

**Article Info**

Received: 07 Jan 2020 | Revised Submission: 28 Feb 2020 | Accepted: 05 Mar 2020 | Available Online: 15 Mar 2020

**Java Based Suggestion Model for Organizing Social Events Under Corporate Social Responsibility**

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**ABSTRACT**

*Currently most of the organizations have their own CSR activities and perform social their events separately. Due to lack of resources and limited budget, their ability to perform these activities on larger scale or in remote areas remains restricted. Also, other corporates may not be aware of such events, so that they can actively participate as well. So the idea is to develop an organized Common Corporate Social Responsibility Portal where different corporate or individuals can come together and collectively provide valuable service to society. Therefore, this model is designed to provide suggestions to the corporate to conduct the events by collaboration and working hand in hand with each other. Once the companies post their event on the portal, our internal algorithm will work on some parameters on the basis of which it will send suggestions to the companies via e-mail to conduct the events together in order to make it much more successful and enable the event to make a positive impact on the society. The parameters of suggestion used here are on the basis of-Location of the event, Date of event, Category of event, Most frequent type of event ( Evaluated for displaying suggestions by the individuals to conduct any particular category of event in their locality). If all of these match for any of the corporate, an automated suggestion e-mail would be sent to both the corporate for collaborating together (The final decision of accepting or rejecting the suggestion depends on the choice of corporates itself). Along with this the companies will be displayed suggestions to conduct any particular category of event in their locality under the suggestions section on the portal based on their previous interests or most frequent category of event. This will aware the corporates and increase their reach in remoter areas as well.*

**Keywords:** *Common corporate social responsibility portal; Automated e-mail suggestion; Parameters of suggesting.*

**1.0 Introduction**

In India, Corporate Social Responsibility isn't a new concept, however, the Ministry of Corporate Affairs; Government of India has recently notified the Section 135 of the Companies Act, 2013. CSR can be understood as the way through which a company achieves a balance of economic, environmental and social imperatives, while at the same time addressing the expectations of shareholders and stakeholders.

Objective is to develop a portal which will enable different corporate or institutions to come together collectively provide valuable service to

society. This CSR portal will enable various corporates and individuals to come under one umbrella and increase their social reach to remote areas. Individuals can also access this portal to provide or seek help for them or others in need. Also different institutes can post their requirements on this portal and can seek help from registered corporate such as stationary, teaching assistance, electronic equipment etc. Give suggestions to the corporate through mail arbitrary to conduct the event by collaborating if the category, duration and location of event seem to be similar. Creating a secure system and considering authentication as a priority.

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### 1.1 Corporate social responsibility

The term "Corporate Social Responsibility (CSR)" can be expressed as a corporate initiative to assess and take responsibility for the company's impact on the environment and effect on social welfare. This generally applies to companies efforts that go beyond what may be required by regulators or environmental protection groups.

To be engaged in CSR means that, in the ordinary course of business, an organization is operating in ways that enhances the society and the environment, instead of contributing negatively to them. Therefore, the importance of this portal could be understood by comparing the current scenario of how the CSR activities are conducted with how this portal could change this to a better and organized management of CSR activities.

Current Process: Mostly organizations have their own CSR portal and conduct social activities on a small scale. Therefore, one corporate may not know what valuable initiative others are driving. Also, due to the lack of resources and budget it limits their ability to perform these type of activities on large scale and in remote areas due to which their events are not a major success.

- Develop a portal which will enable different corporate or institutions to come together collectively provide valuable service to society.
- Different institutes can post their requirements on this portal and can seek help from registered corporate such as stationary, teaching assistance, electronic equipment etc.

### 1.2 Advantages of common corporate social portal

- Common CSR portal will enable corporate to know about other companies initiatives and also to actively participate in them.
- Individuals can also access this portal to provide or seek help for them or others in need.
- Due to collaboration between the companies there will be less overhead of cost and management on any one organization and also it will enable them to conduct event on a large scale.
- This collaboration will improve business relations between corporate and provide more business opportunities.
- More CSR events will ensure Long term future for business of the corporates as "Deliver a sustainable society in which business and its stakeholders can prosper in the long term".

- Suggestions by individuals will be refined on the basis of interest of company for conducting a particular category of event and will be read by the company officials which will help them to know about the problem of common people and help them to utilize their CSR fund accordingly.

### 2.0 Work-flow of the system

The work flow of the whole system can be depicted using three diagrams:

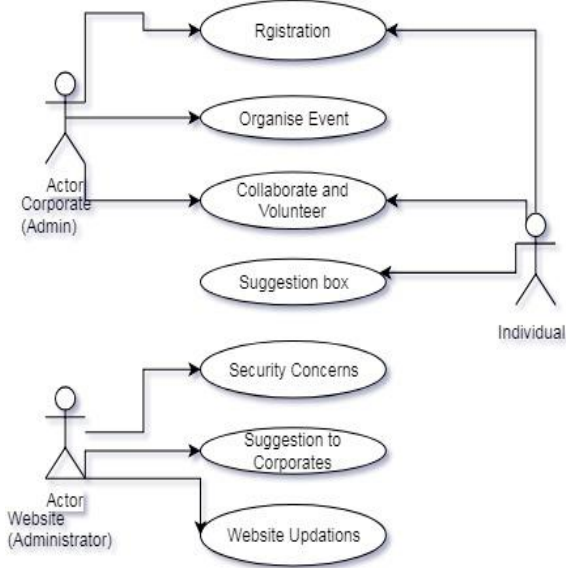
Fig-1: This is the Use-Case diagram which shows the scope of the system. It is the representation of the user's interaction with the system; it depicts the relationship between the user and different processes in which the user is involved. The end users here are individuals who are capable of registering themselves on the portal and on the same side they can give suggestions to the corporate to conduct any particular category of event in their area.

The other end user here are the one for whom this whole system is designed for i.e. the corporate, they are capable of registering on the portal, creating and organizing events through the portal, to collaborate with other corporate in their events and provide resources to them. Lastly, there is a website administrator who looks after all the internal issues in the system and suggests the corporate to collaborate based on the comparison parameters of the events.

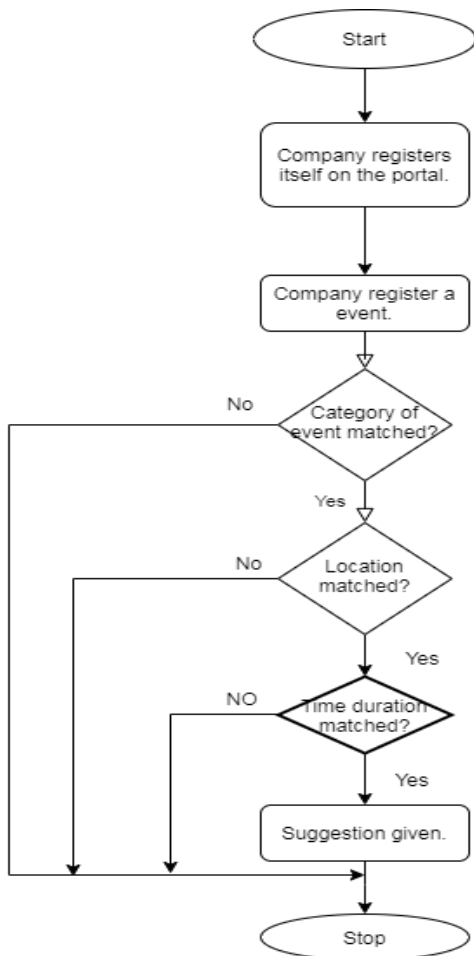
Fig-2: This shows the work-flow for module-1 of the system which is explained below. This depicts the main algorithm working in the project under which once the company registers on the portal and creates event, at that moment our algorithm will work internally according to the flow depicted below, and match the event category of the newly created event with the other upcoming events which were earlier created in the system and if it matches it will further match the location and time duration of the event, if that also comes out to be the same, our system will automatically send collaboration suggestions to both the corporate via e-mail mentioning the details of the other company and encouraging them to collaborate and conduct event together as it will ensure it to be on a large scale and to be a major success.

Fig-3: This shows the workflow of module-3 under which the refined suggestions by the individuals will be displayed to the organizations once they log-in to the portal.

**Figure 1: Use-case Diagram of the System**

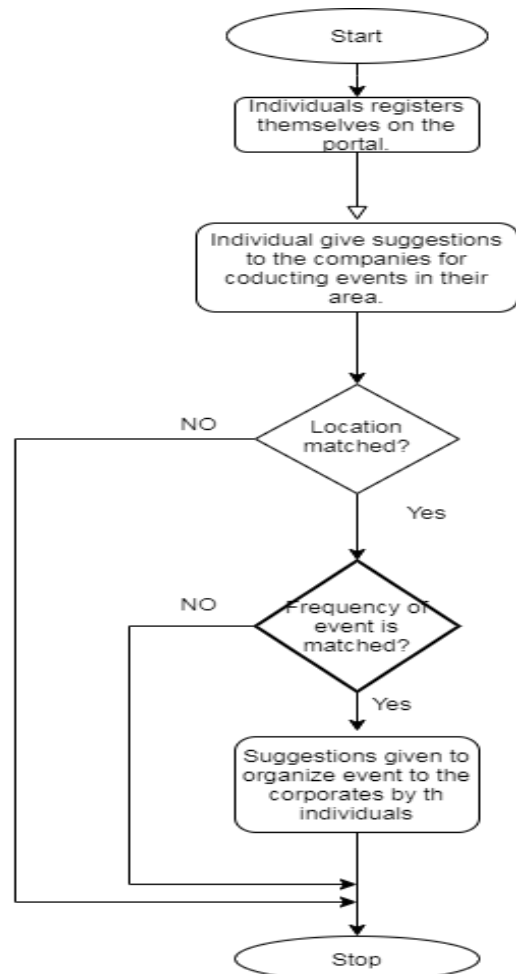


**Figure 2: Flowchart for Collaborating Different Companies in a Company Organized Event**



Firstly, the individuals will register themselves on the portal and then they can give suggestions to the corporates for conducting any particular type of event in their area or mentioning about the problems in their areas. Then based on the factor that which company is doing more such type of events that is being mentioned in a particular suggestion that company will be displayed that suggestion and also notifies via email, this will help the corporate to know about the main issues and problem and also enable them not to limit their reach to remote areas. Also, the suggestions by the individuals will be given much importance through this, and in this way the resources and the money used for conducting events will be rightly utilized by identifying areas which are in need. Hence, the society will be much benefited by this and it will lead to sustainable development.

**Figure 3: Flowchart of Suggestions Given by Individuals to Corporate**



### 3.0 Module Description

The system is designed to provide two types of suggestions to the registered corporate and they can be explained through two modules which are as follows:

#### 3.1 Module-1

Suggestion for collaboration via email to the corporate conducting similar category of events.

The corporates which have registered the event of same category, at nearby location, and within the duration of 30 days, will be suggested via email to collaborate with each other in order to make the event more effective and to conduct it on a large scale. This will increase the budget, resources, manpower as well as the social reach. The events by the companies will be matched on the basis of the above parameters and suggestion via E-mail will be sent to both the organizations, wherein the final call or the final decision to collaborate with each other depends on the choice of both the companies therefore, it will be done by mutual discussion.

##### 3.1.1 Algorithm

**Step 1:** Registered companies create their event on the portal

**Step 2:** Match the category of the event with the category of upcoming events already present in the database.

If (Event category of company1 == Event category of company 2)

Then: Go to step 3 else go to step 6.

**Step 3:** If (Location of event by company 1 == Location of event by company2)

Then: Go to step 4 else go to step 6.

**Step 4:** If (Time difference between events of company 1 and company 2 <= 30 days)

Then: Go to step 5 else step 6.

**Step 5:** Send Mail to both the organizations mentioning the details of each other and motivating them to collaborate with each other and conduct event together on the same date.

**Step 6:** Stop

**API's used for sending mail:** Java Mail API, Java Activation API, SMTP.

##### 3.1.2 Description

This module explains the internal algorithm which will work in the system; it will give the

suggestion for collaboration to the corporate who are conducting similar type of events in the nearby location and also, during the same time duration. This will enable right utilization of the resources and money and the event will also be conducted in a large scale due to which it will be a major success. It will also distribute the overhead of the event between two corporate and the resources will also get shared between the two.

The algorithm only gives suggestion to both the companies via mail mentioning the details of the other company, whereas the final decision of collaborating and conducting event together lies on the companies itself.

#### 3.2 Module-2

Here the corporate can visit through the portal and can have a track of the upcoming events where they can send collaboration requests to other companies if they wish to collaborate in the event created by any other organization.

##### 3.2.1 Algorithm

**Step 1:** Company log in by entering the credentials on the portal.

**Step 2:** The Company's dashboard displays the list of upcoming events along with the Want Collaboration Option.

**Step 3:** If the company wishes to collaborate it visits the collaborate option.

**Step 4:** Once the company clicks on the collaborate option, the collaboration request via is sent to the organizing company mentioning the details of the company that wishes to collaborate in the event.

**Step 5:** Organizing Company will also be displayed the collaboration requests on the portal from where they can accept or reject it.

**Step 6:** Once the organizing company accepts the collaboration suggestion by the requesting company, the company will be displayed in the collaborating companies list of the particular event.

##### 3.2.2 Description

This module enables the company to send collaboration requests to other companies and notifies the organizing company about its pending collaboration requests. The main motive of the system that companies can go through each other's

Figure 4: Output Screen for Different Companies Collaborating in an Event



initiatives and can collaborate in others events as well is being satisfied through this module only. The organizing company can accept or reject the collaboration requests through the portal. Once they accept the collaboration request of any particular company that company will be displayed under the collaborating companies list of that particular event. And if the request is rejected by the organizing company, the requesting company will be notified via mail and also that request of collaboration will be deleted from the pending requests of the company.

### 3.3 Module-3

Corporate can see the suggestions given by individuals on the portal on the basis of some parameters like frequently conducted event type and location of requested event.

#### 3.3.1 Algorithm

**Step 1:** Find the event type which is being frequently conducted by logged in corporate

**Step 2:** Obtain the suggestions from the suggestion table in the database, refined on the basis of category and location.

**Step 3:** If (Event type of suggestion = event type of most frequent event by the company)

Then: go to step 4 else go to step 6.

**Step 4:** If (Locality difference between the suggested event and company location  $\leq 100$ kms)

Then: go to step 5 else go to step 6

**Step 5:** Display the suggestions of the individuals which matched the above two parameters on the dashboard of the logged in corporate.

**Step 6:** Stop.

#### 3.3.1 Description

This modules helps the companies to know what the problems of real world are and what problems are the people facing in a particular locality which will help them to identify areas which are in need and therefore conduct events in those areas for the right utilization of the resources.

Figure 5: Output Screen for Corporate to Send Collaboration Request to the Organizing Company



Figure 6: Output Screen Can Go through the Individual Suggestions of Conducting Particular Category of Event



The suggestions will be refined and then notified to the companies via email and also on the portal. The suggestions will be refined and displayed on the basis of the frequency of a company of conducting a particular type of event. This will help the individuals by making their suggestions reach to the company officials and also the company to identify areas and increase their reach to remote areas.

#### 4.0 Output Screens

The output screen shows the output obtained after implementing the algorithms of the two main modules that are working internally and are explained above in detail.

## **4.1 Output for Module-1**

### **4.1.1 Description**

This shows the list of the upcoming events along with the organizing company and the companies collaborating to conduct event together. Also the other organizations who wish to collaborate in the event can send their collaboration request to the organizing company, on the acceptance of which that organization will also be included in the collaborating companies list for the particular event.

## **4.2 Output for Module-2**

### **4.2.1 Description**

This shows the dashboard of the logged in corporate along with the upcoming events and want collaboration option. If the corporate wishes to collaborate in the event of any particular company, it can send collaboration request to the organizing company.

## **4.3 Output for Module-3**

### **4.3.1 Description**

This depicts the refined suggestions which are displayed to the organization which has logged in on the portal and is frequently conducting plantation events, therefore the suggestions by individuals which are under the event category plantation are only displayed to this organization. Hence, the suggestions are refined on the basis of the core interest or main focus of the organization.

## **5.0 Conclusions**

Most of the organizations have their own CSR activities and perform social their events separately. Due to lack of resources and limited budget, their ability to perform these activities on larger scale or in remote areas remains restricted.

Therefore this system enables the organizations to keep a track of CSR activities of other corporates and also to collaborate in their activities so that they can together provide their valuable service to the society.

This is a very unique concept of joining hands and conducting CSR activities together.No such system is currently into use therefore, this will be a

very new concept if introduced. It will enable the companies to organize their events on a larger scale and increase their reach to remoter areas as well. Due to collaboration between the companies, the resources and the overhead of conducting the events would get shared. The corporates will also get to know about the problems faced by individuals in accordance to which they can plan their next event in a particular locality which is in need.also, the corporates will be suggested to collaborate with another company and together conduct event if they both register similar types of events in the portal. Through this portal, small-scale companies can actively perform their CSR by collaborating with large-scale companies or by providing them with necessary resources for the smooth conduction of the event. The focus of this system is more on Sustainabe development and for the betterment of the society. This portal will motivate and encourage the corporates to conduct more activities and to provide their valuable service to the society.

## **6.0 Acknowledgements**

This thesis becomes a reality with the kind support and help of many individuals. Therefore, we would like to extend my sincere thanks to all of them for helping me throughout.

Firstly we would like to express my gratitude and profound respect to my mentors and guide Ms. Bhawna Gupta (Assistant Professor, Department of Computer Science and Engineering, Meerut Institute Of Engineering and Technology, Meerut) and Mr. Arpesh Singh (Assistant Professor, Department of Computer Science and Engineering, Meerut Institute Of Engineering and Technology, Meerut) who helped and encouraged me at all stages of my thesis work with great patience and immense care. We particularly indebted to Dr. Mukesh Rawat (Professor, Department of Computer Science and Engineering, Meerut Institute Of Engineering and Technology, Meerut) for his support and constant encouragement to participate in all spheres academic activities.

We are very much thankful to CDK Global India Pvt. Ltd. who presented the problem statement of Common CSR Portal in Smart India Hackathon 2019, due to which we got a vision to initiate this process and provide solution for the same.

This thesis is only made possible because of the help of above mentioned guides and with the support of my parents and friends who were there to constantly motivate me at each step and encourage me to perform better.

### References

- [1] R Tasneem, S Jain. Jamia Milia Islamia. Corporate Social Responsibility in India: A Case Study of Public and Private Sector. [https://www.researchgate.net/publication/317852406\\_Corporate\\_Social\\_Responsibility\\_in\\_India\\_A\\_Case\\_Study\\_of\\_Public\\_and\\_Private\\_Sector](https://www.researchgate.net/publication/317852406_Corporate_Social_Responsibility_in_India_A_Case_Study_of_Public_and_Private_Sector)
- [2] MT Khan, NA Khan, S Ahmed, M Ali. Corporate Social Responsibility (CSR) – Definition, Concepts and Scope (A Review), Universal General Of Management and Social Sciences. [https://my.uopeople.edu/pluginfile.php/57436/mod\\_book/chapter/121630/BUS%205115%20Unit%208%20CSR%20Definitions%20and%20Concepts.pdf](https://my.uopeople.edu/pluginfile.php/57436/mod_book/chapter/121630/BUS%205115%20Unit%208%20CSR%20Definitions%20and%20Concepts.pdf)
- [3] SK Krishnan, R Balachandran. Corporate Social Responsibility as a determinant of market success: An exploratory analysis with special reference to MNCs in emerging markets, researchgate.net [https://www.researchgate.net/profile/Sandeep\\_Krishnan/publication/238658156\\_Corporate\\_Social\\_Responsibility\\_as\\_a\\_Determinant\\_of\\_Market\\_Success\\_An\\_Exploratory\\_Analysis\\_with\\_Special\\_Reference\\_to\\_MNCs\\_in\\_Emerging\\_Markets/links/56c7ecbc08ae110637036fe7/Corporate-Social-Responsibility-as-a-Determinant-of-Market-Success-An-Exploratory-Analysis-with-Special-Reference-to-MNCs-in-Emerging-Markets.pdf](https://www.researchgate.net/profile/Sandeep_Krishnan/publication/238658156_Corporate_Social_Responsibility_as_a_Determinant_of_Market_Success_An_Exploratory_Analysis_with_Special_Reference_to_MNCs_in_Emerging_Markets/links/56c7ecbc08ae110637036fe7/Corporate-Social-Responsibility-as-a-Determinant-of-Market-Success-An-Exploratory-Analysis-with-Special-Reference-to-MNCs-in-Emerging-Markets.pdf)
- [4] S Padhiyar. A Study on CSR activities in selected.