

SAFETY MANAGEMENT SOFTWARE – iSAFETY

BACKGROUND

[0001] Employee management makes it easy to check and track workers. It makes the system easy to handle and manage employees from different location. This system helps in supervising employees work report and productivity.

[0002] Safety management system is to improve safety of employees. This includes hazard identification, hazard reporting, risk assessment, audit trail, incident reporting, incident investigation, action plan and safety recommendations.

SUMMARY

[0003] In Singapore, an average 194 workplace fatalities per 100,000 employed persons have been reported. Building/Constructor workers are more likely to be killed at work site. Safety Network Global has developed a Safety Management Software- iSafety, to reduce workplace fatalities and help safety officers in managing workers. This project mainly includes three modules namely Employee, client and Safety modules.

[0004] In employee module any number of employees can be added according to organization hierarchy. Employees can be tagged with their corresponding work type and work permit. In client module basic details of clients can be added. Projects can be added to corresponding clients. The result of safety module is a list of risks and actions supporting safety performance monitoring. Hazards/ Incidents are reported to higher authorities and corrective actions are recommended.

[0005] The main objective of iSafety is to get safety assurance in management decisions. All safety actions are identified and ensure corrective measures.

BRIEF DESCRIPTION OF THE DRAWINGS

[0006] Fig 1 is a block diagram showing illustrative system architecture.

[0007] Fig 2 is the work permit flow diagram

[0008] Fig 3 Use case diagram of Safety

DETAILED DESCRIPTION

[0009] Many of the features of effective safety and health management are analogous to the sound management practices advocated by proponents of quality management, environmental protection, and business excellence. Commercially successful companies often excel at safety and health management as well, precisely because they apply the same efficient business expertise to safety and health as to all other aspects of their operations.

[0010] While the quality management of products or services and environmental protection principally protect physical phenomena, safety and health management in the workplace involves protecting people and developing a safety culture between employers and employees. However, there are considerable similarities between the approaches to safety and health described here and those advocated for effective quality management (ISO 9000 series of standards) or environmental protection (ISO 14000 series).

[0011] iSafety Web and Tab applications serves the purpose of conducting audits, risk assessment, incident reporting, site findings, meetings and project management. It provides all the necessary safety rules and checklists that are to be checked by the supervisor and sent to the authority responsible. iSafety helps in creating and managing the master database.

[0012] All the clients, meetings, projects, employee details can be maintained in this software. The tab application and Management software are integrated in order to synchronize the required database.

[0013] iSafety project includes employee management along with safety and health management. Employee details can be added to his profile. Certification undertaken by employee can also be added. Online filling of work permit is another important feature of isafety. It is well described in Fig 2. When an employee is approved with any work permit, then automatically permit details will be shown under Employee Permit Details. These permit details can also be added, edited or deleted if needed.

[0014] The user rights and role rights are defined by Admin in iSafety web application. Only admin can enter the details of employee and assign certification. When an employee login with his credentials he can view his profile, projects assigned to, equipment assigned, certifications, trainings, permits, licenses, previous safety issues, whether blacklisted or not, appraisal details, etc.

[0015] Employees attendance is captured from the biometric device. Attendance is important in safety meetings, trainings, mock drills and projects. Admin can monitor the attendance of employees from anywhere and anytime. Employee in time, out time, overtime are all monitored. Employee substitutions are also monitored.

[0016] Project Manager can add his subordinates in to respective projects. Project scheduling can be done for each project and work type in order to monitor on the work done. Manager can tag an employee to project scheduling by uploading certificates or appraisal related in employee's profile.

[0017] Admin can update the client profile by entering the client basic details and the projects associated with the particular client and the invoices can also be managed.

[0018] Safety is the main module of iSafety software available both in web and tab app form. The traditional safety management approach responds to events that already happened (incidents and hazards). The new method is identifying hazards before they appear in incidents or accidents and take action to reduce the risks.

[0019] iSafety has an app version which incorporate all the safety features like Hazard reporting, risk assessment, incident/accident reporting, incident investigation, recommendations of actions plans etc. Nowadays safety officials inspect the work site with tablet or notebook device. iSafety app can easily be installed on any android device.

[0020] While inspection safety officials can refer any safety manuals, tool box talks, company policies, etc. from the isafety Manual section. On finding a Hazard or Incident safety officer can notify the authorities by just one click. In case of hazard occurrence officer can enter a brief description of hazard, type, priority, workers who were involved, concerned department, project location, recommended action plan etc. Using the upload picture option the officer can even sent the photograph of hazard to the head of department.

[0021] Upon receiving the intimation from safety officer the safety head takes further actions. The head can tag the concerned department head to the issue raised by the safety officer with a corrective action plan.

[0022] The concerned department head assigns his subordinates to take the corrective measures and notifies the safety head upon completion of the task. The safety head notifies the employees about the hazard and states the corrective action plan to eliminate a similar hazard in future.

[0023] In case of accident reporting along with the accident description some more fields have to be added. The details of injured person/ persons, date of occurrence of incident, location, body parts injured, severity of injury, witness details, witness statements and immediate actions taken. Photograph can be uploaded from Tablet if available. Risk assessment page is also tagged along with the reporting page.

[0024] On receiving the incident notification from safety officer with all the details the head reviews the incident and assigns an investigation team for incident investigation. Only head can assign officers as investigation team members.

[0025] The investigation team gathers information from incident location. They take witnesses statements in chronological order. Team updates the root cause immediate cause of incident and immediate actions taken.

[0026] The safety head reviews the incident investigation reports and recommendations are added in order to reduce the risk of accident happening.

[0027] Safety audits can be performed efficiently with iSafety tab application. Paperless and less time consuming compared to the lengthy safety audit sheets. Checkboxes are easy to fill in by just a click. Audit details are synced with PC the officials can enter the data from anyplace.

[0028] Safety mock drills are conducted in various project location to ensure safety at workplace. The details of mock drills can be added. Number of people participated, date, location, type of drill and the outcome can be updated in Mock drill page.

