

Essay on project report

Business



Specification: The specifications for this research project are as following:

Objective: To find out the best quality control tool from the seven basic tools for quality in the context of various sector of manufacturing business. Scope: Scope of this project is limited in the manufacturing business making products of only one category among five categories have been chosen for this research which are - Automotive EX " Automotive" , Electronics EX " Electronics" , Pharmaceuticals EX " Pharmaceuticals" , Food & Beverages, Construction equipment EX " Construction equipment" .

Report Format: The project report format given below is proposed for he research- o Introduction o Research Objective o Research Design o Research Methodology o Field Research (collect Data) o Findings o Conclusion o References o Appendix AC 1. 5: Plan and Procedure for the Agreed Research

Specification: A roadman has been created for carrying out this research: Firstly, a questionnaire should be created to satisfy the relevant information needed. Then, the survey would take place After that, information will be collated into MS Excel.

Then the necessary calculation and processing will be done with this software. Final phase is the preparation of the project report in proposed format with the derived endings and conclusions.

Task 2: The Project Report on " Seven Basic Quality Control Tools: Choosing the Best one for Manufacturing Business. " Introduction In this paper by Judging seven basic quality control tools, we are going to find out which tool works best r manufacturing business.

Seven basic quality control tools are taken from an accumulated version of Nancy R, Taste where she presents seven basic quality control tools and they are- Check sheet EX " Check sheet" , Control chart EX " Control chart" , Histogram EX " Histogram" , Praetor chart EX " Praetor chart" , Scatter diagram EX " Scatter diagram" , Run Chart. About these 7 basic tool all the data collection and analyzing processes has been done to reach conclusion about the best one. ACE.

1 : Matching Resources with Questionnaire: The research objective and deign are formulated in term of resources and then matched with questionnaire.

Research Objectifications of these research is to fulfill the below noted aims- To understand the seven basic quality control tools. To analyze the validity of these tools in manufacturing business. To find out the advantage of disadvantages of each basic tools To reach a conclusion about the best tool. Research Designates is an exploratory research project and to some extent descriptive also. Manufacturing businesses are one of the most important things to economy.

Basic quality control tools help to maintain quality.

I none of research paper relate these seven basic tools to manufacturing business to find out the best one. There is a plan to gather some knowledge about the theories and then define different manufacturing businesses sectors and approach them with my questionnaire EX " questionnaire" to find out which tools they are taking for their manufacturing business and either being successful or not. Questionnaire justification: I have only asked 4 questions to the manufacturing companies to reach my decision.

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Justification for all the questions of my questionnaire EX “ questionnaire” is given below: 1 .

What does the company manufacture? Answer to this question will sort the companies into predefined categories. 2. What tool does the company use for quality control? There are multiple answers given, the applied option will be chosen from the given list of seven basic tools- Check sheet EX “ Check sheet” , Control chart EX “ Control chart” , Histogram EX “ Histogram” , Praetor chart EX “ Praetor chart” , Scatter diagram EX Scatter diagram” , Run Chart 3. Are you satisfied with the performance of quality measuring tool?

Here this question is to find out how the tool is working for them by judging the performance of the tool. 4.

Are you satisfied with the quality of your product? This question is for finding the co-relation of better measurement tool of quality control tools with better products. ACE. 2: Undertaking the Research Investigation (Research Methodology)The research methodology is described in several criteria below: Sampling: The random sampling is used to pick the manufacturing businesses, find out the lolls they are using and weather its performing well for quality control purpose or not. 00 random samples EX “ random samples” were considered by taking 20 companies to each category of the five categories of manufacturing business that totaling to 100 businesses. The companies using more than one tool are avoided to simply the calculations any analyzing processes. Primary data: Answer of the proposed questionnaire EX “ questionnaire” (Appendix A) is the source of primary data.

Questionnaire is mainly filled up by case studies. But several personal interviews and telephone interviews are done as well. Secondary data: The research ark being an exploratory one, secondary data are not available for direct use purpose.

Only for theoretical explanation, secondary data are used. Method justification: 100 random samples were taken because there was time and a resource constraint as well as the data universe is too huge to be considered for a research project. Taking equal number of business from each category will help to reach a decision about that category.

Some of the survey questionnaire EX “ questionnaire” were filled up by the observed information from cases that saved the time and resources. Some other questionnaire was filled up by telephone interviews that mom what saved time as well.

But to reach 100 businesses some of the businesses are interviewed personally. AC 2. 3 Recording and Collation of Data (Field Research) All the answer were transformed into numerical dates and presented into MS Excel.

The frequency of usage of each tool in each category is presented in a cross tabulation, which was done with MS Excel with pivot table. The values are presented here in the table below- Table SEE Table * ARABIC 1: Cross Tabulation - Categories and Tools Tools* Cause-and-effect Check sheet EX “ Check sheet” Run Chart Grand Total Product categories Food & Beverages 2 1 6 522220

Automotive EX “ Automotive 23 7 23 2 1 20 Construction equipment EX “
 Construction equipment” 348 1 22 20 Electronics EX “ Electronics” 1642331
 20 Pharmaceuticals EX “ Pharmaceuticals” 5 6222 1 220 Grand Total 13
 2027 12 10 108 100 Which tool is mostly used, which category of
 manufacturer use a specific quality control tool most etc. Can be understood
 from the below given chart. Figure SEE Figure * ARABIC 8: Column Chart -
 Categories and Quality Control Tools Interpretation: Control Chart is the
 mostly used quality control tools in online business.

Then comes the check sheet tool and then for third and the forth position
 mom Check sheet EX “ Check sheet” and Histogram EX “ Histogram” . The
 rest three Praetor chart EX “ Praetor chart” , scatter diagram, Run chart EX “
 Run chart” respectively comes for fifth, sixth and seventh position.

AC 3. 1: Uses of Research Evaluation Techniques: For deriving the output
 from the survey data following research evaluation techniques has been
 used: Cross tabulation: For considering the relation between categorical data
 a specific form of contingency table used.

The method of using that table to find the interactions of categorical data by
 putting them into row and column is called cross tabulation. CITATION
 Heehaw 1033 (Creatures. Com, 2014)Correlation: Correlation is a statistical
 method for calculating the degree of relatedness among two data different
 data sets. Let signifies change of one dataset cause how much changes to
 other other datasets.

CITATION Crack 1 1033 (Croûton et al. , 1968) AC 3. 2: Analysis and
 Interpretation of the Results: Here the collected data set are analyzed in
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interpreted in term of the research specifications- Which Tool is Performing Well to Measure Quality?

The collected information tells us that the control chart mostly doing well in overall manufacturing businesses. Most of the user using this tool agreed that, this tool is performing up to their expectation. Then come the Check sheet EX " Check sheet" and Cause-and-effect diagram EX " Cause-and-effect diagram" . Table SEE Table * ARABIC 2: Cross Tabulation - Different tools and Satisfactory Performance of the Tool Tools Satisfactory Performance of the Tool?

No Yes Grand Total Cause-and-effect 2 11 13 Check sheet EX " Check sheet" 7 1320 Control chart EX " Control chart" 5 2227 Histogram EX " Histogram" 66 12 Praetor chart EX " Praetor chart" 3 7 10 Run Chart 358 Scatter diagram EX " Scatter diagram" 28 10 Grand Total 2971 100 Which tool is Ensuring Satisfactory Quality? Again in this table, it can be seen that satisfactory product quality is mostly ensured by control chart.

Check sheet EX " Check sheet" and Cause-and-effect diagram is also doing well than the other tools. And run chart is doing the least satisfactory Job in these criteria.

Table SEE Table * ARABIC 3: Cross Tabulation - Satisfactory Product Quality? Tools Satisfactory Product Quality? No Yes No Cause-and-effect 3 10 13 Check sheet EX " Check sheet" 8 1220 Control chart EX " Control chart" 8 19 27 Praetor chart EX " Praetor chart" 2 8 10 Run Chart 448 Scatter diagram EX " Scatter diagram" 46 10 Grand Total 35 65 100 Category wise

discussion: Food and Beverage: Len the food and beverage section we can <https://assignbuster.com/essay-on-project-report/>

see that the use of Control chart EX “ Control chart” is most satisfactory quality control tool. And here, run chart never succeeded in this sector of manufacturing business according to the collected data set.

Table SEE Table * ARABIC 4: Cross Tabulation - Quality Control Tools and Their Performance in Food and Beverage Manufacturing. Tools Satisfactory Performance of the Tool? Cause-and-effect 0 2 2 Check sheet EX “ Check sheet” 0 1 1 Control chart EX “ Control chart” 0 66 Histogram EX “ Histogram” 235 Praetor chart EX “ Praetor chart” 0 22 Run Chart 202 Scatter diagram EX “ Scatter diagram” 0 22 Grand Total 4 16 20 Automotive EX “ Automotive” automotive again the control chart is doing the better job.

And run chart is used only one company and that company does not satisfied with its performance toward quality control.

Table SEE Table * ARABIC 5: Cross Tabulation - Quality Control Tools and Their Performance in Automotive EX “ Automotive” Manufacturing. Tools Satisfactory Performance of the Tool? Cause-and-effect 1 1 2 Check sheet EX “ Check sheet” 1 23 Control chart EX “ Control chart” 0 77 Histogram EX “ Histogram” 1 1 2 Praetor chart EX “ Praetor chart” 1 23 Run Charter 1 Scatter diagram EX “ Scatter diagram” 1 1 2 Grand Total 6 14 20

Construction Equipment: Though in constriction equipment manufacturing business are using the control chart like other in most of the cases but its not being that much successful in most of the cases.

But the Cause-and-effect diagram EX “ Cause-and-effect diagram” , has better performance here and the worst performance belongs to the histogram. Table SEE Table * ARABIC 6: Cross Tabulation - Quality Control
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Tools and Their Performance in Construction Equipment Manufacturing: Tools Satisfactory Performance of the Tool? Cause-and-effect 0 3 3 Check sheet EX " Check sheet" 1 34 Control chart EX " Control chart" 3 58 Histogram EX " Histogram" 1 0 1 Praetor Chart 00 Run Chart 0 22 Electronics EX " Electronics" Electronics EX " Electronics" sector Check sheet EX " Check sheet" and control chart is doing the best.

And the worse is shown by the Cause-and-effect diagram, the winner of previous sector.

Table SEE Table * ARABIC 7: Cross Tabulation - Quality Control Tools and Their Performance in Electronics EX Electronics" Manufacturing. Tools Satisfactory Performance of the Tool? Cause-and-effect 1 0 1 Check sheet EX " Check sheet" 2 46 Control chart EX " Control chart" 1 34 Scatter diagram EX " Scatter diagram" 033 Pharmaceuticals EX " Pharmaceuticals" the manufacturing business of pharmaceuticals Cause-and-effect will over other both in terms of the frequent uses and also displaying no failure.

The check sheet fails here in most number of cases in this sector. Table SEE Table * ARABIC 8: Cross Tabulation - Quality Control Tools and Their Performance in Pharmaceuticals EX " Pharmaceuticals" Manufacturing. Cause-and-effect 0 5 5 Check sheet EX " Check sheet" 3 36 Control chart EX " Control chart" 1 1 2 Praetor chart EX " Praetor chart" 1 1 2 Run Charta 12 Scatter diagram EX " Scatter diagram" 0 1 1 Grand Total 7 13 20 Relation of Profitability and market share relation between the good performance of quality control tools and better quality product are is calculated by correlation function EX " correlation" in MS Excel.

The Correlation is 0.7785 Interpretation: This indicates that good performance of quality control tools and better quality products have a fairly strong positive relationship. If the performance of quality control tool is ensured the better product will come as consequence. AC 3.3:

Recommendations: For controlling the quality in manufacturing of food and beverage, control chart will be best tool.

For controlling the quality in manufacturing of automotive control chart will be the best tool.

For controlling the quality in manufacturing of construction equipment cause-and-effect diagram will be the best tool. For controlling the quality in manufacturing of electronics check sheet will be the best tool For controlling the quality in manufacturing of pharmaceuticals equipment cause-and-effect diagram will be the best tool. AC 4.1 : Presenting the Outcomes in Graphic Media: The finding of the research project is presented in a graphic media below- Figure SEE Figure * ARABIC 9: Graphical Presentation of the findings.

Conclusion: Manufacturing businesses play a vital role to the GAP of a country.

It has always been the vital element of business researches and has been a permanent appeal for the entrepreneur This paper try to reach a conclusion about the performance of quality control tools highly depend upon on which sector it performing, though in over all it an be said, in manufacturing business the control chart is doing great Job to control the quality and the run chart is not doing great. As this is an research done with very small scale

data the finding of this paper is not completely reliable, as is always chances
the if the sample number increase the results may change as well.