CSSE7001 PROJECT EVALUATION ESSAY

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Tables of Content

Introduction

London ambulance services is the largest ambulance service provided within london and the busiest service in the united kingdom. Earlier london ambulance services was founded in 1930 to replace the service that is provided by metropolitan asylums board. During 1965 london ambulance services was expanded, as a part of establishment of greater london council to be the head of eight other parts of ambulance service in london. In 1974 london ambulance service became independent body with its own board, managed by south thames it's a regional health authority under the control of national health services. London ambulance service covers an area over 600 square miles with a population of 6.8 million people. During the summer in london the population will be around 10 million people with residents, commuters and visitors.

London ambulance service has 318 accident and emergency ambulances and 445 patient transport ambulances, motor cycle response unit and one helicopter. There are 2,746 staff are working in 70 ambulance stations that are divided into four operating divisions.

Purpose of london ambulance service computer aided despatcher

London ambulance service receives 2000 to 2500 calls and transport over 5000 patients per day. In that emergency call are 60% and results roughly 1,400 patients are transported out of 5000 patients. Mainly the problem is national 3-minute standard mobilisation time and the manual performance in 3-minute was inadequate. During peak times and emergency incidents it will be even more difficult to answer all the calls because there may be vast number of calls in less than minute. In the three-minute standard time staff must attend the call and write the details in the pre-printed form and provide incident coordinates from the map book and sometimes the staff may take more than 3 minutes to locate place in map book and sometimes if they get a call back again they must leave their place and talk to another staff and there is no up to date status of ambulances also london ambulance service is investing 76% of money for london ambulance service call function. They are investing more money but still people for facing problems. Even they cannot assign ambulance to that location because of no update about available ambulances.

London ambulance services has decided to solve the problems they need computer-aided despatch system which has three major components incident recording system to eliminate duplicate calls, computer map display system which will automatically locate the incident in mapping software and automatic vehicle location system that will automatically locate the vehicle to minimise the response time. London ambulance service can reduce their budget and give faster performance with computer-aided despatcher. So, they are really in need of computer aided despatcher.

Failure of LAS Computer Aided Despatcher in 1992

A new computer aided despatcher was introduced to replace manual despatching system. But the LAS computer aided dispatch was a big failure in 1992. Because so many calls are wiped off screens also giving wrong destination to ambulance also assigning one incident to two ambulances and in two-week due to heavy load the system was terminated and unable to load the system. It was a big disaster in 1992 and with that 20-30 people died.

The project organisation for this project was not implemented properly due to below factors

They have described about Projects in controlled environments (PRINCE) usage but did not use it while implementing because they don't know much about prince it was a poor project management also they did not raise any exceptional reports due to fear. Even if we use project in controlled environments still it will not make more changes to have good impact on project the development team must be motivated so that if they find any problem they must be able to solve the problem they must have capability to find solution by learning so that they can fix the problems. If the whole team is changing then it would be the good impact on the computer aided despatcher project.

The required software was incomplete for london ambulance service computer aided despatcher because it has so many errors in software development process and inventing the system also due to no proper testing the system has been overloaded by more number of calls at a time and failed because of inadequate capacity. To overcome this problem after developing we should do system testing, overload testing, usability and organisational testing to make sure that the system works accurately.

Developers who developed london ambulance service computer aided despatcher doesn't have any previous experience in building ambulance service computer aided despatcher this shows insufficient concentration is provided for developing critical project with specifications are poor and leaving many areas not defined and the system was implemented without any proper testing. Users must be involved in the testing process because depends on the user input we can change the modifications of the system also the system must be tested like if there are 2500 calls per day then put 2500 call at certain time and test it then it will be working properly.

Project development time was not flexible to develop the london ambulance service computer aided despatcher. Even if there is a lot of pressure still flexible time must be provided to develop complex and risky projects because if we do not provide sufficient time the project cannot be implemented properly and at certain time it may take more time and become very expensive. Some of the software they were released without any testing.

Insufficient training is given to the non-experienced developers who are new to that project because software technologies is keep on changing so they are not up to date in software also there are contractor's problems that the work was not spited correctly. So they must have in-built team on their own so there will be not confusion and the developers can work efficiently by guiding with accurate requirements

London ambulance service preferred low cost as top priority instead of quality for the project. Requirements are not properly consistent and they keep on changing the requirements so no proper approach to implement the project also no strategic mission. There is no complete responsibility for information technology with no standards and control

Latest Software Process Approach For Implementing LAS CAD

It was a huge disaster for london ambulance services computer aided despatcher being failed and many people dead due to delays and improper response. Even if the computer aided despatcher is failed with huge loss of budget. But we cannot maintain operation staff to attend emergency call function because at certain time we need computer for faster executions. In that regards if we force to do the computer aided despatcher without flexible time because of in need still it we be the failure like 1992. So, additional resources and staff

are allocated to london ambulance service emergency call function to provide good service for the customers currently then we can set flexible time to develop computer aided dispatcher for london ambulance services. There should not be any contractors in between and try to interact directly with developing team and to work on complex project we must improve the infrastructure like changing the electrical system and has control room and update ambulance vehicles that are suitable to communicate with computer aided despatcher and estimate a time to calculate budget.

If the above project was successful then we can work on design of computer aided despatcher. The development team must have development with experience in building similar type of project like the computer aided despatcher and more time is spent on training developers for the requirements and for testing the entire system. To implement such software system latest hardware must be used prior to the software development because the old system was pc architecture and it was not compatible for command and control system. There must be a backup of the data even if one data fails the system must retrieve it from another copy of the database. The system must be compatible with any operating system mostly Linux/Unix commands. After implementing the basic system, it must be tested before working to implement full functionality. Basic functionality comes under implementing operators to receive calls to enter details directly into the system. Using the Latitude and longitude or postal code it must automatically detect the location and then check the nearby ambulance to that location and the controller would dispatch an appropriate ambulance because it will show the nearest hospital for the controller to pass the ambulance. Once the call taker receives a call it will automatically detect and send it to controller and then the controller will despatch automatically to nearby ambulance crew in that location. If it works perfectly then try to implement automatic ambulance location system so that the ambulance status will be up to date and controller can easily despatch to available ambulance.

Practices for Implementation of LAS Computer Aided Despatcher

In-house experienced developers with experience in developing the command and control system for police services at that time then it will be worth able for that project. Flexible timetable is must for developing such complicated and risky projects. Spending more time on training the developers also on software functionality testing. For good project management PRINCE must be used for realistic view of project without doing any mistakes.

System must be developed in small parts and testing must be done, users involvement must be there for checking the functionality of the system. Training manager must be a qualified trainer for training developers and user participation aided understanding. Initial system was built with small stages and testing must be done with the help of user interaction then it will be easier to go to next stage of implementation of project. The system must have fully back-up replication then there will be no response time or other problems will not occur during development and at certain time we are not sure about how and where the problem is occurring. Also, the chief executive must have some meeting with the staff and ambulance crews whether they are familiar with the new system that was upgraded and make sure that both the staff and crew of ambulance are more comfortable to use the system.

Information technology developer staff must be in touch with the operation staff by knowing the end user input and development must be done through it. User must be there in the development process. So that they can check whether they are comfortable with the new

system to launch the project. Already there is a huge investment in 1992 computer aided despatcher so not necessary to develop it from scratch but we can start where the problem is occurred by considering the components to save time and budget. London ambulance service must have its own IT staff instead of giving contract to other development companies.

Justification of Latest Software Process and Practices for Implementing LAS CAD

Currently additional resources and staff are required to continue the manual process which can be even more responsive than the old manual process because of more staff and latest resources with the help of latest resources it would be easier for the new computer aided despatcher to communicate with the latest resources. After doing this then we will be having flexible time to implement the project and once we update the resources the operation staff and ambulance crew can use the latest resources and get familiar to those resources the chief executive must interact directly with the staff, ambulance crew whether they are able to operate them properly and must interact directly with the development team for proper approach towards the project.

In-house without any contractors in between the project to avoid confusion and experienced developers are must in that project because if they know how to do the command and control system of police services it will be easier to trained them and they can work well in the project. However flexible timetable is required to implement the successful project even if there is a huge pressure we must allocate flexible time for the computer aided despatcher project. Anyway, sufficient time must spend on training the developers and testing the software functionalities of the computer aided despatcher. Project in controlled environments must be used because we can have a realistic view and in 1992 computer aided despatcher is a failure because they did not use project in controlled environments.

While developing the complex and risky projects management team must be aware of building small components and test them whether it is working properly are not like when working on computer aided despatcher call identification to record and enter the details then the controller will take the information to dispatch the nearby ambulance. Test it with the user at the end to get the accurate result. If it is successful then work on automatic vehicle allocation system because it will have all the vehicles information up to date and the automatic vehicle allocation system will allocate the nearest ambulance in that location. Already there is a huge investment in 1992 computer aided despatcher so not necessary to develop it from scratch but we can start where the problem is occurred by considering the components to save time and budget. London ambulance service must have its own IT staff instead of giving contract to other development companies.

Comparison between CAD in 1996 with the latest software process to implement LAS CAD

In 1996 the development team has experience in developing the command and control system for police services. There are no contractors in between the project to avoid confusion in developing project. Even if there is a huge failure previously as over budget still they concentrated on the quality of the project. They have used flexible time table to implement the project because of no proper time it was a failure in 1992 that why they have given importance to time. Project management team has used project in controlled environments methodology they have used incremental software process model to execute the computer aided despatcher project. They have developed the project in small increments and testing

whether they are working accurately and user are involved at the end of testing to make sure the system has reached their standards. Proper training has been given to the development team. Initial system consists of simple call-taking system to make sure they are not Wapping off on screen.

Latest software process to implement london ambulance service computer aided despatcher. Spiral model is the best software process model to execute a successful website. Spiral model will be useful for risky projects and it can also adopt any other software process model like increment model that was used in 1996 successful computer aided despatcher project also water fall software process model. Instead of starting it from scratch already they have implemented some part of the system so we can reconfigure and redesign the system because they have wasted lot of time and budget to implement that computer aided despatcher.

We must also be trained the operation staff and ambulance crew to use latest resources properly. More time must be spent on testing the functionality after every development as we are using the spiral model and training the development team to work accurately towards the project. Before the starting of the project we have our own information technology team to develop the project for each testing users must be involved to test the system at end to know whether the system is reaching the user satisfaction. While implementing the project data replication must be created to back-up the data. Testing the system with stress by considering the day load 2500 call per day giving input to system as 2500 call at that time to test the capacity of the system.

Conclusion

However, to execute risky and complex projects the best software process model is spiral model because it can adopt any software process model we can determine the objectives, identify and resolve risks and test the software and project in controlled environments is the best methodology for real view of the project.

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