Engineering Change Note Work Flow Management

K. A. Ramya Reddy[1*], R. Sakthidharapriya[2]

[1]Student, Department of MCA, Adhiyamaan College of Engineering, Hosur, India
[2]Assistant Professor, Department of MCA, Adhiyamaan College of Engineering, Hosur, India

Abstract: The project "E_C_N work Flow Management" Means Engineering Change Note Work Flow Management System. It mainly works on C#, Asp.Net, Mysql. we have to develop. First, we have to understand the requirement, and next we have to do document, and architecture. Next, we have to do coding and testing and finally have to launch the project. Time to time we have to come out with the requirements, modules, coding developed, testing and the project we have to update time to time. Here people are releasing the open points issues are released by one department remaining department will respond to thereby giving solution. Purchase team will update if there was a material procurement against each issue. Each department will use this portal for entering the status of the Engineering Change Note.

Keywords: Work flow management.

1. Introduction

The ECN Work Flow Management System is an engineering change note work flow management system. It is a portal where all the information of the issues raised in the company and solution to those issues were found in one place. The employers can interact with the platform provided to them for seeing the activities like issue raising, solution to the issues, assembly team, purchase team, vendor team. It is one of the best ways to use this technology for the benefit of the employers. This project touches all the related information of the company issues in this portal. In this portal each employee can add the issues they are facing in the company.

The employers can add the issues which they are facing, the solution will check by the solution team and they will update the solution to that issue. The employers can add and modify the issue details by edit option. The employee can add the issue or can raise the open point issues are released by one department and the remaining department will respond to them by giving the solution. Purchase team will update the material if there was a material protrude against each issue. Each department will use this portal for entering the status of the engineering change note. The engineering change note has been previously done by the excel sheet. It is very complicated to modify the data, so to overcome this issue we are using this E_C_N Work Flow Management System. The modification of google sheet is difficult. In this software we are entering the issues in each line. there are mainly 3 departments that are as follows Issue raising, solution, purchase will update the material procurement against each issue. And we have Dashboard also it shows that how many issues are pending according to department wise the pending activity is carried out.

2. Proposed Techniques

The main objective of the E_C_N work flow management project is the people are releasing the open points. Issues are released by one department and remaining department will respond to them by giving the solution.

Purchase team will update their material protrude against each issue. Each department will use this portal for entering the status of engineering change note. This E_C_N portal is done with Asp.net, CSS, Boostrap, Javascript and Mysql are used in this project.

There are mainly five modules in this application they are as follows namely Issue details, Unique issue id, Assembly team, Purchase team, Vendor team. The features of this application are divided by these five modules and the submodules of each module are as follows,

Issue Details:
1. Issue raised date
2. Issue raised person
3. Machine status
4. Raise team by
5. Raise team to
6. Station number
7. Sub assembly
8. station
9. Issue details
10. Action
11. Priority

Unique issue id:
1. Category
2. Sub category
3. Change description
4. Part number/drawing
5. Indent number
6. Number of line item std elements
7. Number of drawing(new)
8. Number of drawing (rework)
9. Design department point handle by
10. Design status

Assembly team:
1. Final completion by
2. Final closing status
3. Next responsible team
4. Final completion date
5. Final no of days to close the point

Purchase team:
1. Purchase action
2. Purchase order number
3. Purchase order date
4. Material receipt date
5. Purchase status
6. Remarks

Vendor team:
1. Vendor action
2. Po number
3. Po date
4. Rework target date
5. Rework completion date
6. New part target date
7. New part completion date
8. Vendor status
9. Remarks

Issue details: Here the issues will be raised, entering the issues in each line with respect to their fields.

Unique issue ID: It states the category sub category, in which part have the issues and from which part the issues has been raised.

Assembly team: The raised issues will be solved by the assembly team by giving the suggestion to the solution.

Purchase team: The purchase team will update the material procurement for the issues raised.

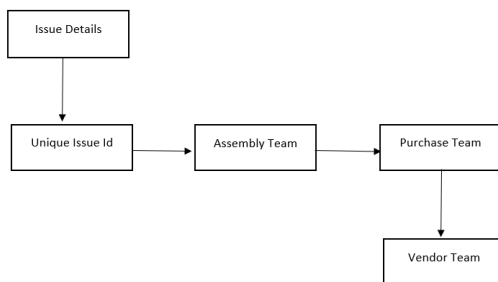*Vendor team:* It gives the information about who has cleared the issues on time with their details.

Fig. 1. Project flow diagram

This project consists five modules which are mentioned above. Inside the modules we can update the issues, select the issues, also edit the issues and delete the issues and finally we have to give the save button. First, we have that issue found, issue raising, design action, purchase update, assembly team completion acknowledgement.

3. Experimental Results

The project "Engineering Change Note" has been previously done by excel sheet. It is very complicated to modify it, so we are using this E_C_N Work Flow Management. The modification of google sheet is very difficult, so we are using the "E_C_N" project.

In this software we are entering the issues in each line. There are mainly three departments namely Issue raising, solution, and purchase department. The Issues are raised by the issue raising department, the solution is given by the solution team and material procurement is given by the purchase team.

Point Raised Date	Point Raised person	Machine Status	Raise team By	Raise team to	Station No.	Sub Assy	STATION	Issue Details	Action	Priority
								Assembly Team		
17-Jun	Prabakaran	Pre-Assembly	M. Assembly	M.Design	65	VSR1S065 A01	VSR1S065	LOAD CELL CALIBRATE SET UP ASSY SHARE		High
17-Jun		Testing	M. Assembly	E.Design	65	VAR1S080 A99	VAR1S080	LOAD CELL CALIBRATE SET UP ASSY SHARE	NEW RELEASE	High
29-Jun		Testing	M. Assembly	M.Design	65	VSR1S065 A02	VSR1S065	LIGHT CURTAIN ACRYLIC GUARD PART NUMBER SHARE	NEW RELEASE	High

Fig. 2. Issue details

Category	Sub Category	Change Description	Part No / Drawing No	Indent No.	No. Of Line item Std Elements	No. of drawing (New)	No. of drawing (Rework)	Design Dept Point handled by	Design Status	Design Completion Date	Design No of Days to close the point	Remarks
										Design Team		
Better_Performance_Requirements									Closed	9-Sep	85	
Modelling_Error_3D	1.0 3D mistakes (Location + Placement error)									9-Sep	85	
Modelling_Error_3D			VSR1S120 P148A	7000078844		2				9-Sep	73	

Fig. 3. Unique issue ID

Final Completion By	Final Closing Status	Next responsible team	Final Completion Date	Final No of Days to close the point
			Assembly Team	
	Closed	M.Design	9-Sep	85
	Closed	M.Design	10-Sep	85
	Closed	M. Assembly	11-Sep	74

Fig. 4. Assembly team

Fig. 5. Purchase team

Fig. 6. Vendor team

4. Conclusion

This project "Engineering Change Note work flow Management" has been previously done by Google Excel Sheet, which is very complicated to modify so we are now using this ECN work flow Management. The modification of google sheet is very difficult. In the software we are entering the issues in each line. In this way this software is very useful.

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