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# Managing International Operations. Virtual Technological Team Management In Consultancy Firms. Trend or Necessity?

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# **Abstract**

he research study aims at defining those variables and inherent corporate features enabling organisations of the tertiary sector to turn themselves into Virtual Organisations. The final outcome of the research is expected to comprise a very useful management tool for consulting firms with expertise mostly in Project Management; however, the resulting organisational model is expected to

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be in favour of a variety of business activities within the tertiary sector, such as Strategy Consulting, HR Consulting and IT Consulting to mention but a few. It applies to those firms active in Projects increasingly involving multifunctional alliances with wide geographic area extensions and most often dispersed expert working teams, temporary in their functional duration. The research is based upon a field study, such as a survey carried out in the form of on line dispatched questionnaires in order to define the current status, problem areas and the key factors that can play a decisive role in the successful formation of efficient virtual organizations. The survey outcome is expected to give substantial answers to the recent financial woes having forced a good number of companies around Europe, at least, to either downsize their expertise or even cease their international operations; instead; tuning themselves into an effective virtual model organization would offer them a globally competitive advantage and at the same time enhance their sustainability by saving on time, operational costs and expertise overall.

## **Keywords**

Technological Team Management, Management, Team Management, International Operations.

### Introduction

The term Virtual refers to a specific domain, that of knowledge-intensive work production, which usually follows and is characterized by the standards of Management Consulting at the level of international operations and development; however, virtual team effective management greatly differs from traditional team management for a number of interrelated factors such as time, distance and even dependence on communication technologies in decision making, which makes interactions sometimes extremely complicated.

The efficient management of the inherent knowledge within virtual working teams is an issue that recently has grown into a research topic, since the continuous development in technology has resulted into the evolution of methods and functions, giving an even more important meaning to the development of such groups into modern globalized businesses.

The issue of Virtual Team Management involves profound understanding of the

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key factors that contribute to efficiently overcoming the interaction complexity virtual teams and organizations are faced with.

The paper summarizes the series of core questions upon which, the field study has been initially based usually comprising the core pursuit of consulting firms for developing themselves into virtual organizations.

- 1. What peculiarities better depict the Management of Virtual Working Teams in the service industry over individual areas of expertise,
- 2. What features of management, organisational behaviour and culture seriously influence the development and further operation of the virtual teams,
- 3. In what ways business Risk Management could be minimized within the Virtual Organization environment,
- 4. What are the core factors that can lead virtual teams to success?

This final question can actually give the answer for the drive to effectively manage virtual teams.

# **Deployed Theories**

The research study seeks plausible answers to substantial operational needs faced by the modern business world based upon the following two theories: a) Theory of the Growth of the Firm, and b) The Agile Manufacturing.

According to the **Theory of the Growth of the Firm** by E. Penrose<sup>1</sup> (1959), the development of a company should be deriving from its internal structure and not by mergers or acquisition. A good number of businesses usually fail in their development project due to anti-operational guidelines, poor management skills, inefficient in their ability to increase their financial resources, low capacity criticism leading to costly mistakes, including poor adaptability or even serious change management issues.

According to the theory of business development, there should be an analysis of the organisational structure in sociological, organizational, technological

<sup>&</sup>lt;sup>1</sup>Edith Elura Tilton Penrose (1914–1996), American-born British economist whose best known work is The Theory of the Growth of the Firm, which describes the ways which firms grow and how fast they do.

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and economic terms due to the nature of virtual business which actually implies the structure of a very complex organization with serious extensions into a variety of financial as well as social activities within the region where it grows, or it is even involved in diverse and contradictory situations, while at the same time it is also influenced by unpredictable human behaviours.

The term **Agile Manufacturing** or **Flexible Production** refers to any business strategy aimed at enhancing business competitiveness. The basic theory of flexible production process is based on the one hand on the evolution of E. Penrose's theory, but also that of Lean Manufacturing/Production Process aimed primarily at reducing costs which applies to the main point of contrast between the two theories: focusing on the corporate ability to operate and compete the market through a dynamic and almost continuously unpredictable change (Sarkis, 2001)<sup>2</sup>.

On the other hand, it comprises a successive and progressive form of the Drucker<sup>3</sup> theory, according to which, the expression of Entrepreneurship is the constant quest for change, as a form of responding to it and exploiting it as an opportunity.

The implementation of theory into practice requires: a) synergy development between customers and competitors, b) alertness for change management or even control of the uncertain and the complex issues to arise, and c) human resource as well as information deployment.

The theory of Agile manufacturing introduces innovative approaches in order to address the recent and growing entrepreneurial challenges:

- 1. Production of high quality goods and services,
- 2. Low cost production,
- 3. Products & services meeting the ever growing and diversified customer needs.

<sup>&</sup>lt;sup>2</sup>Sakris, J. (1963), Leading Management Guru, Professor of Operations Management, Graduate School of Management, Clark University

<sup>&</sup>lt;sup>3</sup>Drucker, Peter Ferdinand (1909) was a writer, management consultant, and self-described "social ecologist"

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# What is a Virtual Organisation?

A Virtual Organisation is a temporary or permanent network of independent and geographically dispersed organizations or working groups consisting of individuals sharing partial or full common tasks and cooperation based on loose hierarchy but still quite strong operational relationships, linked electronically together so that they can commonly enhance the production process, by the means of sharing experience and incoming information.

All goods and services produced and rendered by a Virtual Organization are usually based on innovation issues and meet the individual requirements of both clients and projects alike.

The Virtual Organization is practically an expansion of the theory on the governance trends prevailing in the 90s, promoting Peter Senge's<sup>4</sup> idea of the Learning Organization.

The term itself usually means being virtual or invisible and refers to a temporary or permanent cooperation among geographically dispersed people, working teams and organizational units - which can belong or not to the same agency - or whole bodies which are linked together electronically in order to bear the jointly capacity and property of meeting a production process, sharing their experiences, incoming information, products as well as services.

Some of the elements that characterize such an organization are the following:

- 1. Lack of physical structure,
- 2. Confidence in knowledge,
- 3. Use of communication technologies,
- 4. Flexible space to pursue the professional activity which has been favoured by the expansion of even more opportunities for working mobility supported by the use of new technologies,
- 5. Uniqueness and multinationality.

The virtual organization comprises a new organizational model of particular importance to those companies that build their strategic development on the

<sup>&</sup>lt;sup>4</sup>Senge, Peter Michael (1947), American scientist and director of the Centre for Organizational Learning at the MIT Sloan School of Management.

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use of knowledge rather than material goods, emphasizing the ability of businesses to conserve natural capital (e.g. several square meters for housing, etc.) respectively, while enjoying the benefits arising from participation in a reliable communication networks.

At this point it would sound reasonable to ask oneself why, although a virtual organization is one of the most dynamic organizational types, a few companies in Europe have already adopted the model.

Perhaps among the reasons that negatively impact the adoption of such a working model, the following issues could be addressed as well:

- 1. elements of business culture,
- 2. traditional organizational models/standards,
- 3. inadequate training of the available human resources,
- 4. resistance to the upcoming organizational changes,
- 5. business introversion,
- 6. ignorance in the management and provision of operational risks addressed to certain businesses, etc.

The virtual organization model has recently become more acceptable, acknowledged and even well-come and adopted by some companies as a unique solution to crisis demands, for two (2) reasons:

- 1. It offers opportunities for decentralization and efficiency increase, while it can reduce the operational costs of a business entity and,
- 2. Secondly, because of the strong dependence on the technology of IT systems, Virtual Organizations are characterized by inherent advantages of knowledge management issues.

In post-industrial economy, whatsoever, knowledge is considered to be not only a powerful business capital but a significant diversification advantage. The capacity of a business entity for continuous learning can actually contribute to the business itself as "the only sustainable competitive advantage", as De Geus<sup>5</sup> has strongly supported in his lectures.

<sup>&</sup>lt;sup>5</sup>Arie de Geus (Rotterdam, 1930), former manager of Royal Dutch Shell Oil Company's Strategic Planning Group, public speaker.

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Some key advantages that yield out of a well structured organisation into virtual working teams may be summarized as follows:

- 1. increase of corporate productivity
- 2. decrease of direct and indirect costs of the working personnel,
- 3. decrease of capital costs,
- 4. improvement of customer satisfaction due to the final production and provision of better quality products and services,
- 5. attraction of highly talented collaborators from different locations,
- 6. increase of the availability of technical facilities and offices,
- 7. enhancement of greater capacity to help workers concentrate on their work and at the same time increase their loyalty and job satisfaction, within the scope of their work,
- 8. better quality work enhancement,
- 9. development of the employment schemes for people with disabilities.

# **Main Virtual Organisation Categories**

According to studies conducted by Nick Lethbridge<sup>6</sup>, virtual organization models can fall into the i-Based classification, which necessarily determines the categories according to the flow of information between the association of member organizations to determine.

Three (3) broad categories of information flow can be distinguished:

- 1. Planning: the information is used in order to determine the distribution objectives for a well-organized structure, scope and activity orientation of the entire operation of the Virtual Organisation.
- 2. Operational: the information used for the daily activity of each member-organization.

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3. Coordinating: the flow of information mainly ensures the effectiveness of all operational activities and supports the distribution of goals set by the Virtual Organization.

This flow of information based on the business mission each flow supports; besides this basic i-based classification, though, the following Virtual Organisation models have been identified in related literature; their common requirement for their effective operation is the existence of an intrinsic core management:

- Virtual Face: the form corresponds to the integration of a non-virtual organization into cyberspace. Internet, for example, is used to provide services equivalent to or additional to those offered in a physical workplace. The Virtual Face displays all or a portion of the physical body.
- Star Alliance: it refers to a grouping of independent bodies, with a main body to be in charge of the administration of the whole entity. The core organisation may have been favoured with the key-knowledge as well as various other resources, approaching its customers as the virtual personnel within a virtual organization.
- Market Alliance: the core organisation is in charge of managing all contacts related to sales on behalf of all other member-organizations. In contrast to the Star Alliance type of VO<sup>7</sup>, bearing the entire responsibility for the administration of the VO, the core organisation of the Market Alliance is responsible only for the sales and marketing operations.
- Co-Alliance addresses to a group of independent organisations, each with equal commitment to the alliance. The alliance may exist permanently or respond to membership changes in order to meet the individual project needs.
- Value Alliance: each member-organization adds value to the work of the previous organization's chain or supply value
- Parallel Alliance: The Parallel Alliance represents a chain or supply value, where an added value organisation needs to be active close to another. The member-organisations within the Parallel Alliance environment are responsible for objectives mutually dependent. This requires strong and effective coordination among all member-organizations.

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# **Applied Research Methodology**

Amidst the research survey and for reasons of better understanding the underlying problem, there was initially developed a preliminary draft questionnaire distributed to 80 members from 15 companies of which 60% said they only participated in working groups interacting face to face daily, while the remaining 40% said they participated in groups whose main characteristic is that of the virtual interaction.

Giving some general characteristics of the sample, there should be mentioned that most virtual teams have been identified in the service sector and have been operational for almost over a year. Out of the participants, 56% belong to the age group of 30-40 years, while 60% of the sample consists of men.

Within the framework of the particular research study, a second and more extensive questionnaire has been developed, which has taken into consideration certain critical factors important for the successful and effective operation of virtual teams, such as: efficient communication, diversified civilization and culture, technology, mutual trust among team members, learning capacity of the organisation, individual satisfaction and reward.

The latest questionnaire after its distribution to thirty enterprises active in Management Consulting at international level and partial (on-going) analysis of the answers collected has yielded the following interim findings:

In order to explore the current state of the Greek area, a primary survey was conducted in the business consultancy industry, with a representative sample of the sector EUROCONSULTANTS SA Group companies.

- 60% of the interviewees said they only participate in groups interacting face to face on a daily basis, while
- the remaining 40% said they participate in groups mainly bearing traits of virtual interaction

The survey process has been conducted in the following stages, so far:

- 1. Literature review of virtual working groups.
- 2. Literature review of managing organization and virtual working teams
- 3. Converting the findings of the qualitative research questionnaire based upon the Delphi approach.

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- 4. Updating the questions.
- 5. Designing the questionnaire.
- 6. Electronic dispatch as well as printed form of the questionnaire to specialists
- 7. Preliminary Data analysis.

As far as the demographic data is concerned, the survey yielded some of the following results, which would help for further research and conclusion drawing up:

- 56% of the interviewees are between 30-40 years of age,
- 60% of the interviewees were men.

The survey has been supported by the three following parts:

- 1. The 1st part has yielded data on the general way virtual teams are built and what processes or principles they follow
- 2. The 2nd part yielded data on the technology systems used by the companies to enable them to support their virtual teams.
- 3. The 3rd part yielded some evidence about the members of the teams, their performance and level of satisfaction.

### **Conclusions**

According to the first findings, certain conclusions can be drawn, as follows:

- only 48% admitted the fact that the team has carefully considered its goals even since its formation level,
- almost 50% of them admitted having participated in the design of their team,
- 60% of the interviewees stated that were aware of their actual roles within the company,
- 60% felt that were selected according to their individual competencies and skills,

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• 41% said that right from the beginning, they were initially involved in the discourse about the chances for improved development of their team.

The members also said that they could count on the prevailing of modest trust among them, sense of cooperation and mutual understanding. They noted that the new members are quickly becoming active in the group and to be provided from the outset the necessary technological equipment in interpersonal encounters.

- 52% admit they haven't received particular training by their company , which leads to the conclusion that the experiences of the members shall be those that a large percentage of their mentor, and that members inevitably "were trained" from the successes and mistakes
- the remaining 48% were satisfied with the training offered to them by the company.
- Approximately 72% of the interviewees admitted developing initiatives within their team; they also declared that their supervisor created a vision for the team, being at the same time friendly and encouraging to them; they stated being quite satisfied with the means offered by the company for digital communication; they also agreed that dissemination of information is generally within their group; however, they disagreed on the issue of receiving the same reward as all team members after achieving certain team goals.
- 52% of the interviewees stated that their team has always been effective in achieving business objectives as well as meeting with strict deadlines and budget limits.
- There has been shown among the interviewees a moderate degree of reward from their work, while a sizable percentage believe that develop and enrich their knowledge and skills through their work.
- The vast majority declares receptive to participation in any other group.
- The overall experience of the interviewees in virtual team work seems to be small given the fact that till recently they did not participate in a number of more two virtual teams.

At this stage, these findings will support the results of the overall process of data collected in order to proceed to the formation of the final proposals for the promotion of virtual working team management.

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The results are expected to yield essential data in close connection with the efficient transition of the interested enterprises to a form of virtual organization based upon the extent to which:

- 1. the business will develop international activity
- 2. the participating executives are familiar with the use of new technologies with the view to promoting successful communication
- 3. they participate in already developed virtual working teams
- 4. certain characteristics and traits of organizational behavior to adopt with view to promoting a virtual corporate nature
- 5. the workforce have been familiar with the purpose and operation of a virtual organization
- 6. corporate culture will incorporate transnational traits as an essential incentive for the transition to a virtual organization.

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