Tools for Sharing and Transferring Information in the Field of Logistics

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Abstract: Manuscript presents possible tools for sharing and transferring information in the field of logistics. Initial parts of the paper describe the need of a comprehensive logistics portal within entities operating in the Central Europe as well as outline various information regarding marketing tools for sharing and transferring information. Next part of the paper deals with the importance of mass media in terms of logistics. The most important chapter characterizes individual stages of the CELP project (Central European Logistics Portal) during its realization especially in relation to the logistics issues.

Keywords: Tools for sharing information, tools for transferring information, logistics, CELP project, logistics portal

1. Introduction

The needs of the content managing editorial system have been defined as the inputting the information content, the booking the paid portal content, the economic system of cross-billing of business activities, the marketing support of individual portals involved with the emphasis on the importance of mutual communication among editorial offices and the automation of mutual shared content. After works on individual input analyzes of national level were performed, the project team proceeded to design the portal structure and to program the key SW itself. In the last phase of the project, the research team focused on supporting the basic logistics portal by developing native mobile applications that have enabled portal users to access to daily information from a logistics environment [1-3].

The Central European Logistics Portal is based on the principles of on-line marketing and brings to users all of its currently available benefits. The entire project has been solved within the framework of the Eureka International Programme and has been supported through the Ministry of Education of Youth and Physical Education of the Czech Republic.

2. Marketing Tools for Sharing and Transferring Information

For information transfer through media, same marketing tools as in other processes of the economy can be used, since information; message can be considered a product. When forming a marketing plan, the 4P principles are generally used, which is Product, Price, Promotion, Place. A satisfied customer is a prerequisite for the success of each business entity and its further leadership and market presence. A disappointed and unsatisfied customer can, on the other hand, significantly contribute to the company's failure, bankruptcy and liquidation. Full customer satisfaction, while achieving company's efficiency, depends on a corporate marketing strategy and philosophy [4,5].

Perhaps, not everyone is aware of the real power of media information, and few people appreciate and are trained to communicate with the media and journalists, which in many cases causes great damage in building a certain awareness and image of the enterprise or the project. Also, relations with the media and the public must be professionally built and shaped. Emphasis has to be placed on forming the proper press release and using the appropriate words at the right time. Internet marketing and SEO (Search Engine Optimization) is a very important part of the marketing plan and marketing strategy of successful business entities on the Internet. Design and compilation of a strategic marketing plan for the Internet marketing includes products, as follows [5,6]:

- web design - design of the look of web pages and design of their structure,
- SEM (Search engine marketing) - online advertising campaigns,
- Facebook marketing and promotion on Facebook - promoting the promoter's business plan and communicating with customers through Facebook's phenomenal social network.

3. The Importance of Mass Media

Nowadays, mass media are of vital and ever-increasing importance. Media can be a source of power: potential means of leverage, controlling and enforcing innovations, the source of important information for the functioning social institutions, and at the same time, the basic instrument for information transfer. Media are shared at national and international level.

They are the primary key to get an overview of current development trends, including in transport and logistics. It should be taken into consideration that, last but not least, the media are an increasingly widespread industry sector offering economic growth.

Unidirectional flow is the characteristic feature of the media. The culture of the media is, in its own way, unidirectional, since the user message, for which it is directed, is only very generally characterized and not individualized. The professional media are particularly focused on key user groups. For all commercial media, it is typical that products are offered as commodities, as goods and are sold as they can meet the market demands on which they are applied. Mass communication

is one of the levels of social communication, characterized by the fact that all communication activities take place in an institutionalized way - through mass media. The term "mass communication" originated in the late 1930's (Gerbner: "Social interaction through messages") [7-10].

3.1 Mass Communication Models

For the 1930's, the atomization of the society is characterized. It is caused by the fact that people, due to social changes, are isolated, uprooted, deprived of traditional ties, submitted to market pressures, omnipresent and standardized media tried to celebrate society as a mass.

Transmission Model - it is based on Lasswell's theory (Lasswell's Communication Theory) " "Who says what to whom with what effect"? The model was supplemented by Westley and McLean about interpolation (the role of communicator-mediator). The event is received by the communicator and he communicates with the recipients via the channel [11].

Ritual Model - according to J. Carey, communication is associated with the terms of sharing, participation, assembly, fellowship, and common faith. The ritual concept focuses on keeping the company in time; it is about the internal (inner) satisfaction of the user [12].

Promotional model - it is about the communication as showing off and attracting attention in order to meet the usual economic media objective. The model is based on media competition to attract the attention of as many recipients as possible. It exists only in the present and leaves no space for cause and effect questions (causality issues) [13].

Encoding/Decoding model - it is based on the critical mass communication theory (Stuart Hall) and emphasizes the audience's power examination [14].

New classification with the development of telematics media - the element of interactivity gets into mass communication. The model of J.L. Bordewijk and B. van Kaam defines the relationship among allocution, conversation, consultation and registration [15,16].

3.2 Media Communication

Media is a tool of interpersonal communication and, such as, it is not "communicational neutral", but rather forms a design of communication. Media communication is of the nature, of how (and by what) its shape is influenced by the media itself, what is all about it, and on the other hand, how the existence of media communication is involved in the shape of the society in which we live.

Characteristic features of media communication

Interpersonal communication is defined as a symbolic interaction, i.e., as a people behavior which basis is the sharing and transmission of meanings. A person communicational behavior varies depending on circumstances and the purpose of how and with whom it communicates and how the communication develops.

Looking at the model examples, it is easy to see that the shape and course of communication is influenced by a number of factors [17,18]:

- the degree of non-formal and formal communication,
- alignment of mutual relationships and social roles,
- context,
- the number of participants and the degree of monologues or dialogues,
- the way of communication, readiness for speech and possibility of feedback.

All these types of communication, however, have one thing in common: they occur among living people as their interaction (of course, with a postponed reaction regarding the correspondence). We do not get in touch with a living person during media communication. Implementations of network media and ability to interact with the computer have considerably extended this type of communication. Its distinctive feature consists in the transfer of responsibility to the calling person and the strict limitation of communication on previously known situations. Media communication is one of communication events where contact with a living person is minimized.

Communicated messages are produced by media organizations and delivered to end users by distribution channels. They can share them among each other, talk about them, they can even sing them loudly, but only to a very limited extent, they can respond to the medium that has produced them. Internet media has been strengthened by the capability of response, however, despite this fact, the power of operators of large portals and the ability to make them visible inside and outside the Internet are far greater than those of individuals [19,20].

4. CELP - Central European Logistics Portal

Throughout the project realization, the following systems and applications were gradually started to run into the routine operation:

- universal platform and editorial publishing system for managing websites and applications,
- project applications,
- individual portals for the Internet environment in key markets of Central Europe, the Czech Republic, Slovakia, Hungary and Poland,

- mobile applications for Android and iOS operating systems.

4.1 Universal Platform

The result consists in a universal programming platform for editorial and publishing system and web applications including source code (see Fig. 1).
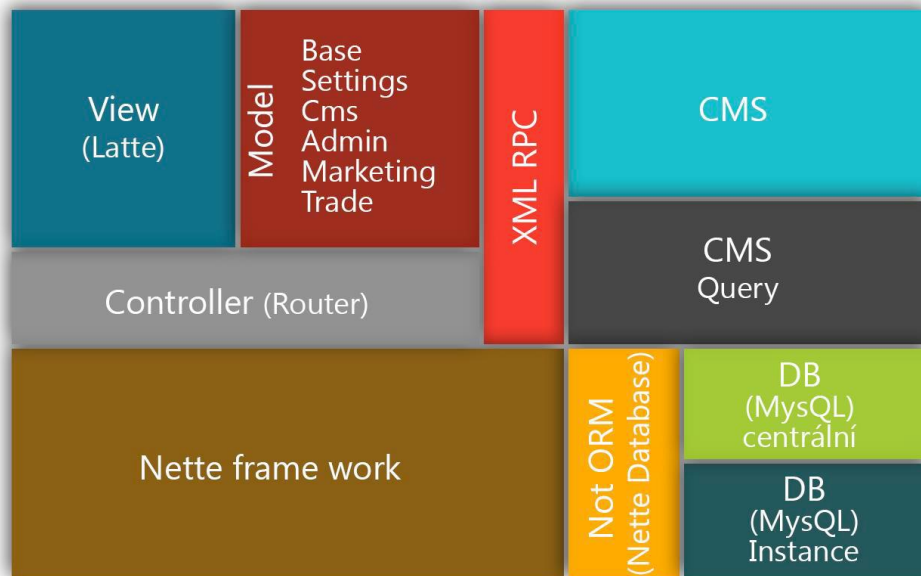

Fig. 1 Universal platform for designing web applications. Source: authors

4.2 Editorial Publishing System

The result consists in an editorial and publishing system suitable, among other things, mainly for administration of information portals in a web environment including source codes.

4.3 Project Applications

The result consists in a web application including individual user modules for application management and operation. The application is implemented and started up on individual web portals. During the solving the project, the application was implemented and installed in a transnational CELP level, and in individual national level for the Czech Republic, Slovakia, Hungary and Poland on individual national domains of the Eurologport (sample design of this application, see Fig. 2).
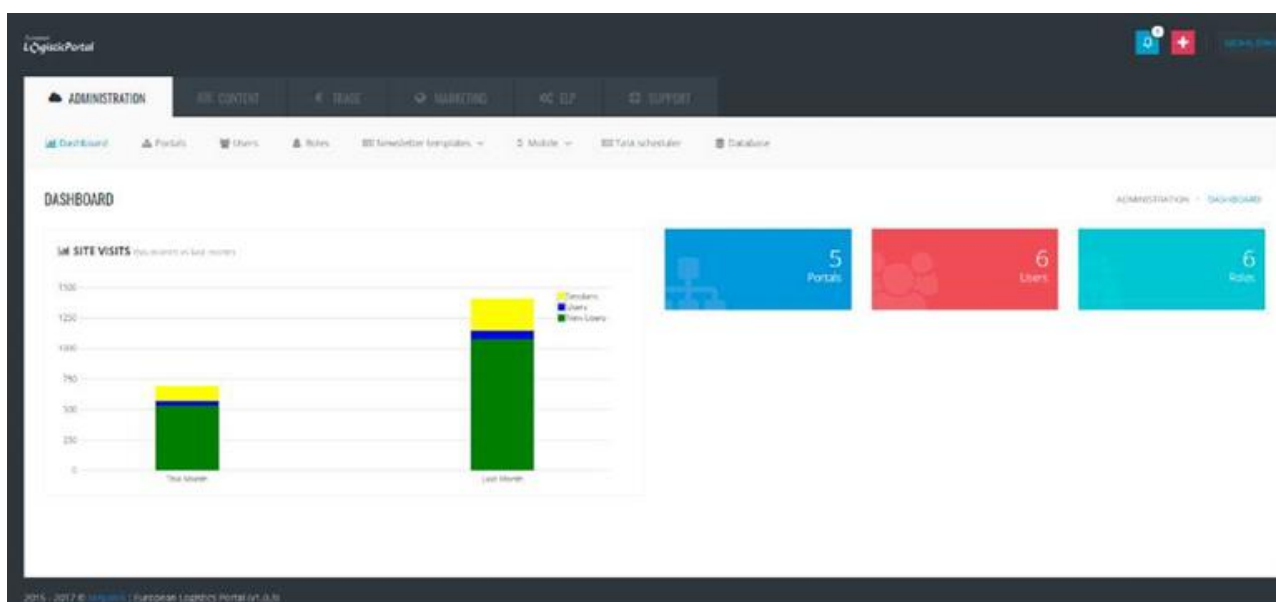
Fig. 2 Logistics portal Eurologport.eu application. Source: authors

4.4 Web Portals and Mobile Applications

Graphic designs and their functionalities have been implemented into the editorial system. The output has been implemented on the following website www.eurologport.eu (cz/sk/hu/pl). The website was successfully tuned and started up in trial version first and then into routine operation according to the planned schedule of project works.

Thus, a software solution for the editorial system has been created. It enables a secure and seamless data exchange among individual national portals and CELP, including an operated and functional national mobile application for the iOS and Android mobile operation systems, as well as including implementation into the national web environment.

The ultimate objective of the researchers was to develop such an information system that is capable of further research and development, and it is possible to respond to it, based on a modular structure in order to allow for its users, logistics, transport, forwarding and other companies to use it. It is brought to them in the form of validated up-to-date information from the field of logistics, and possibly, resulting cost savings based on logistics processes management arising from the correct input information.

5. Conclusion

Works on the whole project were divided into three successively phases. They included processing the initial analyzes for proper definition of the final structure of the processed logistics information portal and the related information system structures including its modular setting, implementation of the web portal in the editorial system for the web environment and implementing and launching individual national portals in the web environment, analysis of the mobile environment for effective

works on programming and creating mobile applications, analyzing limitations of the system possible connection to the national registers, connection development including the trial operation with the selected Czech portal. Analytical works were based mainly on data collection, data modeling, objectively-oriented system design and modular structure of the designed system.

Within a three-year effort, on the basis of close cooperation of experts team in the field of logistics, media communication and IT systems, particular product bringing value-added for its users in the form of up-to-date professional censored regular information from the logistics environment of Central Europe has been created.

In addition, it brings an opportunity to make own visibility not only on the domestic market, but also on the markets of participated national portals of the Eurologport project. A team of marketing specialists continues to expand the network of these involved national portals. The whole system is built modularly, and thus, enables its territorial as well as functional development.

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