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Teleconsulting

An Extension of Netbased Distance Learning

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Abstract: In the same way that the use of consultants may be seen as an extreme type of ad hoc, one-on-one arrangement to further learning, teleconsulting may be viewed as an extension of distance education. When solutions for net-based distance education are adapted for teleconsulting, new opportunities open up to establish systems for cost-effective and high quality customer care. All types of organisations that are engaged in contacts with customers – or with the public at large – may find teleconsulting on the net a viable supplement and/or alternative, both to face-to-face contacts, to mail-based correspondence and to telephone call centres. Teleconsulting also offers exciting opportunities to create virtual organisations.

1. TEACHING VS CONSULTING

Teaching and consulting is traditionally seen as two separate fields, with no or very little overlap. It is, of course, easy to observe that most of the practitioners, ie the teachers and the consultants, have rather different public images and work conditions. Whilst teachers' salaries, social standing, and reputation on the whole has been declining for many decades, consultants have, as a group, become both well paid and well respected. These two professions are, nevertheless, destined to wage turf-wars in the near future. The arena in which these fights will take place is the internet. And the main weapons of the opposing forces will be *teleconsulting* and *distance education*.

1.1 Who controls education?

From the moment most young children enter schools and until well into their university studies, they have very little control over what they are taught. The curricula are set, decided either by political or educational authorities. Even the way they are taught is given, as most courses come with no options or alternatives as to methodology. With respect to control over education we have not come very far, just like in the 19th century it is the providers who decide, not the recipients.

This situation is, however, changing at an increasing speed. The main force behind this change is modern society's need for constantly up-dated and ever more specialised skills and knowledge.

This is reflected in the not so new diversification of course contents at the level of secondary and higher education. Courses with optional modules and components give the participants a certain degree of freedom to choose the contents of their education.

Figure 1: The development of flexibility in the contents and methods of education

The trend towards project-oriented learning is noticeable, not least in Scandinavia. It signifies a movement towards participant control even when methodology is concerned, as learners – again within certain limits – are given the choice as to which learning activities are to be performed.

Educators usually cater for the needs of pupils and students. Most schools had, until rather recently, not much experience with customers. This is certainly true in Scandinavia, where almost all education has been financed by the governments. I suspect it may be true even in countries where a larger proportion of schools have been privately financed: The individual student has not been seen as – nor treated as – a proper, commercial customer. To the educators the governments, and in some cases the sponsors, have been the real, but usually very remote customers. It goes without saying that the lack of paying customers have done little to promote service attitudes or willingness to change within the established educational systems.

As private companies have to invest more money more frequently in the training of a greater proportion of their workforces, providers of made-to-order and tailor-made courses are in demand. Since this demand has not been met to a satisfactory degree by the established schools, colleges and universities, a number of new and more flexible training providers has emerged. Even though the established institutions usually are the only ones that can provide academic degrees and certificates signifying formal competence, the newcomers have an ace up their sleeves: They claim that they can deliver the real competence that is needed in the workplaces.

The real picture is, of course, a bit more complicated than this. Universities, colleges and even secondary schools set up departments or 'competence centres' to provide adaptations of their existing courses for commercial clients. And some of the up-starts in the business seek various ways of recognition from governments and established institutions in order to obtain the right to hand out degrees to their students. The combined effect is that the players in the field of education more and more have to cater for the needs of paying customers. Neither the contents nor the methodology are any longer given – they will to a larger extent than in the past have to be adapted to suit each customer's needs, i.e. satisfy the actual learning needs of the actual course participants.

When a company approaches a training provider and place a commission for a tailor-made course, the similarity to the commissioning of ordinary consultancy work is evident. The course designer/teacher and the consultant

Figure 2. Men on horses – opposing styles in riding

are both agents of change. The teacher promotes learning which, by definition, is change of aptitude and attitude. The consultant also deals in change – if their work does not result in the solution to a problem or the realisation of an opportunity, the effort is surely wasted.

Among educators the traditional grade school teachers and the consultants are placed at opposing sides of the continuum. The old school master's challenge was, to a great extent, to perform the same task, over and over again, preferably without unnecessary deviations. The consultant, on the other hand, ideally has to rethink his or her approach each time a new customer wants the consultants assistance. The old schoolmaster and the consultant are both educators, much in the same way the participants in a dressage and a rodeo competition are both riders on horses.

1.2 Teaching and consulting on the internet

There is almost no end to the hype that is being produced about the internet's ability to provide learning. An alarmingly large proportion of journalists (and even a few educators) seems to believe that anyone with a PC and a modem is at risk of becoming a qualified expert of almost anything. I suggest that these people – and the rest of us, for that matter – first try to sort out some of the basic questions about ways to learn. If we do, we may find and build on some very simple truths:

- *There is no learning without activity*, ie in order to learn anyone needs to be exposed to, percieve and mentally elaborate on the effects of stimuli. It is possible to learn on one's own, and all types of learning include self-study as a prerequisite. The internet is not a syringe filled with predigested knowledge, at best it can be molded into an arena for learning activities.
- *Peer-learning is an extension of self-studies*, as it signifies individuals' non-guided, collaborative efforts to learn.
- *Education is organised and assisted learning*, providing the learners with assistance from persons who either are knowledgable in the subject at hand, or act as study facilitators, or both.
- *The main difference between teaching and consulting* is found in the degree of ad hoc adaptations to the recepients' needs and abilites to learn. There is a continuum of educational approaches, streching from basic and traditional training of huge numbers of students – to individual, one-on-one counselling.

The internet should, in this context, be seen as a new and challenging medium which provides all kinds of educators with exciting opportunities:

- *The internet is an administrative tool* which, by use of specially adapted software, can sustain large-scale systems for distance education. Such operations include not only vast amounts of formal and informal communication (much of which must be registered and stored in a retrievable form), but also high numbers of participants, teachers, and facilitators of many kinds.
- *The internet is a medium for marketing.* Any provider of competence building measures can market his or her services on the net. Ordinary indexes and search engines allow internet users to find well-tagged websites, whilst specialised services, clearing-houses and intelligent searchware will track down even the not-so-well tagged offers.

The many new options provided by the internet, the ever increasing rate of technological change and the need for better qualified and constantly updated workforces, they all form the background for the often expressed need for more 'flexible learning'.

Flexible learning signifies a long overdue change towards learner-centred education, to the extent that it implies that the learner is a customer, a person or an institution that is entitled to get what it orders. Flexible learning represents the break-through of commercialism in the field of education. This, in effect, makes the similarities between the teachers and the consultants much easier to see.

Figure 4. Flexible learning demands a customer-oriented approach to education, whether it be in the form of training courses or consultants' services

In order to provide truly flexible learning, the providers must have access to and know how to best employ all means of education. As one tries to satisfy customers' needs, the question is not whether or not any particular approach or favoured method is the correct one. It very soon becomes a question of which mix of means and measures will best serve the customer. The internet may be ideal for interaction among students, but proximity education will still be needed for, say, chemical experiments or training of brain surgeons. And, even though hypertext can be very convenient for many purposes, regular textbooks have some important advantages over texts on screens.

In other words, the successful providers of education (consultants included) must in the future have access to a complete set of educational tools. The ability to combine many specialised forms of presentation and interaction may soon become the prime factor of success.

2. TOOLS FOR TELECONSULTING

2.1 KnowledgeStreamer

At the present there are not much software around for internet consulting. In the following I will be referring to KnowledgeStreamer, a server application for teleconsulting. It was first designed and developed by ObjectPlanet and RealKompetanse, two small companies based in Oslo (Norway), during last year.

The users, ie the customers, access an installation of KnowledgeStreamer through the web, using any recent browser.

If the log-in function is activated, the users will have to submit their personal IDs and passwords in order to get to the system's main menu. From this menu the users may select one of three options: (1) The information libraries, (2) the teleconsulting interface, or (3) the customer arenas.

The information library may contain any number of useful materials and references. KnowledgeStreamer comes with tools for creating, organising and editing FAQ-files and best practices-documentation. In addition it is, of course, possible to include hyperlinks to one own's and other's existing materials on the internet. An indication as to which types of resources that may be interesting is shown in Figure 6.

The teleconsulting interface provides the users with an opportunity to pose questions and to make requests to the owner of the teleconsulting site. These messages are typed into a simple webform, and are tagged by the users so that it is clear which subject area they refer to and how urgently a response is needed.

Figure 5. *KnowledgeStreamer's main functions, as seen from the users point of view*

KnowledgeStreamer allows the owner/operator of the site to route messages of certain contents and urgency to the particular employees that are assigned to handle them. From the owner's point of view this allows him or her the freedom of not only assigning the regular 'proximity consultants' to such tasks, but also the option of including any employee with access to the net to teleconsulting responsibilities.

Most organisations have employees who usually do only in-house work and, since teleconsulting is an in-house task, these may be among the assigned specialists. One may also act as a teleconsultant when on travel, as long as one can access the web. One may not even be an employee to be recruited, freelancers and stringers may well be included in the teleconsulting staff.

The customer arenas are user forums, set up to facilitate peer interaction among the users of the teleconsulting service. As all managers of user forums know from experience – such services depend heavily on the intended target groups' enthusiasm and level of interest. So, a customer arena should only be established as a result of a manifest request from customers.

KnowledgeStreamer nevertheless includes tools for administration of customer arenas. The rationale for this is twofold: (1) By providing customer interaction facilities, the owner of the site will make his or her area on the web a central resource for the customer and the market in general, and (2) by allowing free peer interaction, the owner may easily observe what his or her customers' problems are, what they are thrilled by, and what does not meet with their approval. Customer arenas will in effect enhance the website's market appeal and, simultaneously, collect valuable market intelligence.

In order to deliver its services, KnowledgeStreamer includes a set of administrative tools. There are, as already mentioned, access control, editors for FAQs and best practices-documentation, a 'switchboard' that routes customer inquiries to the assigned consultants, and tools for moderating customer arenas. KnowledgeStreamer's built-in alarms will sound if a customer does not receive a response within the time-limits set for the relevant type of inquiry.

2.2 KnowledgeExchange

KnowledgeExchange is based on KnowledgeStreamer. It will provide application service providers (ASPs) with a platform for multi-user teleconsulting. KnowledgeExchange will also incorporate new functionality, such as a marketplace for consultants ('hire-a-consultant') and benchmarking tools for the services of consultants. The release of this new software is planned for mid-2002.

2.3 NORSK

NORSK is a Norwegian acronym which stands for 'Net-based Governmental Register- and Service-bureau'. It is an initiative to establish a national service that will allow each individual citizen to securely interact with the government's many agencies, sharing whatever information they may have that is relevant to the individual user of the service.

This project takes teleconsulting to the extreme. In addition to the security-issues that have to be solved (encryption of communications with millions of potential users, as well as secure retrieval, storage and distribution of highly sensitive data from central databases), it requires a major shift in the way governmental agencies work. New skills and new attitudes towards the public will also be needed in order to reap the potentially vast benefits of teleconsulting.

3. THE FUTURE ROLE OF TELECONSULTING

Just as consulting represents the high-end of the market for learning (and change in general), teleconsulting will be the most expensive and exclusive type of net-based learning. This is a logical consequence of the nature of teleconsulting: Customers will typically want quick and meaningful answers to non-standard questions, from a set of consultants who more or less will be standing by, waiting to serve any in-coming customer requests. Unlike simple net-based distance education, where the teachers mostly will evaluate and comment upon responses to standard tasks, teleconsulting will always deal with special and concrete problems. And, in contrast to distance education where responses usually are due within days, teleconsulting can be set up to respond to customers queries within hours – or even minutes.

To an established consultancy firm, teleconsulting may provide a welcomed addition to its established repertoire of services. By providing an internet service, the consultants are establishing themselves on their computers own computer screens, easily accessible and only a few key-strokes away. The lower limit on the size of acceptable commissions may be

lowered, as teleconsulting may be more cost-efficient than on-site visits and work.

Teleconsulting may, indeed, be of interest to any company that provides services and products. A server software packages, as for instance KnowledgeStreamer, can be used to facilitate an extended helpdesk function, taking care of customers who have problems in their use of whatever service or product they have purchased.

And, last but not least, teleconsulting may be employed by traditional educators (teachers, trainers, coaches, mentors, or professors) to break into the markets that have traditionally been serviced by consultants. Access to a website for teleconsulting will make it possible for anyone who has expertise – for which there is a commercial market – to set up shop on the internet.

There will be obstacles, of course, since it is hard to become visible on the net, since there are language barriers, and since new businesses do not come free of charge. On the other hand, teleconsulting can be combined with any dayjob, as long as one does not promise customers immediate responses. Teleconsulting may become a tempting proposition, especially for teachers and academics with a certain standing in a given environment.

BIOGRAPHY

Odd Rudjord is vice president at RealKompetanse as. His main areas of responsibility are concept design and internet-related business development. In previous positions he has developed and designed distance education courses. He initiated the ETUE-net programme (sponsored by the European Commission's Fourth framework programme), and served as *rektor* for the Norwegian National Institute of Technology's Distance education college.