



Strategic Applications for Construction Management Enhancement

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Abstract

This software application brings new ideas in the development of applications and helps small businesses complete the business process on time. It is designed to monitor applications, work management, problem lists, and transfer of work or information by electronic means, which is very important in Android, iOS, and PC modes. Special applications provide users with useful functions such as receiving instructions from the web, sending explanations, storing work-related information, etc. This client work includes office-to-employee and employee-to-employer relationships. The ultimate goal of the app is to be a bridge between employees and employers for monitoring, updating, monitoring, and optimization. Discussion and explanation of a successful application can play an important role in developing it.

Keywords: application, project manager, construction, management.

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Introduction

Building management is difficult, sharing work on site without the right tools is difficult and can be very frustrating at times, but it is easy to use and learn to keep the app close by, sending it to various subcontractors every day. Make it easy for everyone on site to review drawings, plan work, and track returns. Our application combines the best visualization of the work with project management, saving people time at work and in the office. Execute your construction project work with Lean Construction using the Construction Application. It's so

easy to use that anyone from an administrator to a project manager can get it up and running in minutes, even on large projects. Our customers include homeowners, architects, general contractors, and specialty contractors.

Objectives

- a. Learn about technology and innovation management in the business sector.
- b. Prepare information and design ideas for applications.
- c. Create an outline or implementation plan for release.
- d. Create an easy way to update job status from the application.
- e. Monitor and manage employees and reduce risk.

Research Methodology

After some data collection and research for this project, here is a study on the development of construction practice:

Beyh, S. et al., (2008): All smartphones and mobile phones include and enable development Engineers to have unprecedented opportunities to innovate existing methods for construction projects. It focuses on the use of attendance data by district managers to manage employees. The main function used to achieve goals is to plan and organize activities. These processes include site monitoring, operational monitoring, and resource management such as facilities and equipment, equipment, finance, transportation, personnel, information, and technology.

Yang, J., Ahuja, V., (2013): This article shows the interest of civil engineers in the construction industry, which has become important both theoretically and empirically. There is comprehensive information on various areas of the business practice of construction management. They create mobile applications to increase the productivity of people involved in the construction and delivery of projects. Includes registration, sign-in/sign-in, add/edit work, job assignments, and show scheduling.

Result and Discussion

Arrangement of Clients Regarding Management

Business owners (landowners) are the end users of applications ordered by developers or contractors with business needs or contractors who need to build housing on their site. Therefore, the land owner must send a copy of the land property through the application and have it checked by the developer for security and storage on the application server. After completing the inspection of the land property, the next designer will visit the residence and share planning ideas with the owner. After planning, the designer should submit and control the engineering works according to the site, plan, construction works, and time, prioritize and participate in different projects, create lists of important issues, and show the drawings to the project. users can post images, create reports, assign participants and task lists, and field workers can view new projects, documents, work progress, emails, and notifications in the app. Management of these activities will make all the day's activities visible to all users, including customers, contractors, and employees. We can also pay equipment and commission transaction fees through this application.

Aspects To Look for When Creating a Management App

Registration/Access: Registration is the first step in using construction management and is the registration of business management. By creating an identity, engineers can access various job information such as job title, project description, start and end date of the job, supervisor, supervisor, and location of the job site.

Plan View: A floor plan is a series of drawings or two-dimensional drawings used to define areas referencing construction or design instructions. Most plans are drawn or printed on paper, but they can be converted to digital files.

Architectural Drawings: Architectural drawings are a set of revised drawings submitted by the contractor upon completion of a project or specific job. Final drawings, including all of the following and any other changes made during the construction of the project, can be viewed from the app.

Task Management: It is the entire life cycle of the business processes that manage the project. It includes planning, tracking, monitoring, and reporting. Project management can help individuals achieve their goals or help groups collaborate and share information and ideas to achieve common goals. Therefore, the complexity of the tasks also varies from low to high.

- a. View the list of open jobs.
- b. Use filters to view important tasks at a particular time.
- c. Create and update online projects.
- d. Assign tasks to members.
- e. Prioritize tasks and track their progress.

Scheduling: Tasks can be virtual objects such as threads, processes, or data streams that are scheduled for hardware devices such as processors, network connections, or expansion cards. This is a way to allocate work to resources that complete the work.

Work list: Documents that need to be prepared during the critical period or towards the end of construction. The list of work that the contractor must complete before making the final payment, does not comply with the terms of the contract. This may include damage to finished products, materials, and equipment, or failure to complete installation.

Audit: Audit is the most common and formal inspection or inspection. Work that involves testing, measuring, and evaluating some work or equipment must be checked. The results are compared and updated in the application to confirm requirements and standards to determine whether the project or job meets the objectives, usually standards. The application has a review process in place to ensure consistent reviews, updates, and approvals.

BIM Viewer: BIM Viewer displays flyable 3D models of buildings and infrastructure. It includes project plans, financial costs, and maintenance information.

Reporting: It can report the daily work done by the job, as well as update the work that needs to be done and report the daily work to the daily job cost. The specified date and Usage and information regarding the remaining parts are what should be stated in the price.

Payments: Labor, equipment, and other payments are made through online transactions in the application, Details such as location, city, package money, and product name.

Add Property: Allow your online visitors to add the property they want to sell along with some basic information like type, total property, price, contact number, and owner's name. They are also free to add many elements to the application.

Push Notifications: Notify your users about job notifications, all new listings, and listing status in app Features.

Adding to favorites: If they find items they like while searching, they can mark them as favorites and see them in places in the app. Let your users manage their "Favorites" lists. This reduces the time they spend scrolling through the app.

Table 1: Functional options to be in the application

Functional Requirement	Characters Involved
Register/ Sign-in & sign-out	Employers, Employees.
Plan viewing	Employers, Employees.
Building drawings	Employers, Employees.
Task management	Employers, Employees.
Punch list	Employers, Employees.
Inspection	Employers, Employees.
BIM viewer	Employers, Employees.
Reports	Employers, Employees.
Payment	Employers
Add Property	Employers
Notification	Employers, Employees.
Add favorites	Employers, Employees.

The core of this app's success revolves around its comprehensive property database and up-to-date investment-related news. Ensuring a user-friendly interface is key to making the property information easy to understand and navigate. Would you like suggestions on how to structure the database or on how to curate and present the investment news within the app?

Conclusion

This article introduces a new way to create applications for the construction industry, where maintenance of applications is less on portals and marketing of applications is more efficient and effective. Many app development companies have the experience to create high-end applications at affordable prices. Another thing to consider is whether it is developed for mobile on iOS or Android Development platform. If the resources required for development are available and with the help of the application they can easily understand what users can type and time out. There will be a specific time according to the company's time, they can check and give the events they will attend, their background, and generate salary for the employee account and see that the company has introduced a new update specially designed for small businesses.

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