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**International Conference « The Service Productivity and Quality Challenge », Wharton School, Philadelphia (USA), 23-24 October 1992**

## **The Provider-Customer Interface in Business and Professional Services**

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### **Abstract :**

On the basis of several national and international studies in the field of business and professional services the aim of this paper is to reconsider the core question of provider-customer interface. It first shows that the question of the relationships between internal and external business services may not only be posed in terms of substitution but also in terms of complementarity and interaction. It then analyzes the interface as a moment of truth (ie as a process of interaction, as a form of organization, and as part of both the client's and the consultant's value chain) a moment of trust (based upon various modes of interaction and various logics of interface) and a moment of thrust (thanks to innovation).

### **INTRODUCTION**

This paper is based largely upon several studies, some of them carried out in the United States and in three European countries in the late 80s and early 90s by an international research team (ERMES- Lille and TNO Delft), others undertaken in France more recently<sup>1</sup>. These studies deal with the strategic management of consultancy firms, the management of consultants by user organizations, and the way consultants and users interact, create value, and innovate.

The starting point of the paper (part one) is the question : why is it that internal professional functions which do not belong to the firm's core business do not seem to vanish, given the mounting pressure on overheads? One of the answers lies in the need for interfacing in knowledge transfer functions.

In the second part the question is posed, what do we mean by "interface" ? This complex reality will be considered as a process of interaction, as a form of organization, and as part of both the client's and the consultant's value chain: **the moment of truth** (value realization).

But it appears (part three) that there are various modes of interaction and various logics of interface, as a function of the respective roles of providers and users during this **moment of** (requested) **trust**. Following Tordoir's conceptualization, four modes are defined, based on a matrix distinguishing, first, jobbing vs. sparring modes, and, second, whether the consultancy practices include or do not include implementation.

In part four of the presentation, innovation in business and professional services is considered in relation to the interface process : **the moment of thrust** (*ad hoc* innovation, formalization innovation, expertise-field innovation). Each of these three types of innovation has specific forms

of relationships and interactions with clients. This discussion leads to criticism of the current distinction between product and process innovations in services.

Finally, the basic issue of the productivity of services in interface practices is reconsidered. These practices are, like Baumol's horn quintet, live performances. Does this mean that no increases in efficiency are likely to occur during their performance? The answer is negative, certainly from the user's perspective.

### **THREE APPROACHES TO THE RELATIONSHIPS BETWEEN INTERNAL AND EXTERNAL BUSINESS SERVICES: SUBSTITUTION, COMPLEMENTARITY, INTERACTION**

Traditional economic analyses of the demand for business services, from firms or organizations, rest essentially on the idea of a decision whether to provide the services internally or purchase them externally, made on the basis of comparative costs and performance quality.

The most current idea in this field is that, in general, businesses are interested in subcontracting all activities that do not form a part of their core business. Since the majority of business and professional functions do not belong to the core business, it is concluded that it would be more appropriate to pass these services to external service providers who are specialized, competent, and capable of realizing economies of scale and scope. In other words, a division of labour and vertical disintegration would be profitable in the majority of cases, as long as the external supply exists. The natural consequence would have to be a smaller internal professional staff, a widely held view regarding the need to reduce overhead costs.

In the case of business and professional services, this view, which is founded upon a concept of substitution, is incorrect, for three reasons:

- if *substitution* is possible, it is not always profitable. There are situations where internal services function in a manner at least as efficient as external services. Moreover, transaction costs tend to dissuade the subcontracting of certain operations.
- in the majority of cases that we have encountered, and especially in large businesses, the question is not so much one of substitutability as one of *complementarity* between internal and external services, for the same service function, (eg management of human resources, data processing services, marketing and advertising, management consultancy, tax and legal services). The division of labour does not prevent both solutions, it consists of distributing tasks according to the respective competencies of internal and external services. Quite often, the tasks undertaken most frequently or most regularly are performed by internal departments, while more specialized, particular expertise needs to be brought in from outside. However, there are other complementarities.
- finally, and most often, it is observed that even when turning to external professional services increases (which was clearly the case during the 1980s), the resulting quality and performance (evaluated from the user's perspective) depends very much upon the existence of internal professionals, playing an *interface* role.

Why should this be the case ? Because recourse to external business services is 1) a *process*, which can last for short or long periods (from a matter of days to several months and sometimes several years), and not the instant purchase of merchandise, and 2) it is a process of *knowledge transfer* (or information transfer) which requires modalities of reciprocal learning, of interaction, between the competencies of internal actors and external experts.

Concretely, the process of recourse to external consultants can be divided into four stages (each possibly containing sub-stages), as follows :

**FIGURE 1**  
THE STAGES OF THE PROCESS OF RECOURSE TO EXTERNAL CONSULTANTS

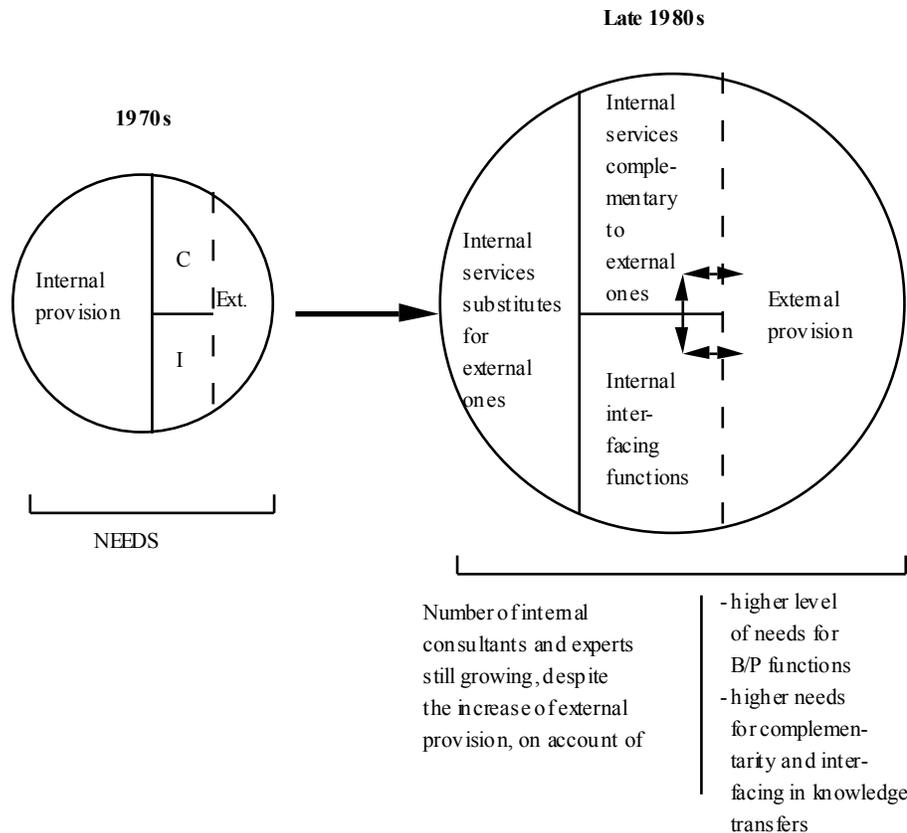
|  |  |   |  |
|--|--|---|--|
| <p><b>IDENTIFICATION</b><br/>of the problem beginning from the initial formulations, sometimes vague or erroneous, sometimes precise and constraining. <i>Preliminary study</i> (sometimes).</p> <p style="text-align: center;"><b>1</b></p> <p>High level of interaction.</p> | <p style="text-align: center;"><b>STUDY</b></p> <p>of the problem, search for information, analysis and synthesis of information, application of <i>methods</i> and technical tools. Diagnosis.</p> <p style="text-align: center;"><b>2</b></p> <p>Low or moderate level (except in the case of sparring).</p> | <p style="text-align: center;"><b>ADVICE</b></p> <p>relative to the eventual application of the obtained results. Recommendations.</p> <p style="text-align: center;"><b>3</b></p> <p>Moderate level of interaction</p> | <p><b>IMPLEMENTATION:</b><br/>may include <b>FOLLOW-UP</b> of project and its <b>EVALUATION</b>. Even activities of "<i>maintenance</i>" and <i>training</i>.</p> <p style="text-align: center;"><b>4</b></p> <p>High level (sparring) or low (jobbing).</p> |
|--|--|---|--|

According to the particular situation, the demand for external services may concern only certain stages, the others being performed by internal services (ie complementarity). On the other hand, it may concern all stages, including implementation, or even management of facilities.

Certain stages require a high degree of interaction, which presumes the existence of a very competent *internal interface function*. In particular, this is often the case for stage one, in which the exchange of knowledge and the diagnosis of symptoms plays a decisive role, for the first phase of stage two (collection of information within the organization), and for implementation, which often occurs cooperatively. But situations vary greatly, according to whether the relationship takes the form of jobbing or sparring (see below).

If these three modalities of relationships between internal and external consultants are taken into account, it becomes clearer why, during the 1980s, although the external business and professional services sector experienced exceptional growth, internal experts continued to be recruited in all fields of intellectual services. Figure 2 shows this development.

**FIGURE 2**  
BUSINESS AND PROFESSIONAL SERVICE FUNCTIONS AND THEIR MODE OF PROVISION



## WHAT DO WE MEAN BY INTERFACE?

The term interface will be reserved for a function of interactive exchange of information and knowledge, and sometimes of cooperative implementation, between the user's organization and the service provider.

This function can be analyzed according to the following procedure:

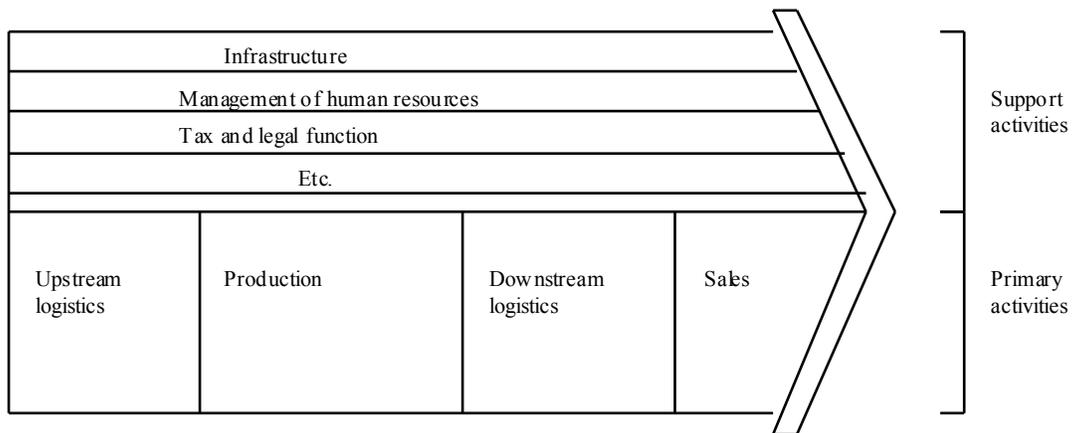
- the interface function takes place over time according to a process consisting of different stages which are more or less interactive (see above). Analysis of the degree of interaction is therefore indispensable.
- the interface function corresponds to a certain organization of work involving internal and external experts. This organization may be informal and very flexible, but it can also be much more structured (project teams, steering groups). At the heart of the interface organization there may be a strong division of responsibilities, or, on the contrary, a relative balance.
- the interface function accords different roles to internal and external actors, which may correspond to different strengths. If performance is to be successful, the casting of roles and the distribution of powers are very important.

It could be said, as Richard Normann [1984] has put it, that this live performance is "the moment of truth" for the service delivery process, even though the other (back-office) procedures

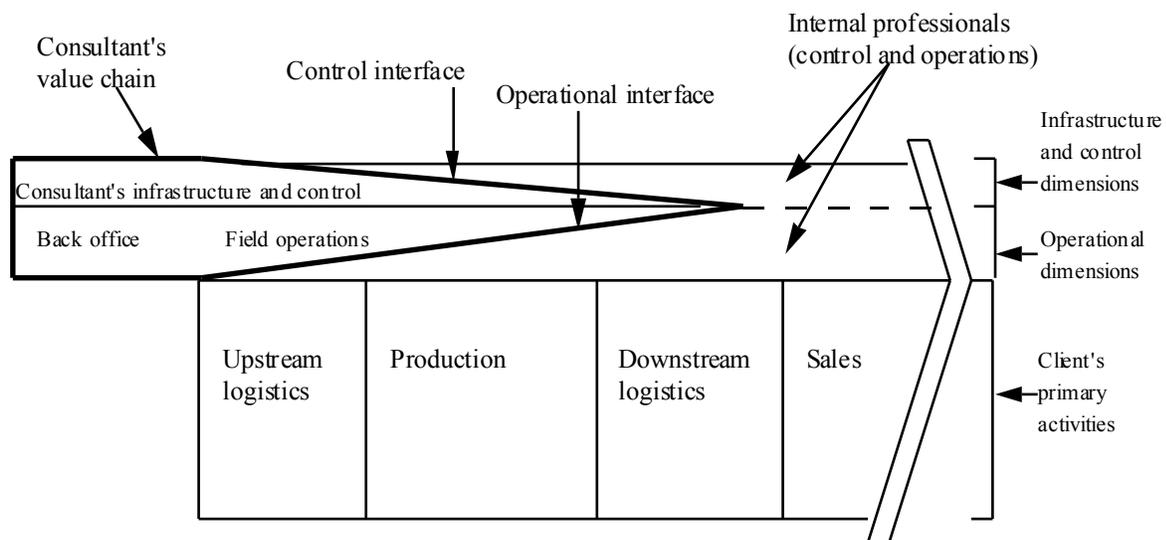
also play a considerable role.

In terms of creating value, or the "value chain" [M. Porter, 1985], the importance of this interface function leads us to modify the traditional schema (figure 3) in order to consider the intersection and overlapping of the value chains of clients and consultants [figure 4, after P. Tordoir, 1992]:

**FIGURE 3**  
TRADITIONAL VALUE CHAIN (PORTER) IN THE CASE WHERE SUPPORT FUNCTIONS ARE UNDERTAKEN INTERNALLY



**FIGURE 4**  
THE OVERLAPPING OF CLIENT AND CONSULTANT VALUE CHAINS FOR ONE SUPPORT FUNCTION (CLIENT SUPPORT FUNCTION PERFORMED BOTH INTERNALLY AND IN COOPERATION WITH A CONSULTANCY FIRM)



## MAIN TYPES OF INTERFACES AND MODES OF CONNECTION BETWEEN CONSULTANT AND CLIENT

Starting from studies carried out by businesses that use services and by service firms themselves, one is able to distinguish [after Tordoir, 1992] two principal variables that help define, through their intersection, four main types of interface and relationship between consultants and user organizations (Figure 5).

The first variable corresponds to the intensity of interaction between providers and users: it places two types of service provision in opposition: 1) jobbing, in which the consultancy firm is called upon to undertake a precisely defined task, with little interaction in the course of the procedure except for supervision by internal experts, and 2) sparring, in which there is a maximum of interactivity and in which the internal and external staffs work together as "sparring partners". The interface is densest in the latter case.

The second variable opposes assignments including implementation and assignments without implementation (advisory functions only). By making these two variables intersect one arrives at four types of interface and relationship.

**FIGURE 5**

### THE MAIN TYPES OF INTERFACE AND RELATIONSHIP BETWEEN CONSULTANTS AND USER ORGANIZATIONS

| <i>Degree of implementation</i> | Consultancy without implementation | Consultancy with implementation   |  |
|---------------------------------|------------------------------------|-----------------------------------|--|
| <i>Mode of interaction</i>      |                                    |                                   |  |
| JOBGING                         | <b>1) Analysts and architects</b>  | <b>2) Project engineers</b>       | Interfaces with supervision by client                  |
| SPARRING                        | <b>3) Co-pilots</b>                | <b>4) "Doctors in management"</b> | Interfaces with cooperation and reciprocal supervision |
|                                 | Analytical interface               | Implementation interface          |  |

Each of these four types corresponds to a consultant profile or a process of consultation. And a certain type of interface at the heart of the client organization as well as a particular form of relationship or connection corresponds to each of these profiles.

In the first case, the consultant sells his capacity for analysis without being involved in implementation. He must accept that supervision of the assignment be completely carried out by professionals in the client firm. He must inspire confidence in this way without intervening in the outcome.

In the second case, we are still in the domain of selling a certain capacity (the skilled servant), the supervision of which is undertaken exclusively by the client. Participation, however,

in the implementation, in the form of jobbing, lends more weight to this operational servant, who must then inspire confidence on the basis of the results of implementation, and not only on the basis of his analytic skills. Nonetheless, the interface remains largely centred on supervision rather than on an interaction of different competencies.

In the third and fourth cases the interface is not limited to supervision: there is close cooperation in analysis and diagnosis (third case) and in implementation (fourth case), which implies that the consultant will not be contented solely to bring skills to bear but will participate to a certain degree in decision-making relative to the utilization of these skills. Thus one can speak of the co-supervision and co-responsibility of the consultant ("co-pilot" in the third case), and even co-leadership in execution (fourth case). This last case is quite rare, and corresponds to the consultant's most powerful position in interface work.

To these diverse interface situations there correspond particular roles and relative powers of consultants and their counterparts from the client organization. Unless they fulfil their roles correctly, consultants will not succeed in creating an atmosphere of confidence, the key ingredient for keeping a faithful clientele in a profession without tangible products.

In a sparring situation it is therefore preferable to aim at an equality of perceived status, which generally implies the involvement of senior managers and partners as project leaders. In jobbing situations, where the consultants are under the supervision of clients, and must accept this role, situations in which the chief project consultant possesses too-high status vis-à-vis his counterparts within the client business must be avoided. If the consultant is over-specialized, it may sometimes be necessary for him to be joined by a general accounts manager who speaks the same language as the managers of the client business and can establish a dialogue with them.

We are not able to go in detail into these situations, but examination of them shows the increasingly strategic character of managing the interface with precision, and of the search for innovations relative to this moment of (requested) trust.

## **THE INTERFACE AS A LOCUS AND SOURCE OF INNOVATION**

In professional services, especially those like consultancy, the interface can be at once a locus and a source of innovation. In the first case, the creation of an interface and its improvement itself constitutes an important form of innovation in service provision. In the second case, the interface becomes a laboratory where that part of the innovation destined for the client is worked out. The existence of such an interface, along with other aspects specific to services (their immateriality, their immediacy), leads us to call into question the traditional definition of innovation [Gallouj, 1994 ; Gadrey et al., 1995 ; C. Gallouj and F. Gallouj, 1996].

Thus the distinction between product and process innovation loses its meaning (or its usual meaning) for such services. We will instead substitute a new classification composed of three categories: *ad hoc* innovation, expertise-field innovation, and formalization innovation, which we will now examine, especially from the viewpoint of the interface.

### ***Ad hoc innovation: product of the interface and short-term moment of thrust***

This type of innovation consists of creating and utilizing synergies out of available knowledge and experience accumulated in the course of past practice, in order to create original solutions (for organizational, strategic, fiscal... problems), new knowledge, and higher-value knowledge. But this intellectual valorization is really only an innovation if it positively, and in a new way, modifies the position of the client. Examples that can be cited include the numerous

unprecedented ad hoc legal solutions sweeping into the cracks in the system, or the specification by different types of consultants of particularly novel strategies that confer a certain competitive advantage on the client.

The interface is the principal location for creation of this form of innovation. *Ad hoc* innovation is in fact often produced in cooperation with the client. It takes place simultaneously with the process of service provision, with the result that it is quite often recognized as an innovation only after the fact; that is, after service provision is over. Contrary to the other two types, we are dealing with a "non-programmed" [Zaltman et al., 1973] form of innovation.

As a product of the interface, *ad hoc* innovation depends upon the nature and components of this:

- 1) Sparring type interfaces are most propitious for the creation and success of this form of innovation, because they help assure a better understanding and acceptance (legitimacy) for the innovation. Moreover, problems of a strategic nature, themselves potential sources of innovation, are most often the object of a sparring type interface, rather than being subcontracted.
- 2) However, one must not conclude from this that only "creative problems" [as Kubr, 1988, calls them], those where one seeks to develop a completely new situation, are carriers of *ad hoc* innovation. "Corrective problems", in which the consultant plays the role of therapist, and "Progressive problems", in which the consultant is expected to improve a given situation that is feared to be deteriorating, are also innovation carriers.
- 3) The opportunities for *ad hoc* innovation appear to increase with the size of the service provider and that of the client; ie with multiple -- quantitatively and qualitatively -- interfaces.
- 4) The effective implementation of *ad hoc* innovation also depends upon the quality of the professionals in the client organization participating in the interface.

The existence of an interface does contribute to limiting the reproducibility of the *ad hoc* innovation in its totality. However, knowledge, experience (whether codifiable or not), tacit and idiosyncratic techniques resulting from practice, methods utilized for their production and transfer, can, for their part, be reproduced. *Ad hoc* innovations are profitable even if they are not completely reproducible because they are based upon the same informational and cognitive input. Thus they are produced by mechanisms similar to those of economies of scope [cf Panzar and Willig, 1981].

The existence of an interface also allows us to raise two key questions relative to the appropriation of the innovation: (a) if the client participates in the production of innovation, to whom does it ultimately belong? (ie the question of normative appropriation), (b) how is this appropriation to be formally implemented? (ie the question of positive appropriation, or legal rights). In the case of *ad hoc* innovation, these two levels of appropriation are both difficult to determine.

*Ad hoc* innovation is the most frequent form of innovation within certain sectors of consultancy such as legal or strategic consultancy. Generally speaking it is hardly spectacular, and in this regard a number of professionals assert: "our innovations are invisible". Its rate of turnover is relatively rapid even if hazardous (this innovation is therefore characterized more by uncertainty than risk) and it generally has a low life-expectancy.

*Ad hoc* innovation corresponds to a short-term moment of thrust. In fact this form of innovation has as its principal result the stimulation of forces favouring external provision over internal provision. In other words, it aims, if not to accentuate the consultant's competitive advantage in

terms of his knowledge-capital, then at least to prove its existence. Indeed in his recourse to the exterior, the client is looking less for innovation (in the traditional sense) than for expertise. And *ad hoc* innovation, as a creative type of mobilization, is without a doubt the highest expression of this expertise.

***Expertise-field innovation : producer of interfaces and long-term moment of thrust***

Based upon surveying and listening to the environment and the client's problems, this form of innovation consists of detecting new needs and responding to them through a procedure of accumulating knowledge and expertise. However, innovation remains only potential, and will only be materialized in an interaction with the client. As a consequence, it requires a certain amount of marketing work which, in the field of consultancy, most often comes in the form of participation in conferences, publication of studies, etc.

Three principal categories of expertise-field innovation can be identified:

- the initial or founding expertise-field innovation. From an historical perspective this corresponds to the origins of numerous different types of consultancy.
- expertise-field innovation corresponding to a multiple specialization within the original function. Examples include investments by innovators in various new potential fields of law (outer space, information technology, consumerism, environmental protection, etc.), and the accumulation of expertise on the creation and management of the European business of tomorrow as much by legal consultants and management consultants as by accountants;
- expertise-field innovation corresponding to a strategy of multiple specialization outside the original function, which arises out of a logic of capitalizing on expertise on one subject, even if this capitalization follows diverse routes for example: recruitment, buying up other consultancy practices. This happens when an auditing consultancy branches out into information technology consultancy and then into personnel recruitment consultancy or when a head-hunting firm branches out into mergers and acquisitions.

Expertise-field innovation is hardly, or not at all, produced cooperatively, even if it arises from examination of business and its environment. It may, on the other hand, result in new interfaces. The non-existence of a production interface facilitates the reproducibility of this type of innovation, whose life expectancy is generally long (ie a low rate of turnover). If, in the absence of an interface, the question of normative appropriation is no longer posed, that of positive appropriation or legal rights remains.

Expertise-field innovation corresponds to a long-term moment of thrust. It is linked to positions in the service-product life cycle and it determines the long-term growth of activity. The essential results of this form of innovation are the opening of new markets, diversification (internal or external) or renewal of product ranges, and creation of a competitive advantage or monopoly in terms of knowledge and expertise.

### **Formalization innovation: production and management of interface and moment of thrust by formalization.**

The concept of formalization is used here in the sense of the search for a certain form of materiality (whether physical or not). Through different means, formalization innovation aims to lend a "material" form to services.

Among these means can be counted:

- the formal specification of the stages of the process and their content (up to a certain point). This is a matter of specifying what Schank and Abelson [1977] call "a script", ie determining in an exact a manner as possible the key points of the process of service provision and the tasks of each party within this framework. The methods, and innovation in the methods, play a fundamental role here since they make up the skeleton of this invisible or mysterious animal that is consultancy;
- the incorporation, at certain points in the process, of technical tools adapted to the demands of consultancy. This may concern back-office or front-office equipment (ie used for interfacing). Innovation is not located in the machine itself (technological innovation) but in modifications to the nature of service provision that it brings about;
- the incorporation of tools created by the consultant himself (tools, software, etc.);
- the contents and organization of packages, whether it be by unbundling a general service or by bundling up the basic units of service or modules [Bressand and Nicolaïdis, 1988, see also Sundbo, 1994, 1996]. Here can also be found aspects of architectural innovation, that is, changes in the articulation of the components without changing core design concepts [Henderson and Clark, 1990];
- organizational innovations. A new service provided to the client can be materialized in a new organization;
- tool kits (in a restricted sense, in which the marketing dimension predominates);

The degree of direct participation by the client in the production of this type of innovation is relatively weak (except in partnership agreements). Formalization innovation is not a product of the interface but it does maintain at least two kinds of relationships with it :

- 1) The commercial success of certain formalization innovations depends upon the quality of the interface. A methodological innovation, for example, may fail at the stage of mobilization during service provision because of a client's incompetence or refusal to cooperate.
- 2) Formalization innovation contributes to the make-up and the management of interfaces. It helps with the flexible reproduction and the flexible "industrialization" of the service. One can speak here of the innovation as a moment of thrust by formalization. The participation of the client in the interface process is one of the factors limiting the ability to reproduce. It is therefore especially a question of diminishing the relationship between client and service provider by the removal (partial) of the user from the service production process and by the strict definition of the user's role.

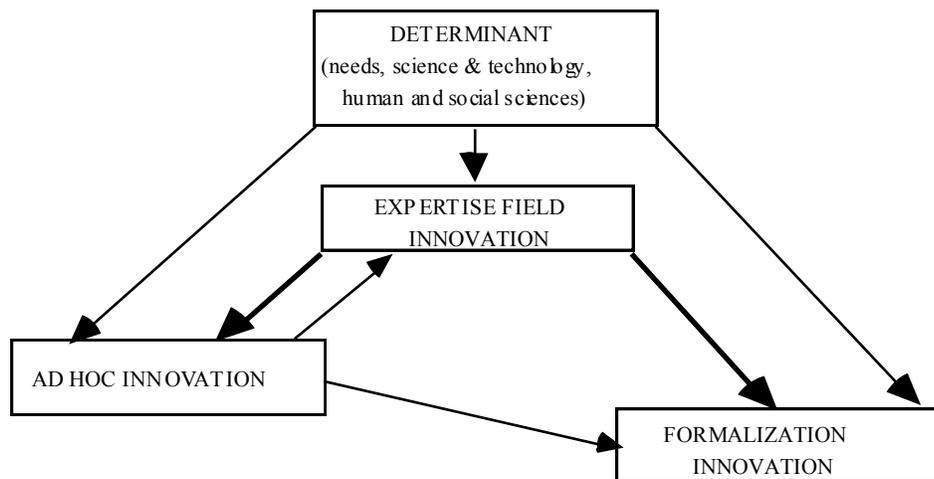
Because of the absence of a production interface, this kind of innovation has a high level of reproducibility. However, the rate of turnover must in most cases (with the exception of forms of formalization that are more psychological, linked to marketing and communication, which are both internal and external) be weak in order not to threaten one of its principal reasons for existence, that is, the formalization of service provision. This in fact risks being destabilized by a

too-rapid rate of turnover, the more so that mastery of the methods by consultants requires a long apprenticeship.

The difficulty of appropriation by the consultancy business of this innovation varies according to its form: if it is easy to appropriate more material forms (those which take the form of product innovations: tests, software, etc.), it is less easy for the less tangible forms such as formal specifications of the stages of the process, for instance.

To conclude this point we could add that the three previous forms of innovation may either have an autonomous existence or be combined or interact (figure 6). Expertise-field innovation seems to be a core component in this interacting system in the sense that it may be followed by *ad hoc* and/or formalization innovation. Expertise-field innovation however may occur simultaneously with formalization innovation. This is what happens when a new field of expertise is detected and exploited and when methods and tools are built without delay and independent services defined among the new expertise field. Furthermore figure 6 (dotted line) shows that *ad hoc* innovation is a source of ideas both for methods improvements (formalization innovation) and for new expertise field detection.

**FIGURE 6**  
THE MAIN LINKS BETWEEN THE DIFFERENT FORMS OF INNOVATION IN  
CONSULTANCY SERVICES



## INTERFACES AND PRODUCTIVITY

As a "live performance", the tasks which correspond to the interface function seems particularly unlikely to give rise to productivity increases, whether one considers the work of external professionals or internal experts.

We have been able to show [Gadrey, Noyelle and Stanback, 1992 ; Gadrey, 1996] that "live performance" services (or "front-office" services) have in certain cases been able to register productivity increases under the influence of two factors:

- technical backup: certain front-office technologies (very often computer-related) allow an increase in the volume of services rendered (information, knowledge, basic problem- solving) per

hour of work in direct contact with the customer.

- the "audience effect": when it is possible to serve a wider audience at the same time, a greater number of clients, without proportionately reducing the quality of service rendered to each customer, one achieves productivity increases. This generally implies certain modes of technical backup.

Now, it seems that these two modes of increasing productivity are rather difficult to implement in business service interfaces, except for some standardized information transfers, but standardized treatments account for a minor part of the interactive tasks that characterize interface work.

One can in fact wonder if the question of productivity has real meaning when it concerns by definition non-standardized, customized intellectual functions. Indeed a precondition for analyzing productivity is the existence of fairly standard types of output, which is clearly not the case here.

From a user's perspective, productivity is not really the issue as far as these professional interactive tasks are concerned. What matters is the effectiveness of the interface work in achieving a proper consultancy service, an adequate legal solution, a well-functioning information system: arriving at solutions, outcomes, pay-off, or competitive advantage, and at reasonable cost. As the managing director of one client business put it during one of our interviews: "this consultant is certainly very expensive, but if the pay-offs are much higher than the costs, I consider the productivity very high". This seems sheer common sense, except that the concept of productivity is no longer relevant in such a situation, since the "product" of the interfacing work is, first, the joint product of internal and external actors, and second, cannot be isolated from the overall effect of knowledge transfer on the client organization and its own technical and financial development. Instead of supposing that productivity is bound to be stagnant, it would be more appropriate to say that, in this case, the concept of productivity is bound to be meaningless and useless.

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<sup>i</sup> More than one hundred (recorded then transcribed) interviews were undertaken.