

## **Towards Modeling Equal Humanity with Philanthropy and IT Constraints using Mathematical Utilities**

Waqas Haider

Department of the Computer Science, COMSATS Institute of Information Technology

PO box 47040, Wah Cantt, Pakistan

Tel: +92303-5700900 E-mail: waqasbtn@gmail.com

Syeda Safia Afzal

Department of Psychology Quaid-e-Azam University Islamabad Pakistan

E-mail: safiaafzal63@gmail.com

### **Abstract**

In this research we present and analyzed the mathematical model for achieving equal humanity factor. The model revolves around human class, Information technology class and Philanthropy. The relative analysis of proposed mathematical model for humanity leads to expose several stable and unstable conditions of equal humanity. The presented model not only relies on Information technology constraint but also it is scalable enough to address equal humanity using any other constraint. During modeling and analysis we use basic set theories and logical operators.

**Keywords:** Social equality, Information technology

### **1. Introduction**

Equal humanity means that every human in this world gets equal rights. More specifically each human should get food, cloth, shelter, education, job etc [1,2,3]. The word “*Philanthropy*” means “*love to humanity*” . Philanthropy is a practice which reveals that every work or product in this world must be for humanity [4,5,6]. Many contributors are currently involved in philanthropy affairs as Peter Norton founder of Norton Antivirus. Explaining his contributions in sense of philanthropy, he made software that really help humanity as antivirus. Similarly Face book co-founder has just started “Philanthropical Networking”.[7,8,9]. In order to solve problems and to get true picture of the problem, mathematical modeling is a practice which makes things possible systematically [10]. Relating philanthropy with information technology means , that humanity is getting from IT. But if we talk about equal humanity and poor peoples the picture is worst as shown in figure 1. Although today Information technology has everything mentioned in figure 1 but due to lankness of philanthropical practice the equal humanity factor is disturbed. Equal humanity factor  $H_w$  (e.g see formal definition in eq (3)) is a probabilistically numeric value which can tell the social analyst that how much the humans in a certain geographical area are equal. The absolute value of  $H_w$  will be 1 if all humans are

equal. The factor  $H_w$  is dependent on several constraints e.g food, health, shelter, education, job etc, distributions among humans. If these constraints are integrated with philanthropy practice then maximum  $H_w$  factor can be achieved.

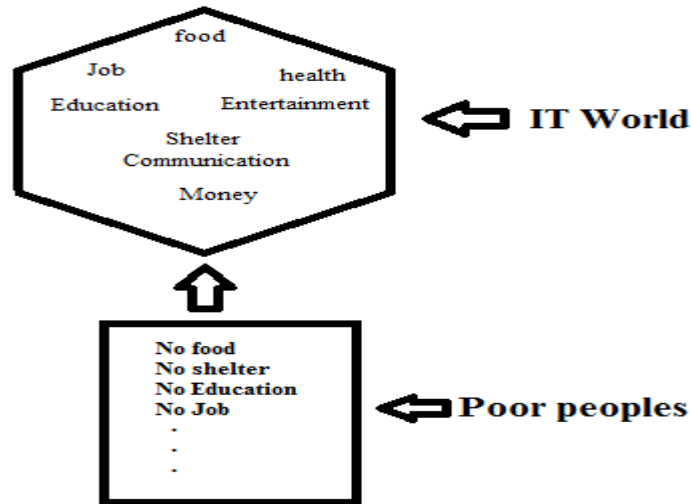


Figure 1. Worst picture of Humanity

In this research it is tried to figure out the equal humanity factor using proposed mathematical modeling practice. The stable and unstable conditions of equal humanity are elaborated under IT and philanthropy constraint because according to figure 1 every other constraint could be given to humanity using IT with philanthropy. The rest of the paper is organized as in Section 2 the system model is expressed. Section 3 exposes stability of equal humanity. In section 4 an example is expressed for finding equal humanity factor and finally in section 5 the concluded remarks are given.

## 2. System Model

In this section the proposed model's for equal humanity entities are defined and their relations and dependencies in current world scenario are highlighted. Let  $U$  is the universal set and represents the whole world,  $X$  is the set which represents IT world and similarly  $Y$  is the set which represents humans. Now a relation between  $U$ ,  $X$  and  $Y$  can be defined as:

$$Y \cap X \subseteq U \dots \dots (1)$$

From above relation it can be seen that both humans set  $Y$  and IT world set  $X$  belongs to universal set  $U$  and in other words  $Y$  and  $X$  are the subset of  $U$ . Let  $P$  represents the philanthropy as it is a behavior or practice so the equation (1) can be extended as:

$$(Y \cap X).P \subseteq U \dots \dots (2)$$

In equation 2 it can be seen that philanthropy is necessarily multiplied with  $Y$  and  $X$  so that the relation (e.g equation 2) is satisfied. Let  $A$  represents poor people set and  $A$  is a subset of  $Y$  e.g  $A \subseteq Y$ . Now the

Equal Humanity Factor  $H_w$  is defined as :

$$H_w = \frac{P}{Y} \dots\dots\dots(3)$$

Where P is the philanthropy and Y is the human set and equation (3) will give absolute probabilistic value one if P is equally distributed among Y. For achieving absolute value of  $H_w$ , the philanthropy P must be given as:

$$P = \int A_i . X_p \dots\dots\dots(4)$$

Where  $A_i$  are the number of poor peoples e.g  $i=1,2,3,\dots,n$  and X is the IT world class. Keeping in view the equation (3) and (4) it can be seen that  $H_w$  will be one if each poor people got philanthropical

Information Technology e.g equation (4). The absolute  $H_w$  can also be given as:

$$H_w = \int A_i . (X \cap P) = 1 \dots\dots\dots(5)$$

Therefore from equation (3,4 and 5) it is more appropriate to say that for achieving ideal value for  $H_w$  which is one, it is necessary to adopt philanthropical practice in information technology.

### 3. Stability of Equal Humanity

In this section using the assumed entities (e.g U, Y, X, A, P and  $H_w$ ) for proposed model, the several stable and unstable conditions for equal humanity are expressed. The purpose of this section is to systematically demonstrate the current worst picture of the world and paving ways for betterment.

From proposed model Y belongs to universal set U and Y is dependent on X and P, so the current world scenario which is not in balance state and is expressed as:

$$Y \cap X \cap P \subseteq U \not\rightarrow H_w \text{ absolute} \dots\dots\dots(6)$$

Where the sign  $\not\rightarrow$  means some relations are not approaches to some thing. The equation 6 is unstable condition of equal humanity, because it can be seen from equation 6 that although humans Y has Information technology X but cannot approach to absolute value of equal humanity factor  $H_w$  due to A and P constraints. As  $A \subseteq Y$  and P is given in equation (4), these two constraints A and P ultimately satisfies equation (6) because poor peoples are the elements of Y and philanthropy P means according to (4) that each poor people must have philanthropical Information technology which is  $X_p$ . In order to have stabilize version of equation (6) which is given as in equation (7), the equation (5) must be satisfied first.

$$Y \cap X \cap P \subseteq U \rightarrow H_w \text{ absolute} \dots\dots\dots(7)$$

The equation (7) can be considered as stable condition of equal humanity and it is possible only if  $X \cap P$  are integrated with each  $A_i$ . Also the stable model for equal humanity presented in equation (7) can be modified to another constraint other than  $X$ .

#### 4. Conclusion

The model presented in this research is capable to address achieving and finding equal humanity factor in a systematic way. As to achieve equal humanity it is necessary to figure out problems and solutions so Information Technology world is one of the possible effective constraint to achieve such social goal. The proposed model can be helpful for social analyst to find actual figures of human equality. With the help of this model social analyst can view the problematic constraints and also they can give policies for the better adjustment of those constraints as IT and Philanthropy. Also the proposed model is helpful for both developed and underdeveloped countries to achieve absolute equal humanity.

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