

**CREATION OF A VIRTUAL LEARNING COMMUNITY FOR
THE GLOBAL VIRTUAL ENTERPRISE PROJECT**

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ABSTRACT

From smoke signs up to the new Telecommunication Era, human beings have always tried to express themselves and share ways of thinking. This new era allows people around the world to communicate with each other in an easy, fast and less expensive way. People share experiences and learn from each other. This favors the creation of Virtual Communities; when people share ideas and learn from other in cyberspace, Virtual Learning Communities arise. The main goal of any Virtual Learning Community is to create a shared way of understanding, obtaining a win-win attitude. The aim of this paper is to describe what is a Virtual Learning Community, the necessity to create it and how it has been built in order to obtain a successful collaborative environment; in this case, the development of the Global Virtual Enterprise project. The creation of a Virtual Learning Community will enhance communication among its partners and at the same time will help to obtain the desired project objectives.

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The Global Virtual Enterprise project

Nowadays data can be transferred in a faster and easier way with new Information Technologies. These new technologies enable the creation of global markets where boundaries do not exist and new business opportunities arise. In this scenario the concept of Virtual Enterprise emerges. Byrne, J. A. (1993) defines a Virtual Companies as “A temporary network of independent companies, suppliers, customers, even erstwhile rivals linked by information technology to share skills, costs, and access to one another’s markets”. The life cycle of a Virtual Enterprise has five main processes: Opportunity Identification, Partner Search,

Formation/Commitment, Operation and Reconfiguration/ Dissolution (Goranson, T. 1997).

The formation of Virtual Enterprises is not a simple process. In order to create Global Virtual Enterprises, six universities are working together: University of São Paulo (USP), Brazil; Monterrey Institute of Technology (ITESM). Mexico; Aachen University of Technology, Germany; University of Saint Gallen (Institute of Technology Management), Switzerland; University of Venice, Italy; and University of Newcastle upon Tyne, England. The mission of the Global Virtual Enterprise (GVE) Project is the formation of a worldwide cooperation environment among corporations, universities and government agencies to increase the economical and business development of enterprises, based on the paradigms of the Virtual Enterprise. The Virtual Enterprise is a type of cooperation among enterprises which can improve the potential of Small and Medium Enterprises to make them competitive. This kind of cooperation “concentrates on the core competencies of its members and thereby joining their forces in networks they are able to produce more complex, yet still customized goods. Small companies can improve their competitive position in an outstanding way” (Bremer, C. 1995).

A needed concept:

Virtual learning communities

One of the things that makes the human race unique is its ability to communicate, share, and learn from experiences through telling stories. We tell stories in many different ways through many different media. The new Information Technologies that have emerged in the last years give the human race an easy, fast and cheap worldwide communication capacity. This new era in telecommunication technologies has as a consequence the formation of Virtual Communities. Rheingold (1997) describes a Virtual Community as “the social aggregations that emerge from the Net when enough people carry on those public discussions long enough, with sufficient

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human felling to form webs of personal relationships in cyberspace.”

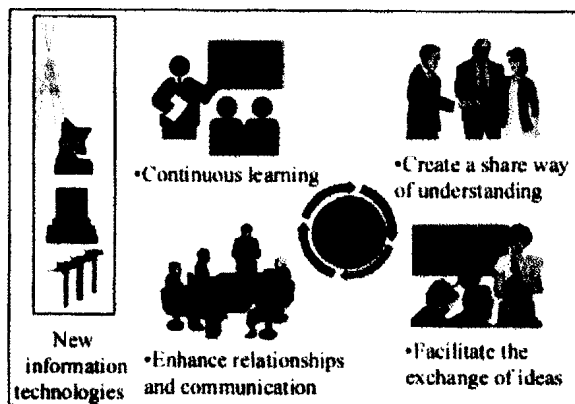
These Virtual Communities push for a change of the world's social structure, allowing persons to communicate, share and learn from experiences from people with other cultures, religions, ages, genders, ways of thinking and life perspectives. Taking all these in consideration, Virtual Communities help to find a new way of worldwide learning.

Riel (1997) mentions that education is about creating a shared way of thinking about ourselves and our world. Exchanging ideas encourage learning because it is inherently a social process of constructing shared understandings. Putting all these concepts together, a Virtual Learning Community (VLC) is a social aggregation that emerges from the Net, forming webs of personal relationships in cyberspace and creates a shared way of understandings about their members and about themselves. Virtual Learning Communities have no fixed times and zones and the conversation among its members is carried out by electronic mail, chats, video conferences, etc.

The main goals of a Virtual Learning Community are:

- ❑ Create a shared way of understanding;
- ❑ Facilitate the exchange of ideas;
- ❑ Enhance relationships and communication and
- ❑ Allow continuous learning

FIGURE 1
VIRTUAL LEARNING COMMUNITY
GOALS



Necessity of a Virtual Learning Community for the GVE Project

As it was mentioned before, the GVE Project is carried out in six different countries around the world. To be able to collaborate (work in same projects, even performing parallel or common activities) in geographically distributed countries and to obtain the expected results, a Virtual Learning Community should be created. At the same time, a continuous learning culture will emerge and research among the partners will be encouraged. The creation of the Virtual Learning Community for the GVE Project will accomplish the following objectives:

- ❑ Create a way of sharing thinking and understanding about common topics;
- ❑ Enable partners to accomplish shared goals;
- ❑ Enhance relationships and communication between the partners;
- ❑ Encourage partners to participate with creative ideas across distances;
- ❑ Support partners with information to be able to perform research in a faster and collaborative way in cyberspace;
- ❑ Share information and knowledge basis and
- ❑ Be able to show all members the new changes performed in the project.

At the same time, the next four conditions have to be satisfied:

- ❑ Access to updated project information to Virtual Learning Community members;
- ❑ Management and documentation of important information among partners;
- ❑ Communication among members and
- ❑ Common information basis.

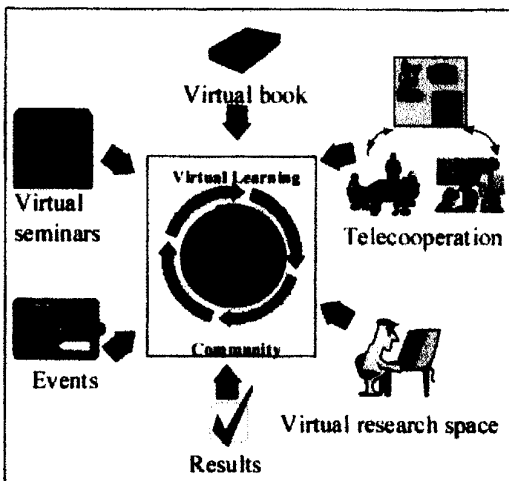
To fulfil these needs and reach the objectives, the Virtual Learning Community will contain six elements, corresponding to three main activities: learn, work together and disseminate. Table 1 explains the activities, elements and goals.

TABLE 1
VIRTUAL LEARNING COMMUNITY
ACTIVITIES, ELEMENTS AND GOALS

Activities	Elements	Goals
Learn	1. Virtual book 2. Virtual seminars	Share and obtain more knowledge about important Topics
Work together	3. Tele-cooperation 4. Virtual research space	Develop activities together in different places
Disseminate	5. Events 6. Results	Notice what events are coming and be able to know Meeting results

Members will be able to access these elements using Internet service. Figure 2 shows the six elements that will be used in the Virtual Learning Community to reach its goals.

FIGURE 2
VIRTUAL LEARNING
COMMUNITY ELEMENTS



ELEMENTS OF THE VIRTUAL LEARNING COMMUNITY

Virtual book

The objective of the Virtual book as an information system will be to give an easier access to the members of the VLC. In order to have reliability, the people in charge of the critical activities will update continuously the information. The Virtual book will have the following activities:

- ❑ Text researching: this is where the researchers will do the readings and will send the suggestions of texts to the GVE editors;
- ❑ Protocol performance: where the GVE editors will evaluate the suggestions and will send the approval protocol to the GVE designers;
- ❑ Texts presentation: where the GVE designers will publish the accepted information in GVE Intranet so that the Researchers can find texts; and
- ❑ Publish text searching: where the researchers will find the text by performing a search.

The published text searching, will be reached using the Internet browser. The existing texts will be classified as follows;

- ❑ Abstracts: where the main idea or the most interesting point of the text will be shown to the Researchers;
- ❑ Complete texts: where the full text will be shown and
- ❑ Sites: where it will be possible to access the original site to give important information to the researchers.

Virtual seminars

The objective of the Virtual seminars will be to offer the final results of the researches to everyone with condensed ideas in the form of pictures. To perform the Virtual seminars the following activities will be done:

- ❑ Seminar performance: the seminars will be based on research like papers, thesis and others written by Researchers. The pictures and the concepts in the seminars will provide an easy and fast understanding;
- ❑ Seminar evaluation: the evaluation will be performed by the GVE editors, who will decide about the importance of the seminar and
- ❑ Seminar publication: if the seminar is considered important, it will be sent to the GVE designers, so it could be published on the GVE Intranet to support other Researchers.

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Tele-cooperation

To establish contacts through the Virtual Learning Community. GVE partners will communicate either by chats or videoconferences. These meetings are called virtual meetings. To be able to obtain a successful telecollaborative project using these communication media (Harris, J. 1997), (Killing, R. 1997), (Levin A.J. 1997), (Rogers 1997), (Waugh, M 1997) five main guidelines have to be followed. These guidelines are:

- ❑ Target invitation: when a member desires to communicate, he or she should invite the key members by any communication media. The partners who are invited by the target invitation will be called key members at the virtual meetings;
- ❑ Response: when key members are invited to communicate, they should reply if they are able to participate;
- ❑ General invitation: when the target invitation has a positive response from the key members, a general invitation will be published in the Events agenda at the GVE Intranet; members who are interested to participate can also be part of the virtual meeting.
- ❑ Meeting performance: the chat or videoconference will be performed on the date and time set on the Event-agenda; the partners who accepted the invitation should participate in the virtual meeting and
- ❑ Closure: when a virtual meeting finishes, the responsible will write a minute containing the summary, conclusion and list of participants of the Virtual meeting. This minuet will be sent to the GVE designer. Then, the meeting minute will be shown at the GVE Intranet, in the results link, in this way, all members will be able to now what happened in all the meetings.

Virtual research space

To encourage research in the Global Virtual Enterprise Project, a Virtual research space will be created. This Virtual research space will work as an open forum where all members can discuss

and contribute with their points of view to several matters. If a GVE member is researching a particular topic, the member will be able to perform a discussion in the GVE Intranet.

The interested members can reply and collaborate to the research. They will be able to support with information, suggestions and comments. By doing this, all members will be able to contribute to the research with their points of view. The researcher will obtain more information and ideas from all the project partners. These will encourage publication of articles to which many members can participate. The outputs of the Virtual research space will be articles, abstracts, presentations, etc.

Events-what's coming

All the Virtual Learning Community events will be published in an agenda. This agenda will contain the schedule for events such as videoconferences, chats, meetings, etc. Events will be published continuously and will contain a small description of the event. All members should look at the agenda frequently so they can notice the present and future events within the project. Events will be published as showed in Table 2.

TABLE 2
VIRTUAL LEARNING
COMMUNITY EVENTS

Type	Events	Description
Internal	Chats Videoconferences Meetings Others	Events regarding to different topics, but only among the community members
External	Congress Meetings Others	Outside events that support the project's Performance

Results

The Results will present the explanation of the meetings. Meetings will be performed by person-to-person chats, and by videoconference. The results will be written in order to update and inform the GVE members. The logical sequence

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of activities concerning to the result are the following:

- Once the meeting is done, the responsible will send the minutes to the GVE designer and
- The GVE designers will publish these minutes in the GVE Intranet, so that, every member can understand what was discussed at the meeting.

CONCLUSION

Communication difficulties regarding countries' geographical distribution is not relevant in order to cooperate in the GVE Project. With information technologies, physical presence is no longer a requirement to be able to work simultaneously in far away places. At the same time, the use of Internet services provides a low cost to communicate. Using the GVE Intranet the following goals for a Virtual Learning Community will be reached:

- Create a shared way of understanding;
- Facilitate the exchange of ideas;
- Enhance relationships and communication and
- Allow continuous learning.

This proposal exploits newer procedures to research in separated groups, in order to improve productivity. Thus, it is possible to obtain good results with more agility and fast communication.

One of the main purposes of this paper is to show how distances and cultural differences can be broken when a Virtual learning Community is created. Companies should be able to recognize the importance of creating Virtual Learning Communities, where knowledge can be created, acquired and transferred. In the 21st century, the creation of Virtual Learning Communities will be enhanced, where people can obtain knowledge and ideas from person from distant places. In this way, the human race can develop and learn in a context where everyone can express and give their own points of view and this is the base for the creation of Virtual Enterprises.

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