

MULTI-MODE HEALTHCARE DATA COLLECTION PROCESS MANAGEMENT SOFTWARE

***Prateeksharma**

Software Engineer, Glocal Minds Ltd.

ABSTRACT

This paper is on multi-mode healthcare data collection supporting clients with their global quantitative and qualitative healthcare market research needs. Quantitative services include programming, hosting and translation, data collection, data processing, custom charting and incentive handling. Qualitative services include recruitment, scheduling, moderation, interviewing and translation. This tool provides a good user interface between client and in-house teams. System contains various kind of attractive module that easy to use.

It is a most anticipated self-service quote creation tool. The tool allows access to update profile information and create/modify quotations at your convenience.

When a client wants to do survey on any specialty or any country then first he will send the complete information about the survey like time-line, country and specialty. So this tool will help to generate the quote because it is auto generated tool. This is a tool for physician once the physician registration done successfully then this dashboard will open using User-Id and password. This dashboard is unique for each physician. It provides the facility see his survey status, incentive status and he can also see how much survey he completed. This tool provides one more facility to physician they can redeem the incentive amount by online shopping. The project management of this software plays a very important role. Once quote won successfully then particular project will assign to the project manager. Once project manager gets survey then they will start work on it. The main work of PM is to get completes with good quality of data.

The PM will add the specialty and country on the project and it will do the user count and send invitation mail for survey to the physician. The PM can generate the reports of the survey. It is a very powerful and auto generated tool. This tool is use to generate for the questioner and survey link. Once the PM gets the questions from client then he will add the question in this tool then it will automatically do programming and generate the survey link. This link includes the survey question and this link will unique for all users.

The current system is that it is manual due to manual work it is very difficult to keep track of Physician details, Incentive amount. In manual system it may take one month or lengthy and extended. When the physician wants to see the survey status and project status then only way of communication is e-mail and this process is very time consuming.

When the survey is completed successfully by physician then incentive amount is given to the physician only by cheque and this process will consume lot of time.

The Objective of this paper is to propose tool of the selection process as well as the employability test, proposed an idea to maintain entire physician information, incentive information and many future announcements and the system provide good user interface to physician, gives the new feature to the physician to do online shopping by using these incentives amount.

INTRODUCTION

The system provide good user interface between client and in-house teams. System contains various kind of attractive module that easy to use.

Modules in system

QUOTE CREATION TOOL: It is a most anticipated self-service quote creation tool. The tool allows access to update profile information and create/modify quotations at your convenience.

When a client wants to do survey on any specialty or any country then first he will send the complete information about the survey like time-line, country and specialty. So this tool will help to generate the quote because it is auto generated tool.

PHYSICIAN DASHBOARD & INCENTIVE MANAGEMENT: This is a tool for physician once the physician registration done successfully then this dashboard will open using User-Id and password.

This dashboard is unique for each physician. It provides the facility see his survey status, incentive status and he can also see how much survey he completed. This tool provides one more facility to physician they can redeem the incentive amount by online shopping.

PROJECT MANAGEMENT: The project management module of this software plays a very important role. Once quote won successfully then particular project will assign to the project manager. Once project manager gets survey then they will start work on it. The main work of PM is to get completes with good quality of data.

The PM will add the specialty and country on the project and it will do the user count and send

invitation mail for survey to the physician. The PM can generate the reports of the survey.

SURVEY PROGRAMMING: It is a very powerful and auto generated tool. This tool is use to generate for the questioner and survey link.

Once the PM gets the questions from client then he will add the question in this tool then it will automatically do programming and generate the survey link. This link includes the survey question and this link will unique for all users.

ADMIN TOOL: Admin tool is a major tool of this process management software because only the admin person has authority to create users. Admin can insert, update, and delete the data.

In manual system it may take one month or lengthy and extended. When the physician wants to see the survey status and project status then only way of communication is e-mail and this process is very time consuming.

When the survey is completed successfully by physician then incentive amount is given to the physician only by cheque and this process will consume lot of time.

Limitation of Existing System:

- Physician need to ask survey information to related project manager.
- Very difficult to maintain big data.
- Time consuming.
- Human Error.
- Expenses because of manpower.
- No tracking system about the incentive.
- Time consume in sending incentive amount.

1.1.2 Proposed system

Objective of the new system is overcome the existing systems drawback in a smart way. We believe that using the new proposed system will reach the objective of the selection process as well as the employability test.

The GLocal Mind physician dashboard proposed an idea to maintain entire physician information, incentive information and many future announcements and the system provide good user interface to physician.

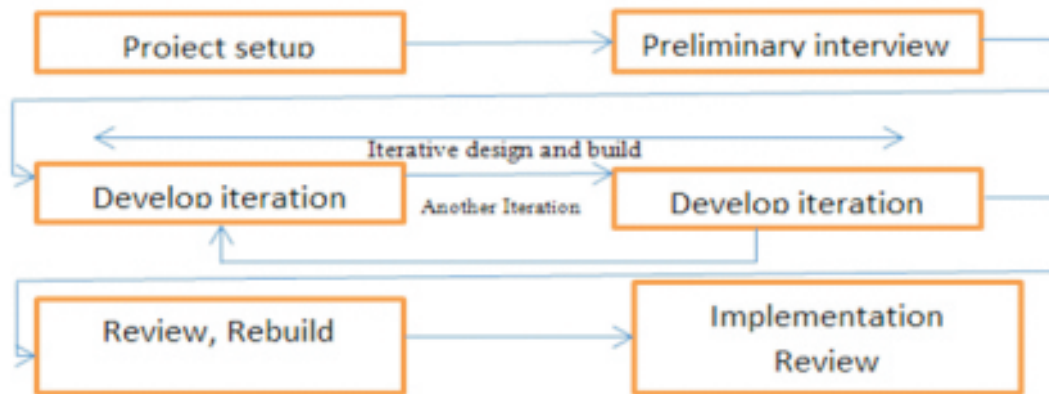
This proposed system gives the new feature to the physician to do online shopping by using these incentives amount.

Advantage of Proposed System:

- Time save to access information.
- Every physician has own dashboard so they can access all information.
- Users can redeem incentive amount using online shopping.
- This system provides new technology.
- It is user friendly web application.
- Provides Authorization –hence secure.
- Web based –hence creating, updating and sharing data is easier and faster.
- Time saving is more.
- Minimize the human effort.
- To solve actual problem in a college administration, a software engineer or a team of engineer must incorporate a development strategy that encompasses the process, methods and tools layers and the generic phases of the software

engineering. This strategy often referred to as a process model or a software-engineering paradigm. A process model for a software engineering is chosen based on the nature of the project and application, the method and tools to be used and the controls and deliverables that are required.

- The nature of given problem and the simplicity of the RAD model forced the use of this model in the development of this project.
- Rapid Application Development:
- Rapid application development (RAD) refers to a type of software development life cycle which uses minimal planning in favor of rapid prototyping. The “planning” of software written in RAD is interleaved with writing the software itself. The lack of extensive preplanning generally allowed software to be written much faster and makes it more flexible to change in requirement.
- Rapid application development is a software development methodology that involves techniques like iterative development and software prototyping. It is a merger of various structured techniques, especially data- driven information engineering, with prototyping techniques to accelerate software system development.
- Rapid application development approaches may entail compromises in functionality and performance in exchange for enabling faster development and facilitating application maintenance.



•Fig 1.3.1 Rapid Application Development

Multi-mode healthcare data collection Process management software is a web application developed to overcome the limitation of existing system by automating the process. All the requirements are based on the observation made by the in-house user, client, and physician. This view of how the system should be. This is a unique influence on the system since it becomes a highly efficient solution to the said problem.

2.2.2 SYSTEM FUNCTIONS

- Multi-mode healthcare data collection Process management software main function is admin panel which maintain by only admin person.
- Admin panel provide all function in that admin person can add, update and delete data into web application.
- Admin can add or remove users from admin panel through this web application.
- The footer part of this system contains one division of NEWS feed which contains the daily updated NEWS of health care market.
- This web application provides all short cut links which is help to reduce time to access all specific information.
- **Dashboard:** Upon logging in, the homepage will display the dashboard

associated with the account. The dashboard gives access to account settings which can help update your Profile, Change Password, Quotation History, Create New Quotation, Edit Quotation and Export the costing in Excel format.

- **Update profile:** User can update his profile from their dashboard. This page helps users to add our organization information. Once user press the submit button after inserting the personal details in this form then all form data will be store in the database and as well as it will display in this Update profile page also.
- **Change password:** User can change his password by clicking the option CHANGE PASSWORD from dashboard. Please ensure to click SAVE to save the password once user has entered his new password. The account holder will be notified with the new password on the registered email ID.
- **Creating a new quotation:** The Bid tool enables you to create a new quotation when clicked on NEW QUOTATION button from the create quotation page. A new page will appear. Please fill the required specifications to create a quotation. You can also create a quote for

multiple countries and multiple specialties. The preferred currency can be selected on this page. Please ensure to read the terms and conditions and provide your acceptance by ticking on the checkbox before you click GENERATE BID.

- **Export quotation:** Upon filling the quotation specification, you can click on the EXPORT ICON from the quotation page to export the quotation in excel format. The excel sheet provides the details of the quotation along with methodology, timeline and cost breakup.
- **View and update quotation:** Please click on EDIT icon on the quotation page to edit a quotation. A new screen will appear which enables you to view the details of created quotation and update the quotation status.
- **Project commissioned:** Once user have updated the Bid status as 'WON' in EDIT BID QUOTATION page, the new page will appear. Please fill in the project name in order to assign our internal project manager and initiate the project.



Fig Flow chart of GLocal mind panel

Implementation is the stage of the Multi-mode healthcare data collection Process management software where the theoretical design is turned into a working system. At this state the main work load, the greatest upheaval and the major impact of the existing system shifts to the user department. If the implementation is not carefully planned and controlled, it can cause chaos and confusion.



Implementation includes all those activities that take place to convert from old system to new one. The new system may be totally new, replacing an existing manual or automated system or it may be a major modification to an existing system. Proper implementation is essential to provide reliable system to meet the organization's requirement. Successful implementation may not guarantee improvement in the organization using the new system but improper installation will prevent it.

The process of putting the developed system is actual use is called system implementation. This includes all those activities that take place to convert from old system to new system. The system can be implemented only after through testing is done and if it is found to be working

according to the specification that had been provided earlier.

The implementation stage involves following tasks:

- Careful planning
- Investigation of the system and constraints
- Design of methods to achieve the change over
- Training of the staff in the changeover phase
- Evaluation of the changer over method

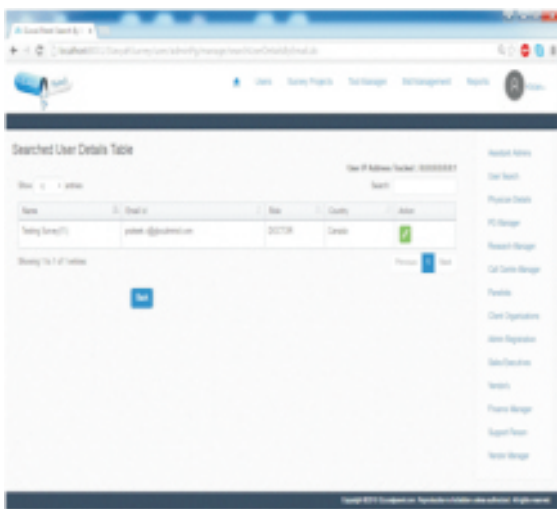


Fig 9.5: Search user details Admin Toolmanager add country



Fig 9.8: Tool manager add country



Fig 9.12: country wise user count



Fig 9.25: Project creation

CONCLUSION

Multi-mode healthcare data collection Process management software is very useful for in-house user, physician and administration person to maintain all details which may be new survey as well as bid information.

This system is very effective to save time and cost as well as to produce information with new technology

Features:

The following are the feature of this system

- Entire process is automated
- Database is used to store information
- Secured through authentication
- Creating, updating and sharing information easier and faster
- User friendly
- Report Generation

BIBLIOGRAPHY

References Book

- [1] Bruno Blanchet. Escape Analysis for Object Oriented Languages. Application to Java. In ACM Conference on Object-Oriented Programming, Systems, Languages, and Applications, OOPSLA'99, pages 20–34, Denver, CO, USA, November 1999.
- [2] Peter Bertelsen. Semantics of Java Byte Code. Student project report, Technical University of Denmark, 1997. Abridged version appears.
- [3] Jeff Bogda and Urs Holzle. Removing Unnecessary Synchronization in Java. In ACM Conference on Object-Oriented Programming, Systems, Languages, and Applications, OOPSLA'99, pages 35–46, Denver, CO, USA, November 1999. ACM Press.
- [4] Horton, Sarah. Access by Design: A Guide to Universal Usability for Web Designers, New Riders Publishing, 2005.
- [5] Bartlett, Kynn. Sams Teach Yourself Cascading Style Sheets in 24 Hours, Second Edition, Sams, 2006.
- [6] Collison, Simon. Professional CSS for Web Development: From Novice to Professional, APress, 2006

- [7] Griffiths, Patrick. XHTML & CSS: A Web Standards Approach, New Riders, 2005.
- [8] Castro, Elizabeth and Hyslop . HTML5, and CSS, Eight Edition: (Visual QuickStart Guide), Peachpit Press, 2013.
- [9] Crockford, Douglas. JavaScript: The Good Parts, O'Reilly & Associates, 2008.
- [10] Langridge, Stuart. DHTML Utopia: Modern Web Design Using JavaScript, SitePoint, 2005

Reference Website

- [1] <http://docs.oracle.com/javase/tutorial/>
- [2] <http://www.w3schools.in/java/>
- [3] <http://beginnersbook.com/java-tutorial-for-beginners-with-examples/>
- [4] <http://mindprod.com/project/projects.html>
- [5] <https://netbeans.org/kb/docs/web/mysql-webapp.html>
- [6] <http://www.objectdb.com/tutorial/jpa/netbeans/web/project>
- [7] <http://www.objectdb.com/tutorial/jpa/netbeans/ee>
- [8] <http://www.htmlandcssbook.com/>
- [9] <https://www.safaribooksonline.com/library/view/html-css/9781118206911/>
- [10] <http://as.wiley.com/WileyCDA/WileyTitle/productCd-1118008189.html>
- [11] Efficient Framework of e-Government for Mining Knowledge from Massive Grievance Redressal Data, G Sangeetha, LM Rao- International Journal of Advanced Research in Communication Engineering, 2015
- [12] 'Branding Strategy-Delivering the brand promise in a competitive environment' GJ-MIT, Mohali, India