

Project communications management and distribution information in projects of environmental and geophysical safety of engineering structures from hazard

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Abstract – The purpose of article is review the project communications management in projects of environmental and geophysical safety of engineering structures. The main result of planning is to create online maps as a platform for distribute information in project. The novelty of the paper is to use modern tools online mapping projects in environmental and geophysical safety engineering structures. Perspectives of international tourism along Dniester river water flow is the example of distribution information whis a wide range of stakeholders.

Keywords – distribute information, Project, communications, management, environmental, online maps, environmental, geophysical, safety, hazard.

I. Introduction

Project Communications Management is closely inter related activities. Very often, improvements in one area of the project can be achieved at the expense of the other areas. Project Communications Management includes the processes required to ensure timely and appropriate generation, collection, distribution, storage, retrieval, and ultimate disposition of project information. Distribute Information it is the process of making relevant information available to project stakeholders as planned[1]. Projects of environmental and geophysical safety of engineering structures included: identify stakeholders, plan communications, distribute information.

The main goal of Projects of environmental and geophysical safety of engineering structures is make the system of distribution information to the stakeholders about safety of engineering structures.

II. Distribution information to the stakeholders

Effective communication creates a bridge between diverse stakeholders who may have different cultural and organizational backgrounds, different levels of expertise, and different perspectives and interests, which impact or have an influence upon the project execution or outcome[2].

The analysis of the communication requirements determines the information needs of the project stakeholders[1]. According to [2] a stakeholder is an individual, group, or organization who may affect, be

affected by, or perceive itself to be affected by a decision, activity, or outcome of a project (Project Manager, Sponsor, Customers/Users, etc.) Stakeholders in project of environmental and geophysical safety is owners and residents of engineering structures, security staff and public support, investors. So we see it is very a wide range of individual and legal entities.

Communication requirements analysis in project was next. Any Stakeholders are informed about the dangers of engineering structures at their request. The request should include the location of the building and the type of hazard. The system received requests and displays information according to the type of hazard.

The project manager should also consider the number of potential communication channels or paths as an indicator of the complexity of a project's communications. The total number of potential communication channels is $n(n-1)/2$, where n represents the number of stakeholders[2]. For example, a project with 1000 stakeholders has $1000*(1000-1)/2 = 499,500$ potential communication channels. As a result, a key component of planning the project's actual communications is to determine and limit who will communicate with whom and who will receive what information[2].

Projects of environmental and geophysical safety of engineering structures uses pull communication as Communication methods for very large volumes of information and for very large audiences, and requires the recipients to access the communication content at their own discretion.

The methods used to transfer information among project stakeholders may vary significantly. For example, a project team may use techniques from brief conversations to extended meetings, or from simple written documents to extensive materials (e.g., schedules, databases, and websites), which are accessible online as methods of communication.

There are pros and cons to different methods of distributing (communicating) project information. It is important to weigh the pros and cons against availability of certain tools/methods, expectations of the individual being communicated to about the project, expectations around formal or informal communication, the need for formal record keeping, etc.[3]

The three basic general communication categories include: Face-to-face communications (group or individual meetings); Hard-copy communications (letters, memorandum, reports); Electronic communications (email, conference calls, web conferencing)[3].

The method you choose is based on your audience, the environment, company policies and/or access to software, the size of the project and other factors.

Face-to-face communication allows more easily for gauging others' reactions to what you are communicating, which allows you to ensure they are hearing what you intend them to hear and understand what you are saying.

If you need to pull a large group together, and a face-to-face meeting is not possible, you may choose to use a collaborative meeting tool, such as GoToMeeting®, or a

similar tool, to communicate with the team. Such tools allow for collaboration as video can be an option – if individuals are able to see each other there is a higher likelihood of collaboration.

Author analyzed and created a list of ways to share information. List ranked in order of increasing value of information is divided into a client:

1. Create a web service
2. Broadcast information via online services and fixed panel monitor stakeholders.
3. Communication over the internet(skype, forum etc.).
4. Phone call.
5. Personal meeting.
6. Paper printing of project information
7. Creating a call center.

The most expensive option is the creation of a call center, we must hire staff, premises and equipment. The least cheap - it create a web service, because the cost of its creation is not large, and the number of users is limited by the capacities of the selected provider. A web service is a method of communication between two electronic devices over a network.

Popular web service Google Maps has taught a wide range of people to get information from online maps. Today, online maps have become a popular tool for decision-making in simple and complex tasks.

Distribute information will made by two ways. First is automaric answer through the a web service. Second is broadcast information via online services and fixed panel monitor stakeholders.

Automatic answer through the web service can be made using online maps, it is truly ease of use.

ArcGIS Online maps services are available at no cost. You can share or embed in a blog or website, or with ArcGIS for Smartphone and Tablets applications[4]. It was created as an example online map (Fig. 1) Perspectives of international tourism along Dniester river water flow.



Fig. 1. The example of online map

Online map was created to promote tourism and the dissemination of information on tourist facilities among a wide range of stakeholders[5]. Every stakeholders can obtain the coordinates of the tourist sites and the description by making a click on an object, the same operation can be performed in environmental and geophysical safety of engineering structures.

The Iowa Flood Information System (IFIS) is the analogue web service for disseminating spatial information about hazards[6]. The author of IFIS is Iowa Flood Center. IFIS is a one-stop web-platform to access community-based flood conditions, forecasts, visualizations, inundation maps and flood-related data, information, and applications.

The author of IFIS is Iowa Flood Center(IFC). IFC is working to provide advanced users from research organizations and government agencies an alternative way to access its network of stream sensors. [6].

Conclusion

Project communications management is an important factor in the successful implementation of the project of environmental and geophysical safety of engineering structures.

It was considered different methods of distributing (communicating) project information but distribution of spatial information across a wide range of stakeholders is best done by using online maps.

Perspectives of international tourism along Dniester river water flow and and Iowa Flood Information System is the example of distribution information whis a wide range of stakeholders.

Web Service allows automated sharing data in a common format for stakeholders with no high costs of information transfer.

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