

# Sustainability for the Community by the Community: CSR and Community Involvement through Gamification

Fawad Ali Khan, NagendraYadav, Fatima Beena, Mohit Kumar

**Abstract:** *This paper explores the aspects of Gamifying the eight human core motivations for voluntary and continued involvement of the community in CSR activities. In these dynamic times communities are expecting diverse aspects in terms of value creation and delivery from the organizations. The organizations in turn have to devise robust CSR strategies that take sustainability as their foundation and create and implement resilient strategies that require a refurbishment of their CSR processes. Gamification is a craft where we derive all the fun and engaging elements found in games and apply the same to real world productive applications. Any process can be better implemented if we design the process for human motivation in a system as opposed to pure-efficiency designs. It should be more of a Human focusing design rather than a Functional focusing one. Sustainability is not an end game process. It is like taking a bath or brushing your teeth. It has to be worked upon every day, with the same vigor and with the objective of KAIZEN. It is not something that can be achieved, rather it is a process that can be developed and retained. This objective can only be achieved if the community voluntarily steps up and takes active and responsible steps towards a better future.*

**Keywords:** Sustainability, Gamification, Community Participation, CSR

## I. INTRODUCTION

Gamification is the application of game design elements and game principles in non-game contexts in attempts to improve user engagement, organizational productivity, flow, learning, employee recruitment and evaluation, ease of use and usefulness of systems, physical exercise, traffic violations and voter apathy among others. Gamification is an emphatic approach to introduce, transform and operate a service wherein the customer is a part of the value creation process. The basic idea is to generate user interest and involvement through incentive based techniques on a gaming platform having applications in marketing, ideation, health, employee motivation and productivity, education, crowd sourcing, politics and terrorism and the likes. Gamification is about learning from games, not just in the sense of learning about the games themselves, but understanding what makes the games successful. Understanding what makes the games engaging. Understanding what games can do, why games have power.

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And then taking some of those techniques, and thoughtfully applying them to other situations which are not games. While paradoxically the concept of gamification in advergames was used in a non-game context which aims more at providing a lasting brand value impact on the minds of the players about certain attributes or a single attribute of their offerings. It follows a very simple method of incorporating the social recognition and reward aspect of games into a software which pulls them to make an effort to spend time with the brand. Gamification not only finds relevance in marketing but is also being integrated with many business level platforms like Adobe, who believe that the future of business and customer interactions would be game based applications which involve the customers on an intricate level with the business or the product.

## II. OBJECTIVE

This paper has been written with the objective of conceptualizing an operational model that will be the bridge between CSR activities of organizations and voluntary community participation:.

- Conceptualizing a working model for sustainable CSR and community partnerships.
- Operationalizing an innovative methodology for sustainable CSR processes.

## III. SCOPE AND METHODOLOGY

The community members were given to play the Nike+ game with an objective to understand how they can be involved in CSR activities voluntarily. Analysis was done based on Average Screen time, Average Game time and Average involvement time on field of the respondents. Leaderboards were used as moderators to gauge the variance. Data available through a longitudinal research has been analyzed to formulate a conclusion. This research will be of incremental value to further the cause of voluntary community involvement in CSR activities through gamification for continuous improvement.

## IV. LITERATURE REVIEW

As a gamification pioneer, whenever I ask people about their views on gamification the most common reviews include a response that sounds like, “Interesting concept, but how can it be applied to real world situations?” In other words the same means that people consider gamification to be a gimmicky fad that has no impact.



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So instead of trying to convince the people over and over again I try to present them with certain facts that steer the conversation in a way that settles the argument. I am convinced that Gamification not only has a real-life value but it also has a substantial impact for futuristic sustainability concerns.

We have conducted a brief review of some gamification based marketing and CSR campaigns and the list will make you understand how Good gamification or a Human Focused Approach adds more value to lives.

Example 1: Puzzle Game FoldIt made breakthrough in AIDS Research that Scientists couldn't solve

Example 2: RPG Diary Game Pain Squad helps Patients Combat Cancer by providing both Purpose and Data

Example 3: Zamzee makes Kids active by making running around Epic

Example 4: Khan Academy makes people fall in love with learning through Gamified Online Education

Example 5: CrowdRise turns charitable donations into a Game

Example 6: SuperBetter makes you recover from Setbacks and supercharges your Life.

Example 7: OPower makes people responsible with their energy consumption

Example 8: RecycleBank saves the environment by rewarding points that can be redeemed for goods

Example 9: m.Paani aims to solve the clean-water problem in third world nations through an innovative loyalty program

Example 10: FreeRice Feeds the Hungry by Quizzing the Intellect

It's hard to argue against these examples being extremely positive for our society and well-being. What we're seeing here is a complete shift from things we "should do" to things we "want to do." But instead of shifting the tasks, we simply make what we should do fun.

### 1. The Eight Core Motivations

CSR activities are an organizations way to contribute to the society. The society is made up of communities that benefit from CSR activities. The basic problem that most of the organizations encounter in effective implementation of their CSR programs is community involvement. We approached this problem from two perspectives:

1. The perspective of the organization: The communities that are directly benefitting from the CSR initiatives have to come forward and actively contribute in the CSR process so that we can not only gain a better understanding of how and what to contribute to them but we can also create a self sustaining system wherein they can keep improving their lives even when the organizations pull out their contributions from the same. The CSR initiatives are not implemented very effectively because the organizations don't have a very detailed in depth picture of what the community actually requires while the community is hardly showing any interest of involvement.
2. The perspective of the Community: The communities normally do not participate because they feel that there is no obvious tangible benefit of getting

involved in CSR initiatives. On the other hand they feel that they are entitled to be a beneficiary of the CSR initiatives because it is the responsibility of the corporate and government organizations. They have a list of things that they expect the organizations to do for them but they are of the opinion that there is hardly any benefit in getting involved in the CSR process as the organizations have more than enough resources to go through the whole CSR activity on their own. More so the communities responded that they feel that if they get involved in the CSR processes the organizations will go on a back foot approach to implementing these initiatives and will pass on the buck to the community involved. That way the community will end up losing more than they are gaining from the CSR initiatives.

While both the perspectives are seemingly correct and possible there has to be a solution that enables the organizations to get better involvement from the communities while they also keep to their pace and both the stakeholders complete the cycle in unison. We ended up inquiring about the factors that can act as motivators for the communities to actively participate in the CSR initiatives for a continuing sustainable system of improvement. Through numerous informal interactions with various communities that are normally the target of CSR initiatives by most of the organizations we recognized eight basic factors that motivate people to participate more actively in the CSR initiatives. The common factors across all communities were possessions of mobile phones with internet access and a desire to be more relevant. The eight basic motivational tools recognized were then divided into two basic psychological conditions "Conscious" and "Subconscious". Conscious were the extrinsic factors that were in control of the respondents and could be manipulated by external effort. The subconscious were the intrinsic strings that pulled the respondents in a subtle manner and most of the times were the reason of many actions that the respondents usually performed.

**Table 1: Affective Relationships**

| Conscious Motivators                 | Subconscious Motivators      |
|--------------------------------------|------------------------------|
| Empowerment of Creativity & Feedback | Meaning & Calling            |
| Ownership & Possession               | Development & Accomplishment |
| Social Recognition and Acceptance    | Unpredictability & Curiosity |
| Scarcity & Impatience                | Loss & Avoidance             |

### V. DATA ANALYSIS AND INTERPRETATION

We discovered a positive correlation between the factors as listed in the table below



**Table 2: Correlation summary**

|  |                     | Meaning and Calling | Development and Accomplishment | Unpredictability and Curiosity | Loss and Avoidance |
|--|---------------------|---------------------|--------------------------------|--------------------------------|--------------------|
| Empowerment of Creativity and Feedback | Pearson Correlation | 0.597               |                                |                                |                    |
|  | Sig. (2-tailed)     | 0                   |                                |                                |                    |
|  | N                   | 50                  |                                |                                |                    |
| Ownership and Possession               | Pearson Correlation |                     | 0.684                          |                                |                    |
|  | Sig. (2-tailed)     |                     | 0                              |                                |                    |
|  | N                   |                     | 50                             |                                |                    |
| Social recognition and acceptance      | Pearson Correlation |                     |                                | 0.538                          |                    |
|  | Sig. (2-tailed)     |                     |                                | 0                              |                    |
|  | N                   |                     |                                | 50                             |                    |
| Scarcity and Impatience                | Pearson Correlation |                     |                                |                                | .624*              |
|  | Sig. (2-tailed)     |                     |                                |                                | 0                  |
|  | N                   |                     |                                |                                | 50                 |

\*\* Correlation is significant at the 0.01 level (2-tailed).

\* Correlation is significant at the 0.05 level (2-tailed).

Source: Survey Data

The construct of Empowerment of Creativity & Feedback which is an indicator of the net social impact on the people and also reflects the approach to Meaning & Calling has good correlation coefficient of 0.597 indicating positive and direct correlation between the two constructs. The construct of Ownership & Possession which is an indicator of the net achievement impact on the people and also reflects the approach to Development & Accomplishment has good correlation coefficient of 0.684 indicating positive and direct correlation between the two constructs. The construct of Social Recognition and Acceptance which is an indicator of

the net social impact on the people and also reflects Unpredictability & Curiosity has good correlation coefficient of 0.538 indicating positive and direct correlation between the two constructs. The construct of Scarcity & Impatience which is an indicator of the net achievement impact on the people and also reflects the approach to Loss & Avoidance has good correlation coefficient of 0.624 indicating positive and direct correlation between the two constructs. Each of the parameters are significant at 10 % level of confidence.

We further analyzed how the conscious constructs can be affected through the three basic factors of human-mobile interaction. The factors that we recognized for our study were based on three fundamental questions the first being, How much time does a person spends looking at his/her mobile phone? The second, How much time does a person spend playing games on his/her mobile phone? While the third question being, how much time does a person spends being involved actively with his/her mobile phone?

**Table 3: Correlation summary**

|                       |                     | Empowerment of Creativity and Feedback | Ownership and Possession | Social recognition and acceptance | Scarcity and Impatience |
|-----------------------|---------------------|--|--------------------------|-----------------------------------|-------------------------|
| Avg. Screen Time      | Pearson Correlation | 0.534                                  | 0.616                    | 0.586                             | 0.623                   |
|                       | Sig. (2-tailed)     | 0                                      | 0                        | 0                                 | 0                       |
|                       | N                   | 50                                     | 50                       | 50                                | 50                      |
| Avg. Game Time        | Pearson Correlation | 0.764                                  | 0.834                    | 0.654                             | 0.512                   |
|                       | Sig. (2-tailed)     | 0                                      | 0                        | 0                                 | 0                       |
|                       | N                   | 50                                     | 50                       | 50                                | 50                      |
| Avg. Involvement Time | Pearson Correlation | 0.501                                  | 0.613                    | 0.576                             | 0.642                   |
|                       | Sig. (2-tailed)     | 0                                      | 0                        | 0                                 | 0                       |
|                       | N                   | 50                                     | 50                       | 50                                | 50                      |

\* Correlation is significant at the 0.05 level (2-tailed).

\*\* Correlation is significant at the 0.01 level (2-tailed).

Source: Survey Data

The construct of Average Screen Time which also reflects the approach to Empowerment of Creativity & Feedback has good correlation coefficient of 0.534 indicating positive and direct correlation between the two constructs.

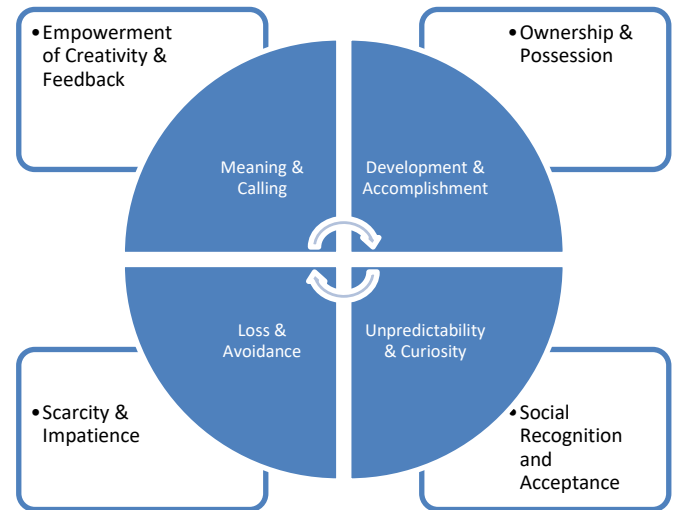


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The construct of Average Screen Time which also reflects the approach to Ownership & Possession has good correlation coefficient of 0.616 indicating positive and direct correlation between the two constructs. The construct of Average Screen Time which also reflects Social Recognition and Acceptance has good correlation coefficient of 0.586 indicating positive and direct correlation between the two constructs. The construct of Average Screen Time which also reflects the approach to Scarcity & Impatience has good correlation coefficient of 0.623 indicating positive and direct correlation between the two constructs. The construct of Average Game Time which also reflects the approach to Empowerment of Creativity & Feedback has good correlation coefficient of 0.764 indicating positive and direct correlation between the two constructs. The construct of Average Game Time which also reflects the approach to Ownership & Possession has good correlation coefficient of 0.834 indicating positive and direct correlation between the two constructs. The construct of Average Game Time which also reflects Social Recognition and Acceptance has good correlation coefficient of 0.654 indicating positive and direct correlation between the two constructs. The construct of Average Game Time which also reflects the approach to Scarcity & Impatience has good correlation coefficient of 0.512 indicating positive and direct correlation between the two constructs. The construct of Average Involvement Time which also reflects the approach to Empowerment of Creativity & Feedback has good correlation coefficient of 0.501 indicating positive and direct correlation between the two constructs. The construct of Average Involvement Time which also reflects the approach to Ownership & Possession has good correlation coefficient of 0.613 indicating positive and direct correlation between the two constructs. The construct of Average Involvement Time which also reflects Social Recognition and Acceptance has good correlation coefficient of 0.576 indicating positive and direct correlation between the two constructs. The construct of Average Involvement Time which also reflects Scarcity & Impatience has good correlation coefficient of 0.642 indicating positive and direct correlation between the two constructs. Each of the parameters are significant at 10 % level of confidence.

### CSR Community Involvement Framework:

Based on the interactions and their deductions we arrived at a basic framework which the organizations can work upon to generate community involvement in their CSR initiatives. Though this is not a very exhaustive study but still can act as a basic pointer for further developments and progress.



**Fig 1: Framework for Community Involvement**

The above framework can help organizations implement CSR initiatives with community involvement through the help of gamification of their efforts. The main four factors are connected to their auxiliary support pointers which if utilized dexterously can have miraculous effects. We will try to explain the framework in brief:

1. **Meaning & Calling:** This factor is affected by the degree of empowerment for creativity and the feedback provided by the community affected. It has been observed that a greater degree of empowerment results in better clarity of the meaning that the community attaches to the CSR initiative. The feedback mechanism keeps the whole process of improvement sustainable.

Games are a very viable medium that are creatively open and can be directed to achievable real world goals with a responsive feedback mechanism.

2. **Development & Accomplishment:** Accomplishments are treated as measuring benchmarks for development. Intermittent accomplishments are proof of continuous development and in the long term a sustainable achievement. The community measures its accomplishments through the possessions and ownerships that it possesses. The CSR initiatives should have complete ownership and possession clarity.

Gamification of their CSR objectives will help the community to keep a tab on its accomplishments in tangible and intangible terms and will keep them motivated to gun for more.

3. **Unpredictability & Curiosity:** The element of surprise, the feeling of ecstasy when we encounter the unknown, and the curiosity that gnaws on the insides to explore all that is undiscovered is one of the most tangible medium of motivation available to mankind. The lust to explore pulls people to achieve feats that normally are considered impossible. This strong emotion combined with social recognition and acceptance fuels the community to participate in endeavors that normally don't even catch their attention.

Gamification provides new avenues to explore, connects the community in a closely knit group with a common objective and has measureable objectives that reflect on the achievements of the participants.

- Loss & Avoidance: The fear of loss and the caution of avoiding things that may harm the community are a great motivator for the people involved. When the people will realize what they are at a stake of losing if they do not actively contribute to the development of their community and participate in the CSR initiatives they will turn out in numbers and with dedication to create a self-sustaining system of continuous improvement.

The gamification of achievable realistic objectives results in better realization of the communities involved as to how they can contribute to the development and avoid loss. The concepts of scarcity can be finely integrated into games which will test the patience of the players where they will be required to wait for their resources to grow and thus realize the importance of the resources that they use in the real world.

## VI. CONCLUSION

The communities need to rise above their insecurities to get involved in the CSR initiatives that are being carried out for their benefits. The organizations have take safe but concrete steps towards community involvement and this can best be achieved by marking a presence in their hands all the times through their mobile phones. The gamified applications developed to promote CSR initiatives will not only help in voluntary involvement of the concerned communities but also serve as a measuring and ensuring platform for continued sustainability of the efforts thus made.

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