Subject: "Networking Technologies and new forms of consulting services, under the view of the Enlargement"

Vassileios Tsoukas¹, Dr. Stefanos Karagiannis², Nikolaos Karanassios³

Abstract:

This paper aims to:

Investigate the use of networking technologies in two geographic regions (Central Macedonia and East Macedonia & Thrace) in a manner that data is not biased by lack of consulting by experts.

Evaluate the degree of the entrepreneurs' willingness to use "network" facilities, considering the cost difference between physical presence of a consultant and his service provision under a virtual presence. The Enlargement of the EU is considered to be, both a market for domestic experts and a pool of experts to be used as consultants, using the Network.

Demonstrate most accurate and up to date information (with respect to the capability of the entrepreneurs to conceive such cognitive items), after executing a field survey, targeted to:

Measure the degree of acceptance, of such an innovation, by the entrepreneurs.

Explore the possibilities of the application of this kind of work (in what fields and sectors) with respect to privacy. Explore the language barriers, the invoicing and money transfer obstacles and communication infrastructure availability.

Examine the preference of provenience, of such "networking" external consultants, such as Universities, Consulting Firms, International Experts etc.

The data evaluation and comparison will be based on the cost of the services. Scenarios will be examined during the survey, in order to be presented in the Conference, not limited by only the cost and secrecy.

1 Introduction

Long experience of business consulting, especially when connected to innovation creation and implementation, mainly as collaborators of the Serres Business and innovation Center (Northern Greece, covering East Macedonia and Thrace territory), has driven us to make a series of assumptions and discuss them with several entrepreneurs, as well as potential once.

Although massive and intensive interventions have taken place, implementing European Policies, in respect to technology transfer mechanisms, little or no evidence at all has been verified in less developed areas.

Excellent ideas, such as involvement of local authorities, entrepreneurial associations and enterprises, even in cases that co-finance has been achieved, seem to resemble to a total failure.

Involvements of Institutional centers of research or excellence, seem to have been winded up in an interminable bureaucracy, where safeguarding the democratic rights of the majority prevail over functionality and usefulness.

¹ Vassileios Tsoukas, B.Sc. Economics (University of Macedonia 1985), Lecturer at the TEI of Serres, Business Consultant. Tel: +30/23210/49279, Fax: +30/23210/45716, Email: vastsouk@teiser.gr

² Dr. Stefanos Karagiannis, Associated Professor, ATEI of Krete, School of Business and Economics. Tel: +30/2810/318205 - 379600, Fax: +30/2810/254237, Email: skaragianis@sdo.teiher.gr

³ Nikolaos Karanassios, B.Sc. Economics (Aristotle University of Thessaloniki 1977), MBA (Universita Commerciale L. Bocconi, Milano1980), Assistant Professor TEI of Serres (Department of Business Administration), CEO of the Serres Business and Innovation Center. Tel: +30/23210/49229, Fax: +30/23210/45716, Email: nk@teiser.gr

Business people make more and more evident that they only support and eventually may finance, tangible consulting, retaining their authority of making decisions to undertake risks, when and if they are convinced that profits are following.

Almost all of the business persons are seeking immediate profits on their investments, with little or no risk at all, with such an innovative character that leads to monopoly and little cost, if not subsidies higher than the cost, transposing risk with profits.

Still, the same entrepreneurs, understanding that this king of picking-up subsidies will not last for long, are trying to diminish the costs of scientific research and documentation and in the same time cope-up with their competitors and achieve long-term profitability.

Business persons are very well aware of the competition, as well as the necessity of a scientific documentation of every investment and every risk they take and that the higher standards this conditions are met the more they satisfy their long-term strategic plans.

Enterprises are rapidly transforming into knowledge management organizations. Each one of them is trying to diversify, in order to on one hand satisfy the needs (or even better, the desires) of a specific market niche, and create oligopolies, on the other

The contemporary global competition environment of the world trade is driving the enterprises of the western world away from bulk production, where the competition is based on the price, which is mainly affected by the cost, which is a consequence of the salaries. Enterprises operating in poor countries are able to offer the same products in prices that are prohibitive for their western counterparts. Enterprises in western countries are forced to skip competition on price and bulk production and compete on quality, brand name, aesthetics and similar arguments.

1.1 Consultants and their tasks

In the last decade there has been a rapid evolution of the consulting sector, business advising and technology transfer. In 1996 the members of the Association of Management Consultants were more than 30, with a legal status of S.A. or S.a.R.L., with a turnover exceeding 11.3 bl Drx. (\in 33 ml) and net profits more than 1.1 bl Drx. (\in 3 ml). Their total assets were about 6.1 bl Drx. (\in 18 ml) resulting to a return on capital employed of 48%. Their financial structure was estimated as healthy, since the current ratio (liabilities over capital fund) was 1.6 (less than the suggested limit 1.8)

The same year, according to a research by ICAP, those companies increased their assets by 329%, their sales by 361% and their profits by 236%.

This unusual development of the consulting companies is explained by the changes in the European economic environment, where, through the unification of the European market, increased competition, forcing the Greek enterprises to start using the services of experts and consulting on economic, technical and technological matters.

1.2 Consulting Activities

Enterprises need to adapt to their, ever changing, environment. In the first place they have to get a clear picture of this environment. Consequently, a communication system is a priority of the Manegerial Consulting.

The communication system is indispensable in order to facilitate the objectives determination of the firms and in the same time help the execution of the rest of the Managerial functions, as a means of achieving these objectives.

Avoiding terminology issues and definition arguments, it can be said that Management consultant's activity consists in providing services to another enterprise, by persons or teams of persons, with a high expertise in Managerial functions, such

as Strategic Analysis, Expansion and Development planning, Project forming and implementation, as well as forming operative plans.

Whoever is involved in such a scientific work may be called a "consultant". Some characteristics of the consultants have to be highlighted. The consultant's services independent; has no authority to change anything, he only gives an impartial and external view. Consultants present a suggestion on how things should be done and when it is the proper timing. Provides special knowledge and experience in order to face practical problems, examine their impact over time, provide the documentation and investigate the roots of complicated situations.

1.3 Consulting procedures

After examining the structure and organization of a firm, a consultant crates documents regarding the problem identification, the problem analysis, the preferable actions and the implementation.

1.3.1 Problem identification

Enterprises, calling in a consultant, think that they have a problem, which can and has to be solved. The first step is to identify and arrive to a profound diagnosis of this problem. It is not rare to identify a different problem than the one posed by the one posed by the calling a consultant firm, already during this very first step. It is not rare, either, to review the problem and identify a different one, after examining the internal environment and the details of the managerial functions. Sometimes, the problem itself, may have been altered, affected by the time interval between the first awareness of the firm and the call for external assistance. Under these conditions, a problem may not be the one posed by the representatives of the "client", may already be obsolete.

In the procedure of the problem identification the consultant may be trapped; cautions have to be considered, such as:

Avoid his own initial strategy, until all the parameters of the problem identification are thoroughly examined. The consultant must be ready to re-examine the problem, redefine it and, if necessary, change the initial work plans and even negotiate again, his services and remuneration, with the client.

It is the consultant's duty, safeguarding his quality, to distinguish the real problems from the appearing as such. Many times it is preferable to let the company continue undisturbed, instead of causing changes that result to a higher cost than the expected revenue.

Problems seeking an intervention have to be discriminated from problems that their solution cost more than the damage they do.

The consultants have to concentrate to the problems that they have been called in to solve. The temptation to, either take the overall company problems as an indivisible entity, or consider the consulting work as a total authority handover, is most usual.

A holistic solution is much more attractive than the problem categorization, through which every expert suggests specific best practice, regardless the interconnection of the separate implementations. Leaving space to the management of the enterprise to choose the adoption of the separate suggestions, keeps the balance between risk and profits.

An extension of consulting services, over the assigned problem to other possible problems, compromises expertise of the consultant.

1.3.2 Enterprise Assessment

Is a gradually detailed description of the problem that people of the enterprise believe that they have. This kind of work extends through all of the consulting period and through the "diagnostic reports" arrives to the problem determination. A strict schedule of this kind of interim reporting has to be presented beforehand. Other

extraordinary reports may be produced, if necessary, but after the client's acceptance.

In cases of long consulting periods, interim reports may be produced in order to make evident that the problem remains the same with the initial one, or has been differentiated and in what nature and extend.

1.4 Data and Facts

The consulting worked is based on facts. The consultant needs a noticeable amount of information as necessary to draw a clear picture of the situation, determine the problem and interconnect potential proposals with the reality of the client's firm.

This kind of information represent the necessary components of structural, development or investment problems, while "real facts" are those components that the consultant uses, in order to complete his diagnosis.

Real facts are also giving the possibility to the consultant to set checkpoints and milestones, necessary to control the progress of his work.

As many as possible primary and secondary information have to be collected, permitting the consultant to have a holistic view.

1.4.1 Real Facts

Real facts are the whole universe of an enterprise. The consultant has to determine what kind of facts will be transformed into necessary information and how they will be obtained. It is usual to adopt a research method, in order to discover the necessary facts and transform them into information, because many of them are not available. An excessive number of facts, creates difficulties in classification and organization, while the deriving information become of equal importance. In addition, such a manner increases the cost.

Facts and information have to be specific to the client's firm. The same facts in different enterprises have a different meaning and importance. The same facts, in a different enterprise are leading to different information.

The consultant needs quantification of facts, so that facts of the same nature are represented of the same units and of the same level of accuracy and the level of the probable error.

Accuracy and probable error level depend on the nature of the problem, the enterprise and especially the information needed. High accuracy and low probable error level is needed in a detailed function, for example the production of a standard item, while approximation and a relatively high probable error level may be tolerated when overall performance, for example total annual production, in being measured.

Measurement of facts period has to be set from beforehand. Longer periods are necessary for enterprises that manufacture capital assets, while shorter are adequate for consumer commodities.

The number of periods examined should be of such an extend as to provide the data necessary for statistical elaboration, representing an acceptable sample and able to show tendencies, deviation, variance, dispersion and other evaluations.

Radical changes of the enterprise, such as new products or new investments, should be extracted from the evaluated information, since they may confuse the statistical measures.

1.4.2 Facts Classification

Facts are already quantified using homogenous measurement units. The consultant's work continues with the task to classify the data in a way that they may be presented in tables and facilitate statistical elaboration.

But facts are not only represented by quantities. Internal (within the firm) and external (customers, procurers, service providers, banks) interviews describe facts in a non

numerical (some call them qualitative) manner. Such information should also be classified in logical sets, for both demonstration and consideration.

Methods and procedures, for the same reasons, should be displayed in a symbolic way.

Diagrams are the appropriate way to extract information from facts.

Designs and selected pictures are describing the aesthetical aspect, explaining the emotional variables, otherwise inexplicable, unless there is a common "significative" language. Semantic languages should better be replaced by images.

1.5 Presentation of Proposals

The Directory Board of the client's firm is expecting the presentation of the consultant's proposed solutions, in order to make the relative decisions. The overall presentation should better last less than one hour.

The presentation, enriched with tables, charts, graphs, designs and pictures, should follow a logical sequence of instances that might better convince the members to adopt the proposed decisions.

Proposals that are less likely to be adopted, is preferable to be retained, because their presentation would confuse the members. In such a case, the consultant is risking an underestimation of his work, transforming it into a philosophical argumentation, rather than a professional result.

Technical, economic, sociological, psychological and other kind of details should not be a part of the consultant's presentation. Avoiding details, the consultant stresses the attention on the interconnection between the proposed actions, their cost estimation and their impact on future profits.

The presentation of the suggested decisions should be on an honest calculation of the "side effects", such as the reaction of the staff and workers' union, the potential reactions of the competitors, the cost of the implementation of a plan and the probability of obtaining the expected results.

2 Assumptions

Greece and especially in the less developed areas, not regions, since there are very different levels of development within the regions, represents a place where the needs and obstacles are stronger and factors of influence may be distinctive.

Such arguments have also been discussed during the Second Development Conference of Serres (29^{th} of May -4^{th} of July 2003), indicating that there is a subject of further investigation. Serres is one of the less developed areas, in spite of a prosperous past and belonging in the Region of Central Macedonia, which represents a respectable development rating.

Such conditions have driven us to make the following assumptions:

- 1. Business persons are aware of their need for high standard consulting.
- 2. They first search for appropriate consulting in the Academia.
- 3. Consulting cost is a very significant factor.
- 4. Physical presence of the Consultants is strongly required.
- 5. Language barriers, if consultants are from another country, are of little importance.
- 6. Telematic facilities, for long distance consulting, are trusted to an adequate level, to be adopted as a platform.

3 Adopted Methodology

A preliminary survey has been chosen as, both an adequate and appropriate means of investigation of the verification or rejection of the assumptions.

Questionnaires seemed to meet the requirements of such an investigation.

Although business persons are very often being asked to facilitate research by completing questionnaires, considering it as a loss of precious time, we decided to try an approach based on the current managerial culture. We have evaluated several factors and, after a desktop analysis, we have been concentrated on a limited number of them, in order to achieve a considerable rate of return and in the same time eliminate the temptation of the investigated managers to give misleading answers, biased by the questionnaire itself.

The factors, we have decided to cope-up with, are the following:

- Questions have to be "closed", so that compilation of the questionnaire may be rapidly answered.
- The choice of the right answer has to be spontaneous, so that no time is spent in order to wander which one best meets their status.
- Questions should be formed the same way managers are putting them, in order to make decisions of the same nature.
- Questions should be among the subjects already taken into consideration, even better if already answered, in the form of decisions taken.
- Questionnaire printing has to be easily legible by middle-age managers.
- The questionnaire itself should motivate managers to accurately devote time by, credibly and as briefly as possible explaining, the usefulness of the results and their privileged access to them.

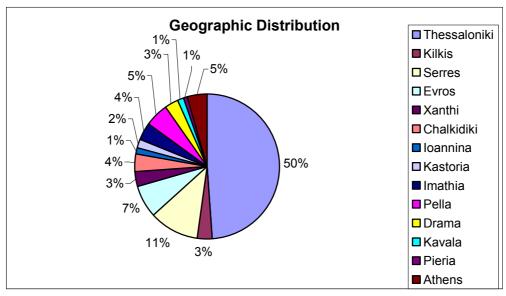
At the expense of having data that covers a broader number of responding enterprises and in-depth information, that would provide a satisfactory level of quantitative input to a behavioral model, we preferred a set of expected answers that demonstrate a tendency, rather than a "function".

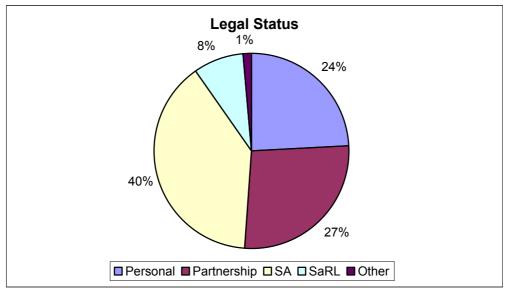
We are using the terms "investigation" instead of research and "preliminary survey" instead of "aptitude identification", because our initial intention has been to spot out:

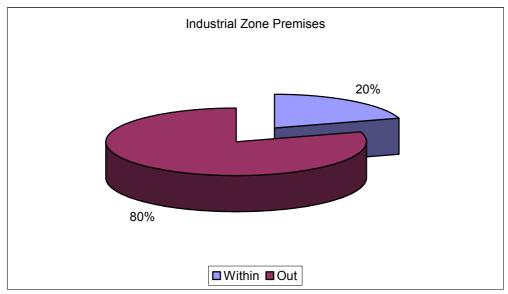
- 1. The mainstream of entrepreneurial considerations, as they are seen by the managers.
- 2. The most sensitive, to a global consulting environment, sectors of activity.
- 3. The level of acceptance of consulting, as a rival of staff and / or managerial and even administrative, services
- 4. The degree of incidence of the exploitation of Information Technologies, as a means of consulting responsibility, in terms of quality of services and secrecy.
- 5. The willingness of entrepreneurs to trust consulting services provided by an evaluation of qualifications of persons, in comparison of trusting persons themselves.
- 6. The impact of the Academic status of the potential consultants, as their asset. A total of 350 companies have been asked to answer a questionnaire. We received 211 answers. We dropped out 58 responses, because they seemed to be compiled inaccurately, either because the respondent did not devote the necessary time and did not pay the expected attention, or because the respondent tried to bias the results of the survey, expecting to influence political decisions that would benefit his kind of enterprise with subsidies. We excluded the questionnaires that showed incoherence among the selection of answers. For example, responses ticking both "frequency of E-mail checking" and "E-mail not available" are obviously out of consideration.

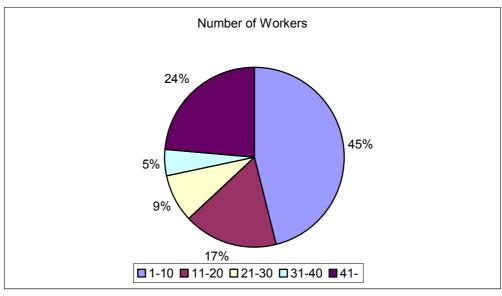
Although the sample did not include enterprises from Athens, a number of enterprises are shown as located in Athens. This is because some enterprises have their premises in peripheral areas, while their management and legal site remains in the Capital City, for obvious reasons.

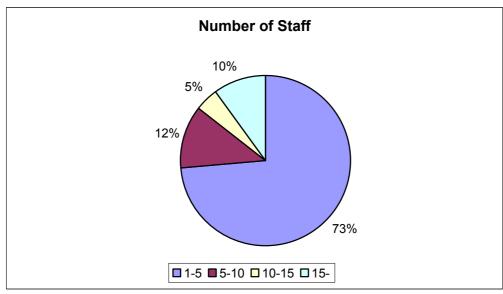
The 153 valid responses are distributed, in a grid that is shown in pie charts, as follows.

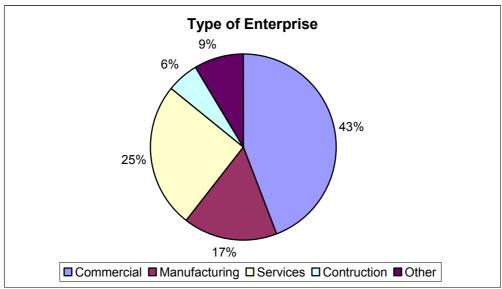








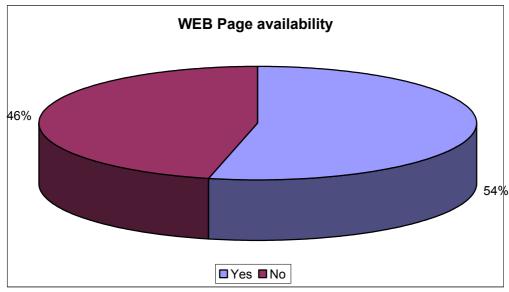


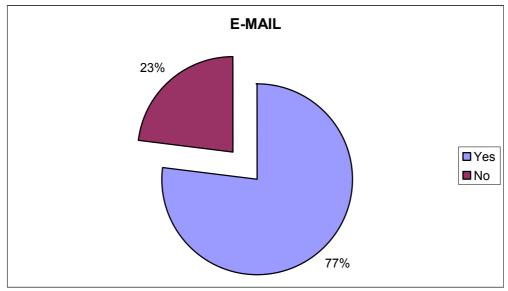


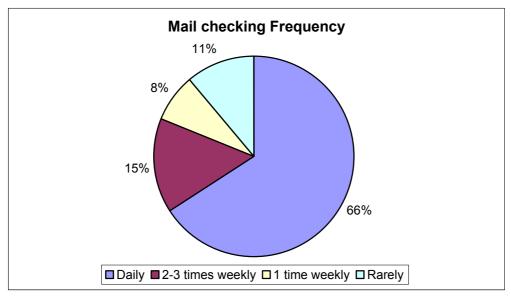
The description of the surveyed sample shows that it is keeping a balance between the description of the Greek economy structure and the target enterprises, as potential clients for the consultants.

4 Survey Findings

Most of the surveyed enterprises already have WEB pages and use E-mail. This means that they are familiar with Information Technologies and that there is a minimal platform of communication.

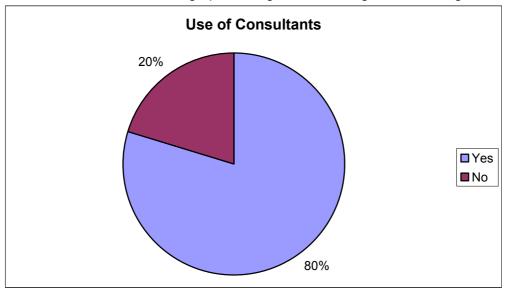




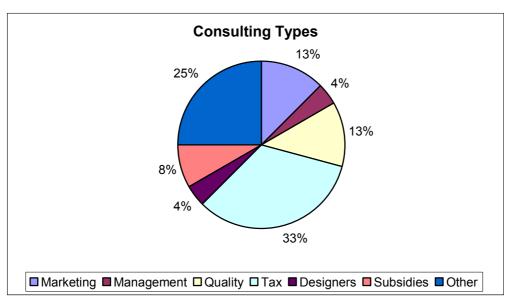


Cross checking the findings above, we may well state that our initial hypothesis, that it is possible to use remote consulting, has a potential market that exceeds 50%, which is quite promising, if not relevant.

In the same time there is a high percentage of consulting services usage.

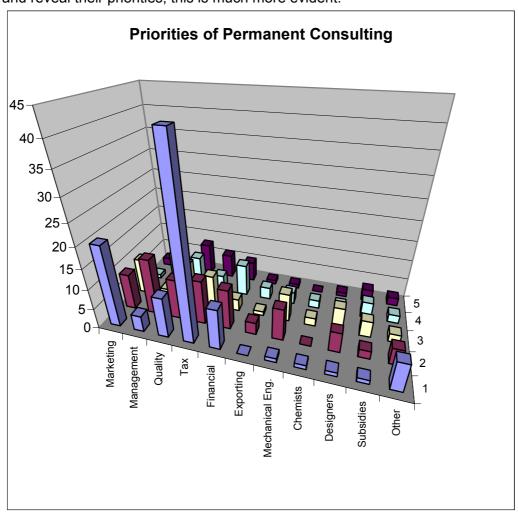


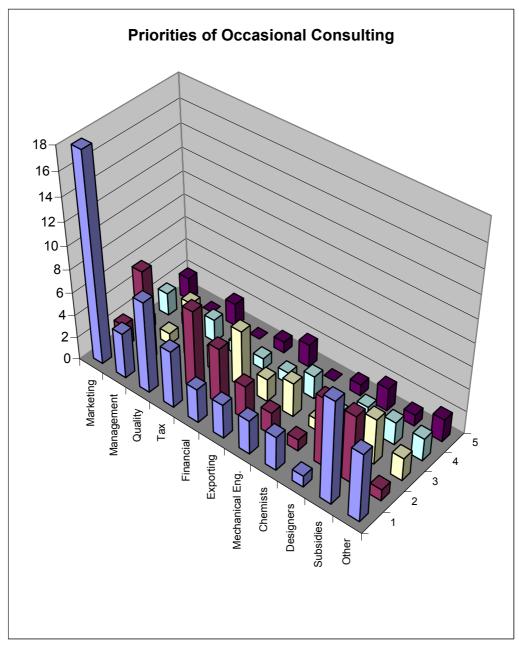
This data would me misleading, if the consulting type used was overseen.



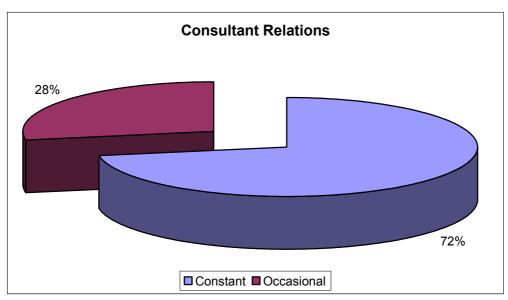
There is a first evidence of the preference of the enterprises in economic, rather than technical and technological subjects.

When the representatives of the responding enterprises are asked to go to details and reveal their priorities, this is much more evident.

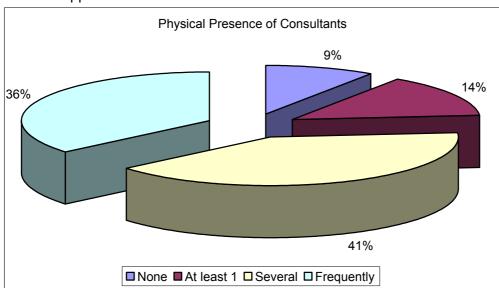


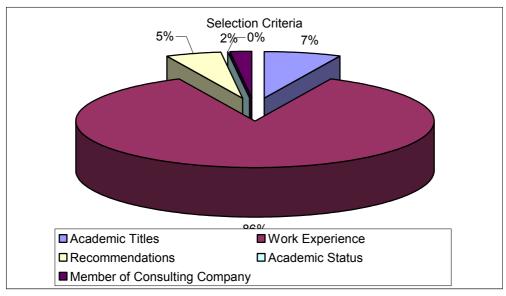


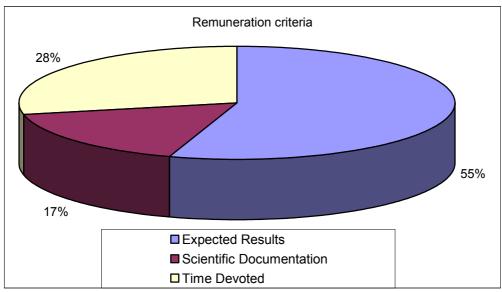
When these responses are combined with the relations between the firms and their consultants, the preferences of the enterprises do not seem to drive to different opinions than the once initially hypothesized. Consulting on Taxation subjects lead to permanent relations, while Market and finance oriented consulting, are preferred to be occasional.

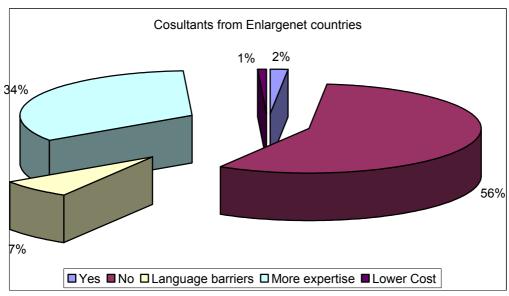


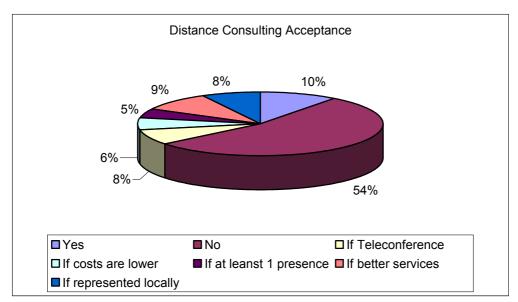
Only one third of the respondents seek a frequent physical presence of the consultants in his firm. When we combine this data with the remuneration criteria and the rate of acceptance of consulting services from Enlargement countries, as well as distance consulting acceptance, under some restrictions, then a tendency of evolution appears.





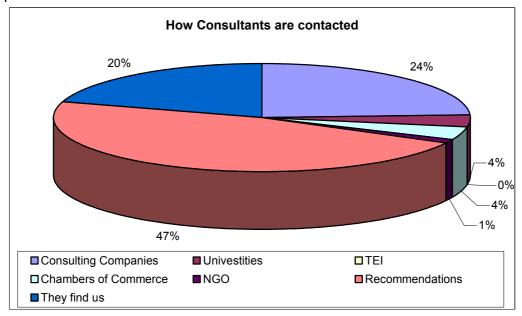


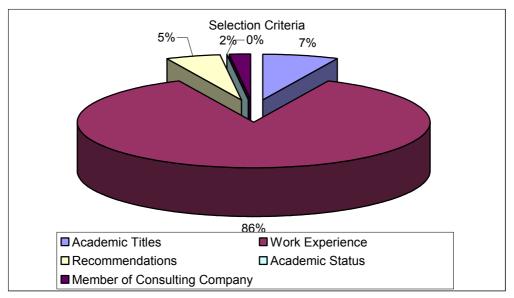




The answers appear to be coherent, since the negative aptitude is almost the same in the questions about the acceptance of distant consulting and the remuneration based on expected results, as well as, the elasticity of the cost. They all exceed, but slightly, the half of the population.

Last finding is how and where consultants are contacted and what the criteria of their pre-assessment are.





It is evident that Academia plays an insignificant role in the consulting business.

5 Conclusions

There is an unexplored ground of consulting services in respect to the scientific documentation of every form of entrepreneurial activity. Products need to have full documentation of their characteristics. Production methods, quality control and the related production conditions, such as health and safety of workers, environmental matters and accountability, need to be documented by accredited scientists, registered in the appropriate verbal and submitted and approved by the corresponding public authority.

The implementation of systems that use the Information Technologies as a platform for consulting services requiring little on no physical presence of the consultant seems to be feasible, while there is a significant readiness to accept such one. Almost one third of the inquired enterprises would not object to receive consulting services over the net, although they would like to meet the consultant, at least once, personally.

Enlargement represents an opportunity to satisfy the need for experts, if they are able to provide a higher degree of expertise, while linguistic or other barriers are not significant.

Entrepreneurs are looking for field experienced consultants, rather than scientific excellence. This explains why the most common procedure in contacting them is recommendation that indicates a higher degree of achieving the expected results.

It is astonishing that the Technological Educational Institutes (TEI) are not listed at all as potential source for consulting. The staff members, both permanent and temporary, are elected only after they certify high rank work experience. In the same time, there is an evident establishment of relations between the Academic members of the TEI with corresponding staff of other European countries as well as the Enlargement once. These institutes, facilitated by the most advanced Information Technology infrastructures, while they belong in the same network (TEN, CEAN, DANTE, GUNet), are ready to launch an approach to the business world, as a pool of expertise, where the entrepreneurs can find the most suitable consultants. This pool is not limited to local availability, but extends to the European level, including the enlargement.

6 Proposals

- Information dissemination and promotion of the potential of E-consulting, recruitment of consultants from Enlargement countries, both ways, to the entrepreneurs and the experts themselves, alike.
- Creation of an Association of the Scientific Chambers (Technical, Geotechnical and Economic), in order to safeguard the quality of consulting services, hosted in the chambers of Commerce, as the users' point of reference.
- Non profit organizations foundation, controlled financially, only, by the TEI, among permanent and extraordinary lecturers, accepting to associate with consulting firms, familiar with IT, having connections with corresponding personalities established in "enlargement countries", as consulting services providers.

7 References

Vahlens Handbuecher der Wi-Sozialwissenschaften (1988)., Verhalten in Wi-Organisationen Schanz, , Vahlen Verlag.

Στέφανος Καραγιάννης (2001)., Οργάνωση και Διοίκηση Επιχειρήσεων, Εκδ. ΙΩΝ, Αθήνα.

Στέφανος Καραγιάννης (1993)., Οργάνωση και Διοίκηση, Εκδ. Αναστασάκη, Αθήνα. Βασ. Ρούπας-Λαλούμης Δημ.(1998)., Διοίκηση Τουριστικών Επιχειρήσεων, Εκδ. Σταμούλης, Αθήνα.

John Micklethwait-Adrian Wooldridge(2000)., Το τέλειο του Μέλλοντος, Εκδ. Leader Books, Αθήνα

- Γ. Μαγούλιος (2000)., Ο ρόλος της Θεσσαλονίκης στη διαβαλκανική οικονομική συνεργασία., Εκδόσεις University Studio Press, Θεσσαλονίκη.
- Ι. Μαντζάρης Ε. Μαντζάρη (2002), Δυνατότητες και όρια κρατικών επιδοτήσεων,
 Επιθεώρηση Εργασιακών Σχέσεων, Τεύχος 28.
- Δ. Πασχαλούδης (2001), Ο ρόλος της καινοτομίας στο σύγχρονο περιβάλλον της αγοράς, Επιστημονική Επετηρίδα Εφαρμοσμένης Έρευνας, τόμος VI, Πειραιάς.
- A. Αλεξανδράκης Σ. Αλεξιάδης (2001), The importance of Manufacturing Sector in Regional Economic Growth, Επιστημονική Επετηρίδα Εφαρμοσμένης Έρευνας, τόμος VI, Πειραιάς.