

THE INFORMATION SYSTEM MODERNIZATION TENDENCIES IN CONNECTION TO THE ORGANIZATION'S MANAGEMENT REFORM

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Permanently pressured by the changes that take place in our society, organization management must always be sensitive to changes that have a short term effect, and periodically receptive to changes that have a medium and long term effect. The need to modernize an organization's information system is motivated on several levels.

In the information societies that are about to emerge, the focus is on integrating modern information technologies on a large scale in all parts of the society. The development speed of the information technologies, which sustain the information society, is accelerated by merging the markets with the new information and communication technologies (NICT). This change is also facilitated and fed by the growing importance of the information's content which disperses the cultural and technological borders that separated the television, publications, telecommunication and information technologies from each other. The information society is also created by merging the NICT with the internet.

Thus, the modernization of the information subsystem of the organization's management is a basic condition to successfully take part at the normal competition between organizations, in which the one that operates in real time with the newest knowledge on trainings and communication will win.

The main effort in developing the information subsystem of the organization's management is to change the focus in the next years from creating applications to sustain the administration towards developing complex projects where the information technologies will be used for training, research, informing and communicating.

At the same time, the approach on the motto "using information technologies" must prevent unwanted consequences, mostly due to obsessive use. Those who define the object of the information subsystem of the organization's management should always keep in mind that information technologies can amplify a part of one person's abilities, but cannot replace those that are most important.

Because of the huge impact the internet communication has on organization's management, hereby we will show a series of items regarding the connection between internet and organization's management.

Although we write and speak all the time about the internet, most managers don't realize the strategic impact the internal organization and the presence on the competition market has.

The internet created a new space for businesses with its basic services: electronic mail (e-mail) and the World Wide Web (WWW or W3). These offer organizations (companies, public institutions etc) and individuals' alternative ways for change of information, communication, delivering of different services and products and starting of new business transactions.

The advanced example to emphasize the opportunities the internet offers is called ICDT, after the name of the 4 major "virtual spaces" it created: Information, Communication, Distribution and Transaction.

The information virtual space "IVS" is the visibility space: it shows who's who, what can be found, how much it costs and so on. It gives a flexible access to its guests to navigate through pages, but remains a one-way channel.

The communication virtual space "CVS" is for interaction. Just like a coffee house, it creates a space for building new relationships and change ideas and opinions. This

“place” can be a simple discussion line, but also a more elaborate 3D virtual space. The members of this community can communicate with higher speed, low costs and beyond usual geographic and physical borders.

The distribution virtual space “DVS” is for services' delivery. Just like a postal office, it has limits on what it can deliver: only what can be digitalized.

The transaction virtual space “TVS” is for commerce. It resembles a stock market where there are no goods or services delivered, only invoices, credit notes and orders.

The ICDT pattern is generic, therefore it can be applied internally as well as externally inside a company or institution.

1. The IVS information space

A. Externally: because the internet is being used on all levels, this space is most attractive to organizations: instant global access to potential customers or business partners. But only by creating a web system will not stimulate interest. It establishes first contact, but if the purpose is to communicate with other agents, then the information presented on the web pages must be pertinent. One can emphasize the relevance by customizing the channel, for instance offering specific pages to different user groups.

And in order to build relationships the web pages must be periodically updated and as often as possible. But this involves investments in multimedia equipment and hiring dedicated personal.

B. Internally: internal web sites, known as intranet, facilitate the access to internal information for an organization's personal. Intranets are secured for outside users by setting up some physical filters between networks = firewalls. The access level in the intranet can be set up accordingly, depending on the user's statute.

Compared to the use of this space externally, internally it is neglected. Companies don't bother too much to allow employees to find out who's who and who does what, except for publishing phone numbers lists. This could be explained by the fact that they consider there is an informal system that transmits this information.

But this space could be used to send newsletters, reports, managerial decisions etc. Also, the achievements of different management levels could be emphasized here. Thus, activities and results would become more visible “we are here, we do this, and we do it this well”.

2. The CVS communication space

A. Externally: here the presence of the organization's managers is well represented. There is interest in communicating with customers (suppliers and company administrators in general), and the focus is not only on supervising but also on interaction.

The CVS offers organizations the possibility to change information, opinions and ideas by e-mail, on-line discussion forums and maybe in the future 3D spaces for virtual interaction.

Public sites can be created, for more companies with the same interests, where one can debate different subjects like laws or agreements regarding relationships with other organizations and institutions.

Obviously, creating and securing such communication spaces imply creating new extremely specialized jobs.

B: Internally: again a difference, but in contrast this time, towards the organization's external approach; much more is being invested internally to create communication spaces hoping to improve the change of information.

3. The DVS distribution space

A: Externally: Organizations deliver services offers consisting in specializations provided, and in a smaller manner, research offers. Apparently today the classical publishing technology (on paper) is still preferred to deliver these services offers, by

printing flies, billboards, advertisements in newspapers and mass-media. Even though, the internet can also be used as some companies already do.

By using the internet, one can also deliver work instructions and consultancy services.

On top of this, by following the example of some newspapers that allow access to their archives, one can allow access from the outside to the (electronic) registers where one can look up the stage of a claim, thus saving time and energy for releasing such proofs.

B. Internally: The intranet can be used to deliver services and materials the employees must be informed about: new programs, strategic plans, the structure of a service center, the budget for the year and the balance sheet for previous years, software packages and updates etc. Specialization courses to more users can also be delivered, to different times and places.

4. *The TVS transaction space*

A. Externally: these spaces are for orders and payments. The cost of any transaction through the internet is lower than through any bank.

If so far the e-commerce meant trading low cost products (books, magazines, music, software), more and more pages emerge where small companies sell different products, after a “virtual visit” in the “virtual shop” where one can find information on different products. The possibility to look through a virtual catalog and eventually buy a product will intensify after adopting the security system proposed by IBM, which will allow payments through Secure Credit Card Information Form.

This type of advanced applications will involve costly investments in software and hardware.

B. Internally: Here, the field of applications is very large, because all the organization's formal interactions can be automated.

Improving and marketing the organization's information subsystem is mostly the manager's responsibility. He must establish the objectives of the entire improvement action, to create an organizational and psychosocial frame, appropriate to the needs of leading a correct and complete investigation, and to stimulate the employees to support an improvement study. Also, the manager chooses the personal which will have the responsibility to conduct this improvement study. During the investigation the manager must be aware of any misunderstandings that might appear between the group of investigators and the employees and must interfere to eliminate them effectively, as well as any resistance the new project might face. The manager must also pay attention to evaluating the results of the improvement study, and after the approval of the improvement measures he will control and support their implementation according to the deadline, ordering some correction measurements where necessary.

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