How Can Socratian Methods Facilitate E-Learning in the Business Environment?

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Abstract—**Information and Communication Technology is changing at an alarming pace creating new forms of learning, such as electronic learning, which seems to be very appealing nowadays across all the business sectors. The purpose of this paper is to discuss how the pillars of Socrates philosophy can be applied in the development of a successful e-learning program within a business environment. Concepts such as language, individual truth, field of expertise, conformity to law and ethics of different infrastructures, personal contact, and intuition will be explored. A case study is undertaken in order to identify whether the proposed parameters can be adopted as relevant and effective to the procedures of e-training within the HR department of a multinational company in Greece. These concepts determine key questions of the methodological approach that need to be answered in order to develop and implement an appropriate and cost-effective e-learning strategy which will help the HR department identify successfully the needs of the employees and create a long-term impact of this state-of-the art educational reality.**

Index Terms—**e-learning, Socratian methods, framework, business environment.**

I. INTRODUCTION

'*At any rate it seems that I am wiser than he is to this small extent, that I do not think that I know what I do not know*' Socrates 469BC-399BC.

In recent years, due to the transition from the industrial economy to the post-industrial (knowledge and technology-driven) economy, the organizations are called to operate in a continuous changeable and extremely competitive business environment by transforming their modus operandi. This speed of change, the rate at which new knowledge and skills appear and become obsolete is remarkable. Skills and knowledge acquired at school or at the beginning of a career are no longer sufficient during a worker's entire professional life [1]. Knowledge, information, and professional skills have a shorter lifetime than in the past [2] and that is why there is a need of constant refreshing to keep up with new technologies and trends.

Throughout the literature there are many who have seen the development of e-learning applications in the workplace as the most efficient and effective method of rapidly distributing knowledge within the organization [2; 3] and also as an answer to new trends and learning needs, such as shorter life span of knowledge, lifelong learning, knowledge management, technological advances. Without doubt, e-learning has gained a lot of attention during the last few years because it is considered to be a new method which will transform the training and learning landscape.

As Gunasekaran [4] states the e-learning will succeed to provide faster learning at reduced costs, increased access to learning process and clear accountability for all participants in order to allow individuals and organizations to keep up with changes in the global economy and turn this change into a competitive advantage.

Towards this reality many frameworks [5; 6] have been adopted so as to establish a successful outcome in the prospect of life long education. But where did it all start? The beginning of examining the needs of oneself and furthermore examining the needs of others started from ancient philosophers. According to our view, philosophical enhancements brought frameworks that analyzed needs and successful implementation of different applications. This is how we came to the idea of re-reading Socrates and analyzing in a pilot case-study how some of the concepts that are repeated in his last speech 'apology' can be interpreted so as to form pillars that can be used to accommodate the needs of the corporate environment where e-learning tools are applied.

The purpose of this paper is to investigate and demonstrate the applicability and effectiveness of this idea in the e-learning context by using qualitative comments offered by the HR department of a multinational company in Greece and identify whether this framework can be used as a complimentary method when deciding to develop and use e-learning applications as a means of transforming its workforce to a valuable human asset.

The remainder of this paper proceeds as follows. The next section analyses the 6 pillars that we have identified and relate them to notions that can be used in the development of e-learning applications. Section 3 presents the research project by looking at the research methodology and the company profile. The research findings are part of section 4 which is followed by Section 5 that contains the conclusions of the research.

II. HYPOTHESIS: RE-READING 'THE LAST DAYS OF SOCRATES'

In his apology, Socrates used the renowned obstetric method of teaching which is known as a means of drawing from his students the probable answer through questioning [6]. In this process, there are concepts that penetrate his philosophy and form questions that relate to what we have decided to name as pillars.

The pillars that we have chosen to identify and analyze are language, individual truth, field of expertise, conformity to law and ethics, personal contact and intuition [7; 8].

A. Language

The concept of language is very important in the speech of apology right from the beginning. Socrates questions the appropriateness of his language in teaching and states that 'I am a complete stranger to the language of this place'. In a way, he exemplifies the notion of language as 'dialect' and 'manner'. Some of the devices that he uses are 'cross-examination', 'story-telling' and 'lecturing'. [8] We propose that this relates to two notions used in the e-learning development phase a) language proficiency, especially when implementing educational tools in a multinational company and b) content relevance. The problem of language management in multinational companies has been pinpointed by many authors [9] and it sometimes forms a barrier in the effectiveness of e-learning applications. Relevance, on the other hand, is viewed by authors in educational [10] and linguistic theories [11] as an essential dimension of communication and successful implementation of learning technologies.

B. Individual Truth

Socrates warns his audience that 'you are going to hear the whole truth' [8]. The reason why he is using the obstetric method is meanly to draw the truth which is unique for each individual. In a business setting, this relates to the differentiated approach that each learner requires and the differentiated methods that need to be used exclusively for every infrastructure. According to Scalise [12] 'it is an approach to teaching which acknowledges that people have multiple paths for learning and for making sense of ideas'.

C. Field of expertise

The field of expertise is another distinctive concept. 'Who is the expert in perfecting the virtues of people in a society?' [8] Socrates asks. He is constantly looking for the expert in each field and appreciates his personal opinion. As far as the e-learning application is concerned, this question may refer to the person who is capable of identifying and pointing out the needs for further tutoring, as well as participating in the e-learning process. In this respect, we regard that a balanced partnership between the employees, the HR department and the designers is what we are looking for or in other words 'user-friendly interfaces' between the involved parties [13].

D. Conformity of law and ethics

'I must obey the law and make my defense' [8]. This pillar is very crucial for the Socratian philosophy in the sense that this great man devoted his entire life to his country's service. Even though he was sentenced to death for his beliefs and he had the chance to escape with the help of his friend Criton, Socrates refused on the basis that one must not disrespect the laws of his country [8]. The relation that can be established here regarding e-learning is a) corporate regulation and b) governmental legislation e.g. the funding resources provided by the government.

E. Personal contact

Socrates did not leave anything written behind. The content of his speech was delivered to us by Plato his student [6]. His great personality was enough to influence and inspire his descendants and prove the value of personal contact through interviewing people and finding out the truth for himself [8]. It is worthwhile mentioning that he 'was remembered in the best possible light, and the actual speech was not conspicuous for its success' [8]. Our hypothesis assumes that this relates to socialization in relation to culture. In other words, what has been discussed as loss of human contact by various academics [14; 15; 16] is important especially when we are using e-learning applications in cultures which rely more on personal contact and interaction (i.e. Mediterranean cultures against other cultures which are considered to be less extravert).

F. Intuition

In the beginning of his speech Socrates states that what his audience will hear will be improvised thoughts in the first words that occur to him, confident as he is in the justice of his cause. Later on, in his talk after questioning men of different professions and poets among other he says 'I soon made up my mind about the poets too: I decided that it was not wisdom that enabled them to write their poetry, but a kind of instinct or inspiration' [8]. The role of intuition in other words initiates creativity and development in the engagement of an activity. For the purposes of this paper, we are going to define intuition as a) inspiration and b) innovation that relates to breakthrough applications. Applications of this could be game-based learning and e-Adventure platforms and any other state-of-the art innovating applications [17].

III. THE RESEARCH PROJECT

A. Research Methodology

A case study was undertaken so as to identify whether the suggested framework could be adopted as relevant and effective to the procedures of the company. For this specific research we were not interested in numbers and statistics that were associated with quantitative research. Our goal was to explore and present the various subjective perspectives and opinions of the participants regarding the application of the six pillars. Therefore, what was considered appropriate for the specific research was qualitative research.

The three main sources of data that are associated with qualitative research and that we chose to implement were:

- Unstructured and semi structured interviewing,
- Personal observation, and
- Examination of documents [18].

The main research questions were based on the six pillars mentioned above and had the following content:

- Question 1 deals with the issue of language connection to the e-learning and e-training of employees.
- Question 2 refers to the concept of individual truth and the applicability of differentiated learning techniques and their effectiveness.
- Question 3 concerns the field of expertise of each employee. An analysis takes places on the identification of the educational needs and the selection of the teaching product addressed exclusively to each employee.
- Question 4 concerns a detailed description of the corporate regulations regarding training methods through new technologies, as well as governmental legislation concerning e-learning funding to an organization.

- Question 5 provides information in pointing the cultural obstacles that arise when it comes to corporate e-learning applications.
- Question 6 refers to innovative ways of attracting employee interest in e-learning.

The required data was derived from the members of the staff that are responsible for the formulation and implementation of the e-learning policy and programs in the form of extensive semi-structured interviews. In the process of the case-study that was held between October and November of 2010 other complimentary research tools were used such as the inspection of other sources of information minutes of meetings, policy handbooks, e-learning training material, archival records, newsletters, memoranda and the yearly Learning and Education Analysis assessment program that the company undertook for the year 2010 and was published by the company's Human Capital Team [19].

B. Company profile

The company was selected as appropriate for the aims of this case-study on the basis that it incorporates a long-established HR department that is highly depended on e-learning teaching procedures in order to educate its employees. To be more specific, the company was estimated as ideal for the purpose of this paper since one third of the training of the employees is based on e-learning whereas the other two thirds rely on on-the-job training and in vivo seminars. The two main interviewees were the two officials holding senior positions in the HR department, the HR Manager and the HR training specialist.

Overall, the company in question is part of a multinational consulting organization that provides industry-focused assurance, tax and advisory services that date back to the nineteenth century. The industry-focused services offered in the fields of assurance, tax, human resources, transactions, performance improvement and crisis management have helped resolve complex client and stakeholder issues worldwide. The total number of people working for the company on an international level is 163.000 and their common goal is the creation of a network that shares their thinking, experience and solutions to develop fresh perspectives and practical advice. The company that operates in Greece is the largest one providing professional services in the country with premises in the two biggest cities in the country and approximately 750 employees. The company in Athens is a separate legal entity and does not act as an agent of the mother company. However, all the branches share the same corporate culture and values. In respect to the HR management, the company gets its guidelines from the mother company which is also the provider of educational advice and long term educational procedures that aim to enhance the productivity and market awareness of the employees.

IV. Research Findings

In this section, we present the findings of the case study that took place at the company in question relying on small scale results. We examine whether the proposed framework is applicable as a complementary method in the process of developing and applying e-learning within the company in question. For this reason, we analyze and demonstrate the qualitative comments and findings which were collected from the company's executives and relate them to the six selected pillars of the Socratian philosophy as they have been defined for the needs of e-learning.

A. Language

The two dimensions of language that were discussed above play an important factor in the implementation of the e-learning. As far as language proficiency is concerned, the HR training specialist stated that the company carries out frequent language-audits in order to test the employees' language awareness and level. These language checks are usually carried out by a certified external organization. The problem of language skills was evident also to members of the company staff who were holders of degrees that were from English or American Institutions where there was no evident initial need to check their language skills. In order to identify this problem the management decided to carry out part of the selection interview in English. These two combined actions helped the e-learning process which was derived mainly from a huge English database that the company used for educational purposes. According to the HR Manager indeed language can be described as an obstacle in the effectiveness of the e-training especially when it comes to training non-native speakers.

In relation to content relevance, he pointed out that this notion is very important to the effectiveness of the corporate e-learning applications. The company offers mandatory e-learning courses that are mostly related to processes, legislation and technical knowledge e.g. learning new accounting principles. These are called predefined courses, they are available to the employees in the form of seminars and they are industry specific. One interesting finding was that the company preferred classroom training when the content relevance was strong in relation to the needs of the employee. Both the participants of the learning and educational seminars and the HR department chose to deliver in vivo experience seminars when it comes to managerial or leadership training.

B. Individual Truth

The concept of differentiated learning is a problem that the HR department is currently facing. The HR training specialist addresses the problem by saying 'we are looking forward to differentiated learning techniques through e-learning technology in the future. One way to cope with the problem is by offering graded levels of the different applications. However, we understand that a customized approach may not be cost-effective.' Another factor when discussing differentiated learning was the time factor. 'E-learning according to our regulations can be done anytime. Our employees can do it at their own pace during or after working hours. This creates flexibility but sometimes it does gives the sense that it is not something important that needs to be done like on-the-job training or classroom training'.

C. Field of expertise

The notion of user friendly interfaces in relation to who is going to decide what to use is something that the company always takes into account. The first step is that the employee identifies his educational needs during his annual assessment meeting with his primary reviewer. These results are afterwards analyzed and finalized by the Human & Capital Department and reported back to the business unit that in turn decides on the actions that will be implemented. The e-learning tool is then being imple-

mented with the following steps 1) checking whether a suitable course is available from the Database and if it is not 2) outsourcing the product by consulting with companies that can provide this software. This procedure is used by many SME companies in the development of courses [19]. In that sense, the identified pillar played a crucial role in the decision to use e-learning and the balanced partnership between all members involved in the e-syllabus should be taken into consideration.

D. Conformity of law and ethics

Corporate regulation is one dimension of the above concepts that could be applied to this company since e-learning procedures available are part of predefined courses which are mandatory. In this regard, applications of new technologies can make use of the regulation available as well as governmental legislation that offers funding to organizations that use e-learning. The training officer of the HR department describes 'the organization of employment of human force in Greece this year offers funding for the training of employees through e-learning procedures for the first time. The amount of the funding is very important since it covers the whole sum of the employees' wages. We are definitely going to make use of this program'. It is clear from the above that conformity to law and ethics is crucial to the application of e-learning and overcomes the potential inhibitions that might exist. It also may determine the extent of the use of the application since the coverage of the expenses for the organization in question is an important incentive to use e-learning procedures for more than one third of their total training procedures.

E. Personal contact

The concept of personal contact played a very important role in the potential development of e-learning applications. The HR officer mentions 'although our company is part of a multinational organization and in many ways delivers the proposed courses in the same way that the subsidiary companies in other countries do, we must admit that the culture of our country is more in favor of educational settings that involve interaction. These were the findings of the survey that we conducted after implementing three different types of seminars namely classroom training, on-the-job training and e-learning.' As a result, we can see that cultural issues sometimes overcome corporate culture and this suggests the importance of personal contact in certain settings. In this respect, e-learning can be partly regarded as a fallacy that some cultures cannot afford to handle, at least for the time being. Blended learning is regarded as a better solution.

F. Intuition

The concepts of inspiration, innovation and e-learning breakthrough methods constitute a significant motivation for the employees e-training. The HR manager talks about the department's future prospects in the following manner 'We are always thinking of ways to make learning more fun to the employees. Many e-products have emerged that contain gaming and e-Adventure platforms that we want to implement as long as the cost is affordable and as long as they promote task engagement. We are always looking for new opportunities and that is why we are eager to attend conferences in order to find new ideas that inspire and motivate our employees'. This is something that is pointed out by many authors [12; 17] namely that games

enhance involvement and participants learn through experimenting. For this reason the last identified pillar must be taken into account in order to promote the effectiveness of e-learning teaching procedures.

V. CONCLUSIONS

E-learning is obviously a form of life long educational tool with multiple uses and effects. Multinational corporations worldwide have come to depend on it when there is a need to incorporate and deliver different kinds of training.

Our case study, inspired by the Socratian teaching method, reveals a new methodological approach concerning corporate provision of e-training. According to its results, six new factors should be taken into account by HR managers when it comes to e-learning adoption and its implementation strategy. The most important are considered to be the characteristics of the company and its employees, corporate culture, relevant legislation and the mentality of the country where the organization operates, personal contact as well as the innovative e-learning applications which may motivate its staff. These new elements introduced by the proposed framework may enhance the effectiveness of the e-learning application in corporations.

Our findings are only preliminary evidence gathered from a small scale research. On a secondary stage, we will run our framework on a bigger sample of corporations and also test it on an educational environment, aiming to expand the application of the above findings and be driven to further results. Last but not least, an issue that requires additional investigation is the significance of each pillar and the hierarchy that needs to be taken into consideration for the training strategy that a company employs. For example, funding provided by the government concerning the use of e-learning techniques may overcome problems of personal contact which may be then regarded as secondary. Overall, further research will obviously verify the usefulness of the framework and the effectiveness of its application.

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