The Development of Construction Web Portal: An Analysis of its Functionality and User Experience

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Abstract: Supply chain networks are generally associated with inter-organisational communications, leading to reduction of time delays in services and information flows. Recognising the importance of communication, this paper deals with the management of information across a network of organisations that are involved in the design and construction process. The paper presents an overview of problems associated with the process of managing construction project information and explores the key role Web-based technology systems can play in making this process more effective. The paper also reports on the utilisation of such a system on a number of construction projects. It discusses the efficiency gained in the traditional process of architectural drawings transmittal, and reports on a questionnaire survey targeting system users to gain some insight into their perception of its usefulness, performance and role in improving communications amongst the entire project team

I. Introduction

In our daily life we saw many people those who have no work they are unemployed.For example if a builder want a helper to construct the building but sometimes builder doesn't get a worker available for their work and also there are some people who doesn't have their own work they are finding many of the places to get work and for that people we are creating a platform through this web portal.This Web application is generally for those people who are connecting to the field of constructing side like civil Engineers, Builders, Wage people. In this Portal we have to express the thoughts that the wage workers don't have specific work and they are facing many of the problems in their life. Our motive for making this Web Portal that every needed person get work.

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II. Proposed System

The existing system based on finding like civil Engineers, Builders, Wage is a very time consuming and tiring process for the Constructor owner. Even after spending hours on searching the persons is not finding for the work. Same as other side the like civil Engineers, Builders, Wage are not searching the Work. The efficient management of information is vital in any supply chain network, particularly in the construction industry, where delays can be costly and time-consuming. This paper explores the use of Web-based technology systems as a solution to the problems associated with managing construction project information. The paper emphasizes the importance of communication in supply chain networks and presents an overview of the issues associated with managing construction project information. It also highlights the key role that Web-based technology systems can play in improving the efficiency of information management in construction projects. The paper reports on the use of a Web-based technology system on several construction projects and discusses the benefits that were gained from this system, particularly in terms of the traditional process of architectural drawings transmittal. The results of a questionnaire survey targeting system users are also presented in the paper, providing some insight into their perception of the system's usefulness, performance, and role in improving communications among the entire project team. Several studies have been conducted on the importance of communication in supply chain networks, emphasizing the need for effective communication to achieve better coordination and collaboration among organizations.

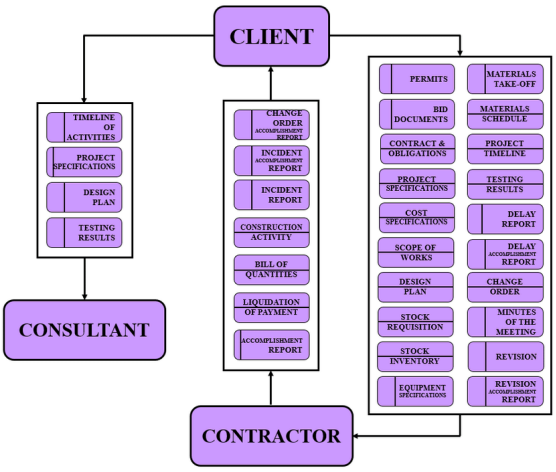

Figure1. System Architecture

For instance, in a study by Li and Lin (2018), it was found that effective communication is crucial to enhancing supply chain performance. The study further suggests that Web-based technology systems, such as supply chain management systems, can play a key role in improving communication and coordination among supply chain partners.Another relevant study is that of Zhang and Ngai (2011), who investigated the impact of Web-based technology systems on supply chain management. The study found that the use of Web-based technology systems can significantly improve supply chain performanceby enhancing communication, coordination, and collaboration among supply chain partners. The authors further suggest that the use of Web-based technology systems can lead to a reduction in time delays and an increase in efficiency in supply chain operations.Several studies have highlighted the importance of communication in supply chain networks, where collaboration and coordination between various organizations are critical to achieving efficiency and reducing time delays in service and information flows. Effective communication can lead to better decision-making, improved resource allocation, and enhanced customer satisfaction. In line with this, the paper recognizes the importance of communication and focuses on the management of information across a network of organizations involved in the design and construction process.

III. Literature Survey

A Construction Chain is basically an interconnected network of suppliers, manufacturers, warehouses, distributors and retailers. This incorporates a coordinated plan which in turn has processes to develop products by converting raw materials to finished goods. The client was implementing a semi-automated process of collecting the order and requirements from their customers instead of using a fully automated form of application to deal with the customers, manufacturing processes, quality control, transportation, and feedback reception from the customers (Lewis, 2001). The client was facing a lot of supply chain problems like Inventory maintenance, the lead times, incorporating latest technology into manufacturing and to maintain a global procurement network.

1. Research on construction and implementation of project information portal:

The project information portal is the one which based on the internet technology and the project participates in the electronic collaboration work. It is a management tool which serves the whole life-cycle of the construction project and adds value to the construction project. With the actual situations where Project Information Portal is applied into the project management processes in the domestic large and medium construction projects, this paper analyzes the differences among the project information portal, the information system of project management and the common information on websites. Based on the research on types of the project information portal, its implementation conditions, features and the existing

problems of its application, both the construction of the project information portal of the project life-cycle process and the solutions to existing problems of its applications are presented.

2. Web page fragmentation for personalized portal construction

Web portals offer many services and wealth of content to Web users. However, most users do not find interest in all the content present in these sites. Most of them visit some specific sites and browse in specific thematic areas of them. In this paper, a software technique is presented that allows the viewers of Web sites to build their own personalized portals, using specific thematic areas of their preferred sites. This transcoding technique is based on an algorithm, which fragments a Web page in discrete fragments using the page's internal structure. A training and update procedure is used for identifying the different instances of thematic areas in different time points.

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4. **Research on the construction of individualized campus portal website in the Web 2.0 environments**

Campus portal website aims to integrate distributed system information on campus and provide a portal for personal information centre. However, in the open campus network, information sharing and gaining are not confined in the campus. The paper discusses the extension and integration of campus portal website and the convenience of the user. Through the technology of ASP. NET, AJAX, LINQ to SQL and Workflow Foundation in. NET Framework, we can construct highly interactive campus portal of rich and visual interfaces. Meanwhile, with the concept of Web 2.0, the integration of personal information in open campus portal may realize through external third-party access to resources, creating an all-round campus information platform belonging to the user's own.

IV. Conclusion

In conclusion, the paper underscores the importance of communication in supply chain networks, particularly in the design and construction process, where coordination and collaboration are essential. It also emphasizes the challenges of managing construction project information and the benefits of using web-based technology systems to enhance communication and improve efficiency. The results of the questionnaire survey provide some insight into the effectiveness of such systems in improving communication and collaboration among the project team. Overall, this literature survey paper offers valuable insights into the management of information across a network of organizations involved in the design and construction process, with a focus on the importance of

communication and the role of web-based technology systems in achieving effective project management.

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