process-competencies as a set of known facts, know-how, practices and behaviours mobilized in a given situation that involves two sets of equipment (Le Boterf, 1994) consumers draw upon in order to collaborate. First comes the equipment incorporated in their person, defined in marketing mainly as their cultural, physiological or individual resources (Arnould, Price and Malshe, 2006; Baron and Harris, 2008) , but also social resources defined as family relationships, consumer communities, commercial relationships (Mac Donald and Uncles, 2007) . Works in the education sciences focusing in particular on technology training (Courtois, Thomas, 2003; Mottet, 2007) enable us to add notional and communicational resources to this classification. It underscores the idea of “notions” – ideas or thought patterns – helping to open up questioning, to orientate observation or understanding, to direct analysis, to organize space and time or to guide action choices.

The communicational resources incorporated into consumer competencies might include the ability to speak the same language as the supplier, seller or after-sales service department, make appropriate complaints, warn about dangerous products or consumer situations, give opinions, and vote or communicate on the product by relying on various media. Communicational resources can take the form of collaborative resources involving bilateral, interactive communication on, for example, the creation of personalised products. Finally, we can add, the financial & material resources (money and loans available for consumption).
Consumers also draw upon their environment, including family relationships, friendships and consumer communities (Arnould et al., 2006), in addition to the commercial resources (like communication channels, physical and technical materials, product and service offers), which they integrate into their own resources in order to co-create their experience.

- **A static vision or the “end competencies”**

Competency lies in consumers’ ability to tap different resources, taking the form of various competent behaviours relating in particular to the consumption situation they are faced with, whether they are interacting with the company or not.

Those competent behaviours or “end competencies” include:

- **Cognitive competencies** involving, in marketing, the ability to decode companies’ messages and advertisements (Macdonald and Uncles, 2007) as well as the cognitive efforts made (Alba and Hutchinson, 1987; Passebois and Aurier, 2004) in the act of purchasing (search for information, creation of meaning, knowledge of rights and responsibilities). This type of competency can be found in the education sciences under the term cognitive or informational competencies, which are defined as the ability to identify the possible nature, scope and sources of information required; find the information effectively and efficiently; read, understand and memorize it; assess its usefulness, relevance and quality; effectively and efficiently organise it; and monitor it. The customer’s cognitive competencies are the ability to read, interpret, memorise and organise product information.

- **Competencies that could be termed instrumental**. It involves the consumer’s ability to handle “physical” products before, during and after consumption; tools belonging to consumers (computers, peripherals, cables) available in their environment (Tricot, 2006); online computer tools; company-provided social media such as YouTube, Facebook or Twitter; interactive terminals; websites; tools letting people create their own personal products; and representation tools (labels, invoices, estimates, schedules of specifications, instructions, electronic meters, etc.). This definition is proposed by some marketing researchers who prefer taking a broader approach. To them, consumers’ instrumental competencies echo the coordinated, masterful use of a technique, technology or know-how to perform another task, such as verbalising expectations understandable by the company (Lüthje, 2004). Bringing instrumental skills into play might also involve relying on a certain number of social resources, such as friendships, professional relationships or online networks (Macdonald and Uncles, 2007) in order to reach a given goal: the use of the terms relational competencies seems appropriate here.

- **Competencies more directly connected to the use of a product, service or media (Internet), which helps to open up access to a legitimate message about the product, service or media in question or even to propose other uses and functions. Von Hippel (1978, 1986, 1999, 2005; Béji-Bécheur and Gollety, 2007) and, more recently, Berthon et al. (2007), in particular, have done marketing research on those competencies. They are similar to the idea of metacognitive competencies (Mottet, 2006), which involves implementing creative abilities: creating new representations, fresh knowledge and heuristic solutions to practical issues dealing with consumption and shifting meanings or creating new ones.

We have sought to classify customers’ competencies for a better understanding of consumer activities generated by purchasing, subscribing, using and experiencing a product or service, but they are not implemented in isolation from one another. They are interdependent. For example, instrumental competencies or skills depend on prior knowledge of the technical tools’ functions (notional resources) and the ability to mobilise them (in other words accumulated cognitive competencies) depending on the market situations consumers live.

- **A conceptual framework**

The resources mobilized must be identified in order to distinguish those competencies. They consist of knowledge, know-how, practices and behaviour patterns used in a given situation, whereas competencies lie in individuals’ ability to tap various resources in each of those areas. With regard to the dynamic and static visions of the competence and as we try to describe it in Fig. 1, consumption-related activities can be understood as bringing into play a certain number of instrumental, relational, cognitive, use or metacognitive “end competencies” stemming from the consumer’s own notional, cultural, communicational, collaborative and physiological resources available in his or her environment whether it is commercial (communication channels, technical tools for interacting with the company) or not (social resources, including online) and from which individuals draw in order to consume.

**One illustration of our conceptual framework: a Smell Web project**

We present in this paper the illustration associated with the resources integrated and the competencies

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1 By information we mean any form of explicit and tacit knowledge (oral, written, visual, sound, video, smell, etc.) from any source (human or media) transmitted by any means (print, electronic, local, networks, etc.).
activated by the customer in the framework of the Exhalia project implementation.

- **Research method for Smell Web project**

We choose to elaborate the illustration in order to show the multiple integrated resources mobilized by the consumer and competent behaviours he could activate in some situations of consumption and in particularly to create value-in-use around sensorial marketing tools.

The illustration was built from the project “Exhalia” launched by France Telecom Research and Development in 2003 in which we participated, which is re-analysed through our conceptual framework of the consumer competence. Thus, we proceeded to a secondary analysis of qualitative materials (Dargentas et al. 2009). Indeed, this type of analysis presents some interest to improve the qualitative research by allowing the accumulation of knowledge thanks to a new questioning of the set of data.

The Exhalia “Smell Web” project was elaborated with the researcher as both the designer of this project and producer of marketing knowledge. In this way, the researcher contributes to the emergence of new scientific representations and knowledge which are procedural and non-substantive, and which aim to provide a guide to “organisational engineers” and which can subsequently be used by other companies to solve complex problems. Thus, our experience in designing marketing and R&D projects, allows us to propose methodological reference in the framework of projects co-built with a firm (Curbatov, 2009). More precisely, two types of study were conducted:

- qualitative tests for the of uses and perceptions, people’s behaviour towards this innovation at the french telecom company R&D department;
- an empirical study, conducted in Paris 13 University to validate the conceptual aspects of Knowledge Marketing.

This research was carried out thanks to the scientific partnership between the City of Grasse and that R&D department, based on research work.

**Using the “Exhalia Smell Web”: project Exhalia**

The Exhalia concept aims:

- To diffuse fragrances in synch with data, images and/or sound, transmitted by a telecommunications network;
- To perfume the content of television, web, DVD in real time, but more generally, all telecommunication and multimedia forms.

The www.exhalia.com portal, created and managed by France Telecom R&D in 2003 and transferred to Exhalia Corporate in 2004, federates olfactory sites and multimedia forms. Several professionals from different worlds, such as city of Grasse wish to try it out on their respective sites by including a “scented” dimension. In order to promote the image of the world capital of perfume and its touristic “services”, the city of Grasse perfumed six web pages of www.ville-grasse.fr with the specific city fragrances (rose, jasmine, lavender, thyme-rosemary, etc.) associated to places of interest (fields of roses and lavenders, culinary recipes) or to the main events (the Jasminade Party or the “Exporose” trade shows).

Instrumental competencies are required on behalf of the consumer to use relevantly the equipment which diffuses fragrances and to be able to navigate through scented websites. The use of the site also implies the involvement of cognitive competencies (to read, to memorize information, to recognize perfumes, to create a knowledge on “usages” of the city) which beforehand require the mobilization of notional and social resources (main notions about perfumes, knowledge about the main tourist places and about the actors of the tourism in Grasse) and commercial ones (images, texts presented on the perfumed web site). The creation, the “composition” of his personal touristic road trip from the city of Grasse’s smell website means finally the activation of metacognitive or use competencies (see table 1).

**Theoretical and managerial implication**

The implications for skills and resources prompt companies to read the consumer’s collaboration on three levels.
Being attentive to the consumer's integration of resources

The first reading involves identifying the skills consumers activate by integrating the resources the company offers in their consumption experience.

To be attentive the company can revise its explicit or implicit analysis based on customer profiles and not just on organisation diagrams: the customer possesses cognitive, instrumental, metacognitive or usage skills in many areas that the organisation does not necessarily take into account.

Being attentive to the skills required

If the company modifies its sometimes-partial consumer representations, the idea of skills and resources

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<tr>
<th>Smell Web</th>
<th>Integrated resources</th>
<th>Competencies brought into play</th>
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<tbody>
<tr>
<td>City of Grasse</td>
<td><em>Notional resources</em>: notions about perfumes and about specific associated touristic web sites (about areas, food, festivities…)</td>
<td><em>Instrumental competencies</em>: Capacity to navigate through the website of the city (6 smell websites) using the required equipment.</td>
</tr>
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<td></td>
<td><em>Social resources</em>: knowledge about the main tourist places and about the main actors of the tourism in Grasse.</td>
<td><em>Relational competencies</em>: Capacity to contact tourism offices or the website administrator.</td>
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<td></td>
<td><em>Cultural resources</em>: specific knowledge about the city of Grasse’s perfumes.</td>
<td><em>Cognitive competencies</em>:</td>
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<td><em>Physiological, sensorial resources</em>: physical conditions linked with fragrances perception and sensorial emotions.</td>
<td>- <em>Informational competencies</em>: Capacity to process information provided by the website simultaneously with fragrances diffusion.</td>
</tr>
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<td></td>
<td><em>Commercial resources (channels of communication)</em>: website and tourism offices, events created by the city.</td>
<td>- <em>Use competencies or skills</em>: Capacity to download from the city website and from perfumed pages documents and to use them.</td>
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<td></td>
<td><em>Financial and material resources</em>: equipment to diffuse perfumes, driver, computer, Internet connection.</td>
<td>- <em>Metacognitive competencies</em>: Capacity to make the link between fragrances and websites to be able to create its own road trip.</td>
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Table 1 Examples of resources and competencies brought into play by the Exhalia consumer

O. Yu. Curbatov
can lead marketers to ask themselves questions about the skilled behaviour required (ex.: digital skills) in their activity’s framework, consequently excluding customers who do not possess them. The various forms of co-production are based on messages emphasizing consumers as “king”, “player” or “partner”, but in actual practice asking customers to collaborate sometimes requires them to use skills they do not possess, excluding a considerable number of individuals.

- **Conditions for activating the customer’s skills**

  This analysis examines the mainsprings activating the consumer’s skills. The illustrations are based on the premise that the customer skills benchmark the company defines matches the actual skills customers activate, but a basic question remains that must be the focus of future research: what are the conditions in which consumers bring their skills into play in order to collaborate with the company, producing a gratifying solution or experience (Caruana, Cova, 2007). Customer and company skills refer to a dynamic reality, a process. Studying skill dynamics (Lachance and Legault, 2007) and formation processes offers some clues. Identifying resources, areas of economic, social or cultural knowledge and learning “curves” (membership groups, family, media, socioprofessional category, gender, etc.) helping customers acquire incorporated resources in activated skills are key steps. More generally, activating skills raises questions on how the company can emphasize them and in what conditions.

  That approach requires gathering accounts about their interactions with the brand in order to clearly identify the type of incorporated resources. More specifically, on a methodological level, several kinds of data must be collected in order to analyse the skills consumers implement and to identify those that can benefit the company, those the consumer does not possess due to a lack of resources or those that are in a latent state, including general information about the company, consumers and the relationships between them; information on the internal and external resources tapped in all the relational episodes; and the meaning consumers give the mobilisation of those resources.

  **Conclusion**

  Following Vargo and Lush (2004), we argue that value resides in consumer actions, interactions, projects (Schau et al., 2009) that acquired resources and brought into play competencies make possible or support. However, these resources and competencies have not been clearly linked and overall classified to highlight the different forms of value created. A theoretical model of consumption activities, based on the concept of competency and the typology of resources and competencies which it implies, enables to enrich the current marketing works in Knowledge Marketing. Thus, the main contribution of this conceptual analysis lies in proposing a detailed and dynamic model of consumer competencies going beyond the cognitive expertise concept. This conceptual framework shows that competency is a dynamic process rather than a static state. It stems from the mobilization of consumers’ own various resources (notional, physiological, sensorial, individual or social, communicational, cultural, and financial) and of those the company provides and their mobilization results in three main types of competencies: instrumental, cognitive, and use or metacognitive.

  The specific case of using the smell web shows that consumers have to mobilize more than in other consumption situations, intangible resources (physiological and sensorial ones) in order to be able to use it advisedly. It highlights the importance for marketers to involve consumers very early in the process of smell web conception and to develop new methodologies to benefit from this customer tacit knowledge. Thus, in our opinion, this conception of competency enable to understand more what the consumer “makes” in the activities bound to the consumption of a product or a service. This conceptual and operational framework of analysis could help organizations to combine better consumers’ resources with their own resources to design multisensory applications like smell web or more generally, products, services, self-services technologies, etc.

**References**


Курбатов О. Ю. “Маркетинг знания”: новая тенденция в світі науки управління

Це стаття присвячена прогресу в дослідженні основ концептуального аналізу споживчої компетентності, визначення маркетингового дослідження знання. Вона має на меті пропозицію нової моделі компетентності для кращого розуміння значення, створено-го споживачем і фірмою. Концептуальну структуру ілюструє використання Павутини Запаху (Проект Exhalia). Ця ілюстрація детально розглянута в другій частині дослідження. Ця стаття береже уваги множинність поняття компетентності та сприяє збагаченню теоретичних і управлінських робіт із створення вартості.

Ключові слова: компетентність, споживач, маркетинг, управління, запах павутини.

Kurbatov O. Yu. The “Knowledge Marketing”: a New Trend in a Management Science World

This communication reports on the progress of a research based on a conceptual analysis of consumer’s competencies, as defined in Knowledge Marketing research and aims at proposing a new model of competencies for a better understanding of the value created by the consumer and the firm. The conceptual framework is illustrated by the use of the Smell Web (Exhalia Project). This illustration is elaborated from a secondary exploitation of a qualitative research. This communication takes into account the polysemy of the notion of competency and tries to contribute to the enrichment of current theoretical and managerial works on value co-creation.

Key words: Competency, consumer, marketing, management, smell web.

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