Marketing audit for Knowledge Intensive Business Services

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Abstract: Marketing is a special challenge for KIBS. KIBS deliver knowledge embedded in services, consulting activities, and problem solving capability. Consequently, marketing must communicate the provider's ability to manage knowledge exchanges with customers. The implementation of an appropriate marketing strategy also implies a proper approach to auditing marketing activities, but marketing audit procedures and tools are generally targeted to manufacturing or retailing companies. This paper proposes a novel approach to marketing audit for KIBS companies that focuses on their relational and cognitive capabilities. It consists of a questionnaire-based tool subdivided in sections, each of which considers a particular stage of the customer-provider relationship. The basic assumption is that the effective delivery of knowledge-intensive services requires intense and continuous exchanges of knowledge between customer and provider, and this capability must fit the specific business environment in terms of markets, competitors, etc. The marketing capability of a company is measured in terms of its ability to fruitfully interact with customers in the conditions of the particular operating environment. The questionnaire can help executives of KIBS companies to self assess the "marketing positioning" of their firms. Due to its easiness of use, it is particularly suitable for small companies. The paper describes the theoretical foundations on which the audit tool is based, a particular implementation for the ICT services sector, and the results of a test conducted with ICT companies.

Keywords: knowledge marketing, marketing audit, knowledge-intensive business services, ICT companies, knowledge exchanges, practical tool

1. Introduction

Knowledge-Intensive Business Services (KIBS) are a key category of companies that are deemed to be one of the distinctive traits of the so-called "knowledge-based economy". They occupy a prominent place in developed economies where they stand out to be one of the industries with the highest growth rate (Eurostat, 2009). The notion of KIBS was introduced by Miles et al (1995) to denote private companies whose job consists of collecting, generating, analysing, and distributing knowledge with the aim to provide solutions to problems that their client firms are not able or willing to deal with by themselves. KIBS firms operate in numerous sectors: computer and related activities, business consultancy and HRM, marketing and advertising, R&D services, legal services, technical services, etc.

Since the early studies, KIBS companies have been regarded as a hallmark of the knowledge economy (Aslesen and Isaksen, 2007; Smedlund and Toivonen, 2007) and they have been the subject of an increasing number of analyses by scholars of different disciplines (Doloreux et al, 2010).

According to the literature, unique features denote these companies (Strambach, 2008; Muller and Doloreux, 2009; Landry et al, 2012): these strongly affect the effectiveness of their marketing strategies. First, their main production input and output consist of knowledge, directly delivered under the form of consulting, or embedded in artefacts and services. Second, their business is mostly based on the exploitation of knowledge possessed by their employees. Third, the provision of knowledge-intensive services requires an in-depth interaction between supplier and user, who are both involved in cognitive exchanges and learning processes (Bettencourt et al, 2002). Fourth, services are generally delivered under the form of a process of problem solving in which KIBS companies adapt their knowledge to the specific requirements of individual clients. Fifth,

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they often act as interfaces between the global sources of knowledge and the cognitive needs of end users (Smedlund, 2006). Sixth, their innovative capability is directly connected to the acquisition, processing, capitalization and delivery of new knowledge (Amara et al, 2009).

The above mentioned features make marketing a special challenge for KIBS (Bolisani and Scarso, 2012a; Bolisani et al, 2012). In particular, a shift from traditional marketing strategies – generally applied to manufacturing sectors and mostly based on the classic notion of marketing mix (i.e., product, price, promotion, and place) – to new approaches that stress the importance of customer-provider interactions (see e.g. the new "service-dominant" paradigm of marketing proposed by Vargo and Lusch, 2004b) is required. Since KIBS mainly deliver knowledge (embedded in services, consulting activities, and problem solving capability) to their clients, marketing activities should communicate the company's ability to provide valuable knowledge to customers. In addition, the provision of services involves the customers themselves, and therefore knowledge exchanges are bi-directional: not only KIBS companies deliver knowledge in the form of the services they provide, but they also learn from the continuous interactions with customers. The particular approach to marketing that can be necessary for KIBS firms affects their marketing audit processes (MA) as well. As is underlined in the literature, MA is integral to the implementation of any appropriate marketing strategy.

This paper addresses the issue of MA for KIBS. Particularly, it proposes a novel approach which focuses on the peculiarities of these companies and, consequently, of their marketing efforts. In substance, it is based on the idea that MA should primarily assess the relational capabilities of KIBS, i.e., the capabilities to provide valuable knowledge to customers throughout the whole trading relationship. Hence, the suggested MA approach consists of a questionnaire-based tool subdivided in sections, each of which focuses on a particular stage of the typical customer-provider business relationship. In formulating the questionnaire it was assumed that the successful delivery of knowledge-intensive services requires a deep exchange of knowledge by means of repeated interactions between customer and provider. In light of this, the tool evaluates the marketing capability of a KIBS company in terms of its capability to fruitfully manage the customers' relationship, according to the particular environment (i.e., markets, competitors, etc.) in which it operates. The questionnaire can help company executives to self assess their "marketing positioning"; due to its easiness of use, it is particularly suitable for small companies, as many KIBS are.

The paper presents and discusses a particular version of the marketing audit tool specifically developed for ICT services providers. The tool has been tested with two small companies. The results of this assessment are reported, and its application prospects are discussed.

The paper articulates as follows. The second section discusses the need that KIBS companies follow a relationship marketing approach, and how the adoption of this approach can influence the design of appropriate MA tools. The third section briefly recalls some distinctive features of ICT services providers, focusing on the typical phases that characterize the delivering process of such services. In the fourth section, the main notions and tools for MA are briefly recalled, and the special challenges that are posed to KIBS. The following sections describe the MA tool developed in this study, how it has been built, and tested. The last section proposes a final evaluation of the work conducted so far, and presents some points of a future research agenda.

2. KIBS and marketing

To develop a MA tool for KIBS companies, it is first necessary to recall a distinctive feature of those firms that has a significant impact on their competitiveness. As the literature has always stressed widely (Bettencourt et al, 2002), delivering a knowledge-intensive business service requires several interactions between client and provider, during which continuous knowledge exchanges occur (Figure 1). The nature of these interactions is affected by the knowledge-intensive nature of those services that produces information asymmetry which can make clients be unable to fully evaluate the quality and usefulness of service delivered.

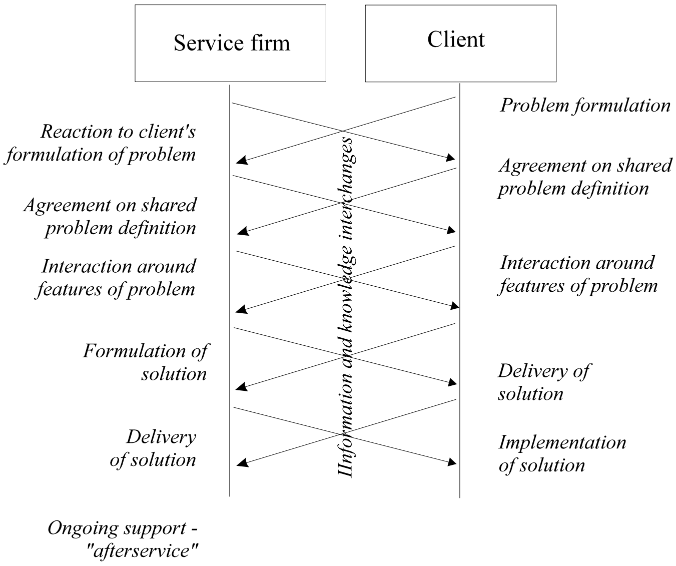

Figure 1: Knowledge exchanges between KIBS and clients (from: Martinez-Fernandez and Miles, 2006)

This raises special challenges for marketers of KIBS firms who have to convince customers of the worth of their value proposition. Firstly, as was shown in recent studies (Bagdoniene et al, 2007; Bagdoniene and Jakstaite, 2008; Aarikka-Stenroos and Jaakkola, 2012), KIBS companies should adopt a “relationship- marketing” approach in order to be successful. This means understanding the dynamics of supplier-customer relationships, how they evolve, and what factors affect their development (Bagdoniene and Kazakeviciute, 2009). The ultimate purpose is to re-organise the company’s processes and re-frame the traditional marketing approach based on the 4Ps (Kotler and Armstrong, 2010). Secondly, many KIBS companies (and particularly those considered in the present paper) have a small size, and this impacts significantly on their marketing approaches and activities, including auditing.

A promising novel approach that can be useful to re-formulate the traditional view of marketing can be drawn from the recently proposed “service-dominant (SD) logic” (Vargo and Lusch, 2004a,b). The SD logic regards services as the application of specialized knowledge and skills for the benefit of clients.

Services are defined as the primary unit of any economic exchange. In particular, the SD logic suggests that what any firm provides to clients is not simply manufactured outputs, but rather *knowledge inputs* of a continuing value-creation process (Lusch et al, 2008). In view of that, the goal of companies is to customize their commercial offer and, by recognising that clients are *always* value producers, to maximise their involvement to better fit their needs. Conforming to this logic, marketing is more than just a functional area of a company: it represents a firm’s distinctive capability, whose functions are to identify and develop the company’s core competences, and deliver them as value propositions that can give them potential competitive advantage. Accordingly, building useful relationships with clients, where intense knowledge exchanges occur, becomes vital. In the SD logic, all employees are involved in delivering services, with the ultimate goal of satisfying the costumer, and this extends marketing well beyond the marketing department (Ballantyne and Varey, 2008).

Ultimately, the proponents of the SD logic claim that the role of marketing should consist of managing communicative interactions and facilitating key relationships and knowledge exchanges with clients. Accordingly, companies should focus on the value-in-use that their products/services can have for their clients rather than just on their features (Payne et al, 2008). This requires understanding the client’s value generating process, and implies a reversal of the traditional "making, selling and servicing" approach, to a "listening, customizing and co-creating" approach, where encounter processes play a crucial role. To sum up, the capability to acquire and share knowledge with clients becomes integral to any marketing process.

3. ICT services companies

ICT services firms are generally considered a category of KIBS (often denoted as T-KIBS - technology-based KIBS, or better C-KIBS - computer and software-related services; Martinez-Fernandez et al, 2004). What needs to be emphasized here is that during the delivery of such services, providers and clients must perform an intense exchange of knowledge.

Indeed, many typical ICT services firms (and especially the smaller ones) provide customized solutions developed through sparring relations with clients, i.e. relations where the nature of service to be the delivered is negotiated between supplier and users (Miles, 2003). Hence, the core of their business is the capability to identify and analyse the problems of a client, and to find the proper solution. Clients are not only the final users of services, but also the sources of fresh knowledge that providers can use for future projects. The literature generally uses the term value co-creation to indicate the active contribution given by the client to identify and implement the better solution to his problems (Stucky et al, 2011). Although each provider can operate differently from the others, it is possible to identify some typical steps that are made when a product or service is produced and delivered to a client (Bolisani and Scarso, 2012b). These steps are:

- first contacts with the customer;
- preliminary analysis, requirement identification;
- feasibility study, formulation of an offer;
- negotiation, sign of the contract;
- technical development; release, test, and implementation;
- post-sale assistance.

Each step involves a bilateral exchange of specific knowledge with the client. For instance, the initial contact is the first time of mutual acquaintance between providers and clients. During this phase, the ICT company describes its commercial offer in general terms, but also requires that the customer provides some preliminary knowledge about its particular needs and problems.

The next steps involve a thoruough analysis of the customer's needs and the identification of the service requirements as more precisely as possible. This phase may take long, since many interactions could be needed for a proper definition of the client's needs that is necessary to design an effective solution. The competence of clients and their willingness to collaborate (i.e., to help the provider to clearly understand the nature of the problem to be solved) are crucial for the success and the quality of the delivered service.

In the negotiation phase, provider and customer must exchange details about the economic value of the project. This involves not only commercial capabilities on both side, but also the ability to assess the value of the technical solution that is being sold. Again, the capabiliy to understand each other becomes critical.

Technical development may raise several opportunities of interaction and mutual learning between provider and customer. There may be the need to solve unexpected problems and to make changes in the original design that may emerge during the development of the project. Also, there may be testing activities that involve both parties which, again, must interact and collaborate.

Lastly, in the post assistance phase, long-term relations with clients need to be established. Not only technical help, but also periodical visits by the commercial staffs are performed. Again, mutual exchanges of knowledge occur: on the one hand, the supplier provides information about recent technological developments, and on the other hand the client informs the supplier about the state of the business and the emerging needs.

All these phases of a business relationship are characterized by several moments of interaction with the customer. Any of these interactions offers the opportunity to implement marketing actions. Clearly, each stage requires appropriate marketing tools that are suitable to the nature of the knowledge that has to be exchanged with the customer.

4. Marketing audit

Marketing audit (MA) is an established notion that dates back to late 1950s (Schuchman, 1959), when the first definitions and elements (goals, issues, types and contents) were given. MA can be defined as a *comprehensive*, *systematic*, *independent* and *periodic* examination of a company's marketing environment, goals, strategies and activities, for determining problematic areas and opportunities, and for recommending an action plan to improve the company's marketing performance (Kotler et al, 1977). This definition points out that MA: a) is broad, covering all marketing aspects of a company; b) should be conducted by an independent person or, at least, with a perspective of objectivity; c) is systematic, since it involves an orderly sequence of steps; d) should be performed periodically. MA generlly bases on a three-step procedure consisting of: a) setting the objective and scope; b) getting the data; c) preparing and presenting the report. The second step, collecting the data, is generally the most time-spending.

Over the years, MA has evolved, and has assumed a prominent place in the marketing management literature (Rothe et al, 1997). However, even though evaluating the marketing effectiveness of an organisation can be important both for manufacturing and service companies, the current state of the art of marketing discipline generally neglects the latter (Pimenta da Gama, 2011). Little attention is given to the peculiar characteristics of services, with the only remarkable exception of Berry et al (1991) who developed an integrative audit framework for service marketing (i.e., ISME - Index of Services Marketing Excellence). Beyond any judgement on the usefulness of this framework, an unquestionable contribution of these authors is that they underline the need for a novel approach to MA that takes into account the distinctive characteristics of services.

4.1 MA tools

The most popular marketing audit tools consist of a checklist of diagnosis questions that are submitted to one or several "key people" in a company. These questions can be open-ended or closed-ended (often Likert-type), and range from a few dozen to more than 1,000 (Wilson, 2002). Questions are often grouped into categories or topic areas, in relation to the main aspects on which one wants to focus the assessment. There is no consensus about these aspects, and different authors propose different dimensions of analysis (see e.g., Berry et al, 1991; Kotler et al, 1977; Macdonald, 1982; Wilson, 2002). As well underlined by Pimenta da Gama (2012), the logic behind the creation of a checklist is the effort to offer a comprehensive set of questions covering all the aspects of marketing that may need improving.

In principle, the more detailed and complete a list of question is, the more likely the relevant points are covered. However, too many questions can require much time to be answered, and what's more the analysis becomes complex. A trade-off between easiness of use and completeness must be sought. In addition, it is extremely difficult to design a checklist that works well in all situations, and local adaptations to the single case might be necessary. Finally, it must be noted that almost all the checklists that can be found in the literature are based on the traditional manufacturing marketing logic that refers to the well established 4Ps approach.

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4.2 MA for KIBS

When it comes to MA for KIBS firms, three main aspects should be considered. Firstly, it is unlikely that small companies (as KIBS often are) can resort to independent external auditors or consultants. Hence, it is essential that they can utilise methods and tools directly on their own.

Secondly (and consequently), a MA tool should be as simple as possible, both in data collection and interpretation. So, it would be preferable to have a checklist with a limited number of clear and easy-to-answer questions.

Thirdly, the goal of MA should be not to push all marketing activities towards a “maximum score”: as a matter of fact, and especially considering the limited size of KIBS, it is not always true that “more is better”. Conversely, in some situations, to push marketing efforts over a certain threshold can be even counterproductive, or in any case uselessly expensive.

5. AUTOMARK: AUdit TOol for MARketing of Kibs

In this section, we present a version of a service-oriented MA tool that was compiled for that particular category of KIBS represented by ICT services. The tool illustrated here was developed on the basis of the previously discussed points and in particular the following:

- marketing is a process that involves all the stages of a provider-customer relationship; an analysis of marketing activities carried out at each of these stages is therefore essential;
- in each stage, providers must have the capability to deliver valuable knowledge inputs to customers (so that they can utilise them profitably in their business processes) and to “learn” from customers (i.e., to acquire fresh knowledge from them);
- exchanged knowledge concerns not only technical aspects (e.g., features of the delivered services, or customer requirements) but also managerial or relational issues (for example: how clients assess the delivered services, how they select providers, how much they consider reputation as a key element, etc.).

Based on these points, a checklist of questions was prepared. The purpose of this checklist is to enable a *self-assessment* by companies for revealing weak areas and opportunities of improvement, and for facilitating adjustment of marketing strategies to strengthen provider-customer relationships. The design of the MA tool was based on the following steps.

a) Building a model of interactions and knowledge exchanges during the typical relationships between ICT companies and their clients that occur in the services delivery process; for this purpose, it was possible to exploit the results of previous studies (Bolisani and Scarso, 2012b).

b) Identification of a number of “critical areas” for MA. As illustrated in the previous section, the ICT delivery process was split into different stages, ranging from early formulation of a sales strategy to after-sales activities; each stage is characterised by specific relational issues that call for appropriate marketing approaches, where the firm needs to acquire knowledge from the market and to deliver knowledge to clients.

c) For each stage, formulation of a number of questions that assess the capability and maturity of relational marketing by a company.

d) Once a preliminary version of the MA checklist was ready, a test was run with two pilot companies. The checklist was tested by executives of two small-sized ICT services firms. This helped to evaluate its easiness of use and usefulness, and to correct errors.

e) A final version of the tool (which was finally named “AUTOMARK”) was then compiled.

AUTOMARK consists of a questionnaire with around 80 questions that can be submitted to a company executive (or two or more executives) in a single company, and serves as a self-diagnostic tool for KIBS marketing. At the moment, the tool is designed for ICT services companies, but extensions to other categories of KIBS is possible.

Actually, when the design of AUTOMARK was being considered, different options arose.

The first was to evaluate answers to questions in absolute terms. This approach is very popular in MA tools and consists of measuring the maturity of a company by calculating "how high" the marks in each question and/or in all questions are. In other words, it is assumed that a company can be successful only if it excels in all areas. We considered this approach unsuitable. First of all, KIBS are often small companies, so it is unlikely or difficult that they can reach top ranks in all areas: hence, this way of using AUTOMARK can be misleading. Secondly, it may be useless (and costly) to reach top marks in all marketing activities, because their usefulness and effectiveness may depend on peculiar market conditions or competitive environments. In other words, it is not always true that "more is better". Incidentally, this is consistent with the findings of recent studies that show that it is necessary to take into account the business context when marketing performance is being assessed (see e.g., Frösén et al, 2013).

The second option was to perform a benchmarking analysis. This means that the same questionnaire has to be submitted to several companies with similar characteristics (for example, in the case of ICT services, many ERP producers in the same market). In this case, a company can assess its relative positioning and marketing capabilities in comparison with others. This is a potentially interesting approach, but difficult to perform: it is, in fact, necessary that several companies accept to use the same MA tool and that they share their results.

The third option was to apply MA as a standalone tool, employed in the single company. This requires that the questionnaire is used as a self-diagnosis tool. Although it does not assess the absolute or relative positioning of a company compared to others, it allows to measure the way a company's marketing activities are aligned to its own expectations and to the perceptions of "what should be done" in a particular market or environment.

For reasons of convenience and simplicity, the last option was preferred. So, AUTOMARK is intended as a *self-diagnosis MA tool* that allows a single company to assess its relational marketing capabilities compared to its own expectations or perceptions of what should be done in that particular environment.

6. AUTOMARK: description and use

The questionnaire consists of two symmetric parts (Table 1). The first part regards marketing activities, tools, and approaches that currently characterise the company's marketing approach, viewed through the lens of the SD Logic, and particularly: the way knowledge is exchanged from and to the clients, the way this knowledge is used to implement marketing-related activities and sale services, the way marketing usefulness is measured, etc. The second part relates to the way markets and competitive environments (and, consequently, marketing requirements deriving from the environment) are currently seen by the company's executives.

Each part splits into 8 sections that focus on the different stages of a provider-customer relationship, namely (see appendix; the complete questionnaire is omitted for reasons of space, the authors can be contacted for further details):

- knowledge about competitive environment;
- markets and marketing/commercial strategy;
- commercial image;
- first contact with clients;

- customer needs;
- proposal formulation;
- implementation of a service/product/solution;
- after-sales.

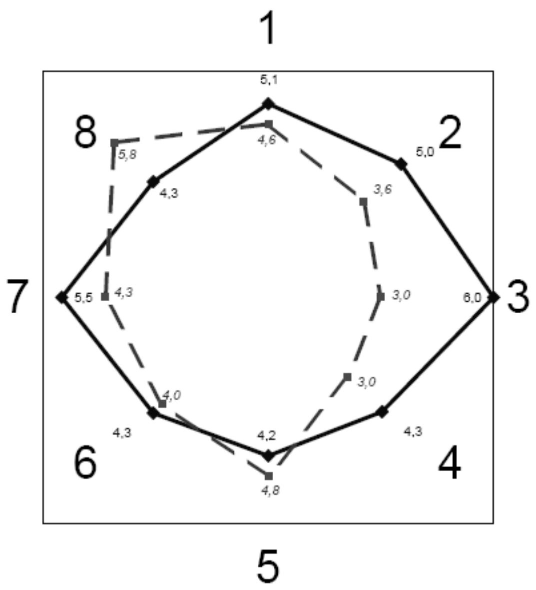
Table 1: Structure of AUTOMARK

Questions regarding the company's actual approaches to relational marketing	Questions regarding the relational needs in the market/environment where the company operates
1. collection of knowledge about market/environment	1. complexity of knowledge about environment
2. marketing/commercial strategy	2. complexity of market
3. commercial image	3. relevance of image in markets
4. management of first contacts with clients	4. importance of first contacts with clients
5. collection of customer needs	5. difficulty of collecting customer needs
6. proposal formulation	6. difficulty of proposal formulation
7. implementation of service/product/solution	7. complexity of services/products/solutions
8. after-sales activities	8. relevance of after-sales relationships

The questionnaire is designed to be self-used in a single company that is willing to understand how its relational marketing activities are *actually* implemented and conducted, and how they *match* the company's perceptions of the competitive environment. For example, the average marks given to the section "collection of customers needs" in the first part measure the way knowledge about customers needs is currently collected by the company: approaches used, tools implemented, procedures followed, etc.; conversely, the average marks given to the corresponding section in the second part ("difficulty of collecting customer needs") measure how this issue is considered to be important given the particular environment where the company operates. If the marks are comparable, this means that the company's marketing strategy is aligned with the "requirements" that are perceived to come from the market: if marks of the first part are higher, the company has invested "too much" in these activities than it might be required; if they are lower, the company should invest more.

Each section is compounded by a number of questions (between 4 and 7). To each question, respondents are requested to express the number (ranging from 1 to 7 in a Likert scale) that best represents the appropriate answer. The questionnaire can be compiled by just one company executive (for example, the sales director or the marketing director), or by more executives in the same company. They can also have different positions, for example: part 1 of the questionnaire can be submitted to the sales director, and part 2 to the CEO, and so on.

Average marks are then calculated for each sub-section, and compared to one another as previously described. The tool easily allows to build a radar chart, which is a powerful way to display the results of the analysis (as an example, see Figure 2). The radar chart presents the average marks for each section listed in Table 1: it is possible to compare the assessments of internal relational marketing activities with the assessments of the perceived external environment, point by point. These results can be used by executives to verify the alignment of marketing strategies to the competitive context, and to take corrective actions. It can also be used as a tool for promoting self-awareness in the company. More generally, it can just be seen as an opportunity for discussing the state of the company with employees.



Key of questionnaire sections:

1 = knowledge about environment

2 = markets & commercial strategy

3 = commercial image

4 = first contact with clients

5 = customer needs

Figure 2: Example of radar chart resulting from a test of AUTOMARK self-assessment

7. Testing and results

The questionnaire was initially discussed with a CEO of an ICT services company that highlighted critical questions that may have been difficult to understand by a typical ICT executive. Since the questionnaire should be used by company executives with no assistance, it is important that questions are clearly understood. From the discussion, it also emerged that questions in the questionnaire should be randomly mixed, in order to reduce the possibility that the answer given to a question influences the answer to the following one of the same section.

The first complete version of AUTOMARK was then tested with an ICT services company, in presence of one of the researchers. This highlighted residual understanding difficulties and minor errors. After that, AUTOMARK was revised and submitted to a second company, where 3 executives (CEO, marketing director and communications director) compiled the questionnaire independently from one another. The results made it possible to correct minor mistakes and to revise an entire section that provided contrasting results.

8. Conclusion

The assumption on which AUTOMARK is based is that KIBS companies must necessarily enhance their relational marketing capabilities in order to successfully place their knowledge-based services on the market. Implementing relational marketing in SD logic implies that companies have to develop capabilities and tools to exchange knowledge with customers effectively during the various stages that generally compound the service delivery process.

AUTOMARK is still a questionnaire but, compared to other MA tools, its setting is different. Instead of a focus on the classic "marketing 4Ps" and, more generally, on the typical activities that characterise marketing in manufacturing, AUTOMARK takes into account the specific knowledge-based interactions that occur between a KIBS company and its clients during typical the service delivery process.

The test conducted with two ICT services companies provided encouraging results. Not only it was possible to correct mistakes and adjust some questions, but also executives proved to be interested in the tool.

Having said that, the study has some limitations. First of all, the tool has been tested with only two companies. There is therefore the need for more testing to verify if it represents the true state of affairs and to improve the tool accordingly. In particular, although we are talking about ICT companies, nonetheless these can be very different to one another, and so can be their marketing approaches. The capability of AUTOMARK to assess different companies effectively has to be demonstrated.

Finally, it should be remembered that AUTOMARK is a self-diagnosis tool. Hence, its results have not a value “in absolute”, but can only be intended as alarm signals that must inspire a discussion in the company. More than numbers themselves, it is this discussion that can provide managers with fresh ideas for improving relational marketing activities of their companies.

In any case, the piece of research described here represents a first important step that will be followed by other improvements. Firstly, the current version of the tool is merely paper-based. To facilitate its use by companies, a web-based version (with online forms that serve as input, and automatic production of charts to be presented to users) will be developed. Secondly, the use of AUTOMARK as a benchmarking tool will be tested. The tool will be proposed to a local Trade Association of ICT companies in the North-east of Italy. By submitting the questionnaire to a selection of representative companies, it will be possible to calculate reference indicators that can serve to other companies to check their relative position compared to the “best players” in the same sector and/or geographical area.

Finally, the extension of the methodology to other areas will be done. So far, AUTOMARK has been designed to be used by ICT services specifically. However, it can represent a “model” for the development of other versions for different categories of KIBS, all based on the same guidelines. The way to proceed for developing new versions can be the one presented in section, i.e.: a) building a model of interactions and knowledge exchanges during the typical relationships between a category of KIBS companies and their clients; b) identifying of a number of “critical areas” for MA; c) for each stage of supplier-customer interaction, formulating a number of questions that assess the capability and maturity of relational marketing by a company; d) running a tests with pilot companies; e) delivering the final forms.

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Appendix: Details of AUTOMARK questions

Part 1. Questions regarding the company’s current approaches to relational marketing
collection of knowledge about market/environment five questions about the capability of companies to collect knowledge of the competitive environment, the resources used for that, and how this knowledge is employed:
marketing/commercial strategy four questions about the centrality of marketing in the company, and the resources used for this

commercial image four questions about how the commercial image of the company is made explicit, and how this knowledge is transmitted to clients
management of first contacts with clients five questions about how the company seeks and manages contacts with new clients
collection of customer needs five questions about how knowledge about customer needs is collected and capitalised internally
proposal formulation four questions about how the elements of knowledge of markets and clients are transferred into a formally structured commercial proposal that must be understandable by clients
implementation of service/product/solution six questions about how company and clients interact and exchange knowledge during the implementation and delivery of a service/product
after-sales activities five questions about how the company collects precious knowledge for improving services, by exploiting the interactions in after-sales activities

Part 2. Questions regarding the relational needs in the market/environment where the company operates
complexity of knowledge about environment five questions about the complexity of the competitive environment, by assuming that the more complex is the environment the more knowledge is necessary to manage it
complexity of market six questions about the complexity of the markets, by assuming that the more complex is the market the more knowledge has to be collected to establish an appropriate marketing strategy
relevance of image in markets five questions about how clients consider the image of a provider as a “substitution” of achieving detailed knowledge of it
importance of first contacts with clients seven questions about how critical the first contact is for clients
difficulty in collection of customer needs five questions about the need for provider-client knowledge exchanges for defining customer needs

difficulty in proposal formulation six questions about the capability of clients to acquire useful knowledge from a commercial proposal and how this enables them to decide properly
complexity of implementing service/product/solution four questions about the complexity of services/products and the need for provider-client interactions to manage their delivery
relevance of after-sales relationships six questions about how relevant after-sales is in the particular market where the company operates

References

Aarikka-Stenroos, A. and Jaakkola, E. (2012) "Value co-creation in knowledge intensive business services: A dyadic perspective on the joint problem solving process", *Industrial Marketing Management*, Vol 41, No. 1, pp 15-26.

Amara, N., Landry, R. and Doloreux, D. (2009) "Patterns of innovations in knowledge-intensive business services", *The Service Industries Journal*, Vol 29, No. 4, pp 407-430.

Aslesen, H.W. and Isaksen, A. (2007) "New perspectives of knowledge intensive services and innovation", *Geographical Annals*, Vol 89 B (S1), pp 45-58.

Bagdoniene, L. and Jakstaite, R. (2008) "The relationships between providers and clients of knowledge intensive business services and its marketing", *Economics and Management*, Vol 13, pp 220-226.

Bagdoniene, L. and Kazakeviciute, A. (2009) "The Model of Client Relationship Management of a Knowledge Intensive Business Services Organization", *Social Sciences*, No. 3, 18-28.

Bagdoniene, L., Kunigeliene, D. and Jakstaite, R. (2007) "Relationship Marketing as factor for Competitiveness of Knowledge-Intensive Business Services' Providers", *XVII International Conference of RESER*, Tampere, Finland, 13-15 September.

Ballantyne, D. and Varey, R.J. (2008) "The service-dominant logic and the future of marketing", *Journal of the Academy of Marketing Science*, Vol 36, No.1, pp 11-14

Berry, L.L., Conant, J.S. and Parasumaran, A. (1991) "A Framework for Conducting a Services Marketing Audit", *Journal of the Academy of Marketing Science*, Vol 19, No. 3, pp 255-268.

Bettencourt, L.A., Ostrom, A.L., Brown, S.W. and Roundtree, R.I. (2002) "Client Co-Production in Knowledge-Intensive Business Services", *California Management Review*, Vol 44, No. 4, pp 100-128.

Bolisani, E. and Scarso, E. (2012a) "Knowledge Marketing: Issues and Prospects", in Cegarra, J.G. (ed.), *Proceedings of the 13th European Conference on Knowledge Management*, Academic Conferences Limited, Reading, UK, pp 100-107.

Bolisani, E. and Scarso, E. (2012b) "Knowledge-intensive innovation management: A multiple case-study of local computer services companies", *African Journal of Business Management*, Vol 6, No. 51, pp 12052-12067.

Bolisani, E., Donò, A. and Scarso, E. (2012) "Marketing of Knowledge-intensive Business Services: Evidence from the ICT sector", in Schiuma, G., Yigitcanlar, T. and Spender, J. (eds.), *Proceedings of IFKAD – KCWS 2012*, pp 1256-1274.

Doloreux, D., Freel, M. and Shearmur, R. (eds.), (2010) *Knowledge-Intensive Business Services. Geography and Innovation*, Farnham: Ashgate.

Eurostat (2009) *European Business. Facts and figures*. Office for Official Publications of the European Communities, Luxembourg.

Frösén, J., Tikkanen, H., Jaakkola, M. and Vassinen, A. (2013) "Marketing performance assessment systems and the business context", *European Journal of Marketing*, Vol 47, No. 5/6, pp 715-737.

Kotler, P. and Armstrong, G. (2010) *Principles of marketing*, 13th edition, Upper Saddle River, NJ: Pearson Education.

Kotler, P., Gregor, W. and Rogers, W. (1977) "The Marketing Audit Comes of Age", *Sloan Management Review*, Vol 18, No. 2, pp 25-43.

Landry, R., Amara, N. and Doloreux, D. (2012) "Knowledge exchange strategies between KIBS firms and their clients", *The Service Industries Journal*, Vol 32, No. 2, pp 291-320.

Lusch, R.F., Vargo, S.L. and Wessels, G. (2008), "Toward a conceptual foundation for ser-vice science: Contribution from service-dominant logic", *IBM Systems Journal*, Vol 47, No. 1, pp 5-14.

Martinez-Fernandez, M.C. and Miles, I. (2006) "Inside the software firm: co-production of knowledge and KISA in the innovation process", *International Journal of Services Technology and Management*, Vol 7, No. 2, pp 115-125.

Macdonald, C. (1982) *The Marketing Audit Workbook*, Englewood Cliff, NJ: Institute for Business Planning.

Miles, I. (2003) *Knowledge Intensive Services' Suppliers and Clients*, Ministry of Trade and Industry, Finland

Miles, I., Kastrinos, N., Bilderbeek, R., den Hertog, P., Flanagan, K., Huntink, W. and Bouman, M. (1995) *Knowledge-Intensive Business Services: Users, Carriers and Sources of Innovation*, DG13 SPRINT-EIMS Report, Luxemburg.

Muller, E. and Doloreux, D. (2009) "What we should know about knowledge-intensive business services", *Technology in Society*, Vol 31, No.1, pp 64-72.

Payne, A.F., Storbacka, K. and Frow, P. (2008) "Managing the co-creation value", *Journal of the Academy of Marketing Science*, Vol 36, No. 1, pp 83-96.

Pimenta da Gama, A. (2011) "A renewed approach to services marketing effectiveness", *Measuring Business Excellence*, Vol 15, No. 2, pp 3-17.

Pimenta da Gama, A. (2012)"Marketing audits: The forgotten side of management", *Journal of Targeting, Measurement and Analysis for Marketing*, Vol 20, No. 3/4, pp 212-222.

Rothe, J.T., Harvey, M.G. and Jackson, C.E. (1997) "The Marketing Audit: Five Decades Later", *Journal of Marketing Theory and Practice*, Vol 5, No. 3, pp 1-16.

Schuchman, A. (1959) "The Marketing Audit: its Nature, Purposes, and Problems", in Newgarden, A. and Bailey, E.R (eds.), *Analyzing and Improving Marketing Performance: "Marketing Audit" in Theory and Practice*, Management Report n. 32, American Management Association, New York, pp 11-19.

Smedlund, A. (2006) "The roles of intermediaries in a regional knowledge systems", *Journal of Intellectual Capital*, Vol 7, No. 2, pp 204-220.

Smedlund, A. and Toivonen, M. (2007) "The role of KIBS in the IC development of regional clusters", *Journal of Intellectual Capital*, Vol 8, No. 1, pp 159-170.

Strambach, S. (2008) "Knowledge-Intensive Business Services (KIBS) as rivers of multilevel knowledge dynamics", *International Journal of Services Technology and Management*, Vol 10, No. 2/3/4, pp 152-174.

Stucky, S.U., Cefkin M., Rankin, Y., Shaw, B. and Thomas, J. (2011) "Dynamics of value co-creation in complex IT service engagements", *Information Systems and E-Business Management*, Vol 9, No. 2, pp 267-281.

Vargo, S.L. and Lusch, R.F. (2004a) "The Four Services Marketing Myths: Remnants from a Manufacturing Model", *Journal of Service Research*, Vol 6, No. 4, pp 324-335.

Vargo, S.L. and Lusch, R.F. (2004b) "Evolving to a New Dominant Logic for Marketing", *Journal of Marketing*, Vol 68, No. 1, pp 1-17.

Wilson, A. (2002) *The Marketing Audit Handbook – Tools, Techniques and Checklists to Exploit Your Marketing Resources*, London: Kogan Page.