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Implementation of fuzzy logic method for physical and mental illness by smart phones

S. Petricia Leema Roseline¹, Priti Kandhve¹ and R. Mohan^{2*}

¹Dept of Computer Science, Christ College, Pune, MS, India

²Dept of Mathematics, College of Military Engg., Pune, MS, India
mohan_rayappan@yahoo.com

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Abstract

Using Fuzzy logic, different types of complex systems can be analyzed more effectively than using traditional approaches. In revolutionary technology, a smart phone emits radio frequency energy which can be absorbed by the tissues in the body. Sleep dispossession is one of the common bad effects of using smart phones. Moreover phones produce light effects which can damage our eye sight. In this paper, we analyzed smart phoned are also found to have a negative impact on health issue.

Keywords: Fuzzy logic, MatLab, centroid, rule based system, fuzzification.

Introduction

This research work is giving some awareness and advice about health. Fuzzy logic is used to analyze and diagnose negatively affected person by the smart phone. Fuzzy has been deemed to be the best methodology, mainly because of its rule based system. To evaluate the performance and implementation of simulation model we used MATLAB tool software.

L.A. Zadeh¹ proposed fuzzy sets. Mamdani² suggested control of simple dynamic plant application using fuzzy algorithm. Zhen and Feng³ suggested the design of neural network fuzzy controller in washing machine.

George and Yuan⁴ developed fuzzy sets and fuzzy logic. Fuzzy logic based control system suggested by Kumar and Haider⁵.

Mendel⁶ presented fuzzy logic system for engineering. Hellendron and Thomas⁷ proposed defuzzification in fuzzy Controllers. Yazid and Mouftah⁸ suggested congestion control methods for BISDN.

Lohani and Hasan⁹ suggested the design of an improved controller microchip for washing machine. Virkhare and Jasutkar¹⁰ developed Neuro-Fuzzy controller based washing machine. Petricia Leema Roseline¹¹ developed unit consumption under fuzzy logic control of washing machine.

In this paper a model using fuzzy logic with three inputs and two outputs is proposed. This paper developed to analyze and diagnose the negatively affected person by the smart phones.

Structure of Fuzzy Logic System

Fuzzy inputs, outputs rule and defuzzification are given in Figure-1.

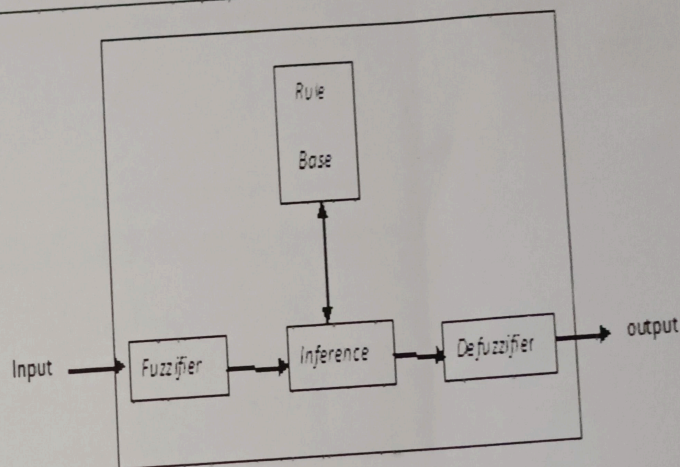


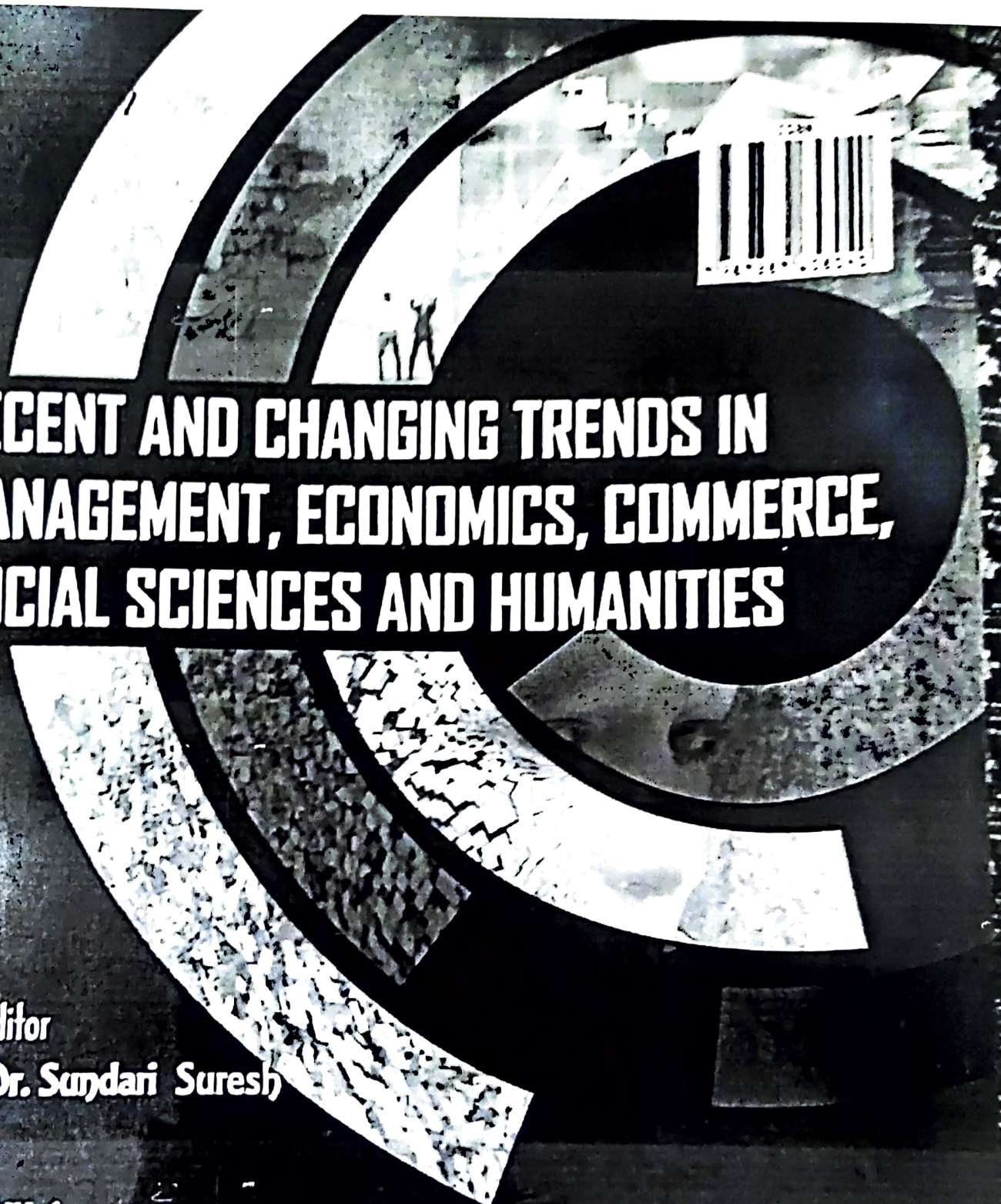
Figure-1: Structure of Fuzzy Logic System.

Fuzzy takes the system of information in normal language and converts it to values. The inputs are associated with membership functions are in form of words such as text, audio, video. Fuzzy system is determined the variables of input and output values such as less, more, extreme etc. are being selected. Afterwards, rules are being developed. Using those rules the relationship of input-output is developed. Using fuzzified inputs outputs are being produced and hence rules are determined. Those fuzzified outputs must be converted into real values. These real values can be used in real system. This system of procedure is known as defuzzification.

Proposed Design of Fuzzy Logic

Input parameters: i. Age group, ii. No. of hours, iii. Mode (Audio, Video, Text).

Output parameters: i. Physical illness, ii. Mental illness.



RECENT AND CHANGING TRENDS IN MANAGEMENT, ECONOMICS, COMMERCE, SOCIAL SCIENCES AND HUMANITIES

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DEMOGRAPHIC DIVIDEND: A CHALLENGE AND REALTY OF INDIA**Ms. Geetha Rajan N****Assistant Professor Christ College, Pune.****ABSTRACT**

Demographic dividend is basically an economic benefit for any country. It refers to a growth in an economy which results from an effect of change in the age structure of population. It is a period where fertility rates fall due to significant reductions in child birth and infant mortality rates and thereby reducing the proportion of non-productive dependent population. The average life expectancy was increased marginally because of advancement in the medical field and awareness which results in increases in the ratio of the participation of working age population towards total population. It is an opportunity for any country to boon their economy if it grasps demographic dividend accordingly. This arise a need of proper planning and strategic formulation. According to statistic survey, the India will surpass china as the world's largest economy by 2025 with the large portion of those in working age category. This shows the opportunity what our country has to work towards. But if it is not executed, these assets can be a big liability for us. Therefore the objective of this paper is to study the term demographic dividend and its impact like a boon or bane for Indian economy. This paper discusses on challenges of our country with an emphasis on education and Skill Development and unemployability and all possible micro factors.

KEYWORDS: Demographic Dividend, Working age population, Education, Skill Development, Unemployability.

INTRODUCTION

A demographic dividend is the situation where in there is a decline in fertility and mortality rates boosts working population productivity. To receive the benefit of Demographic Dividend, a country must go through a demographic transition from rural agrarian economy to an urban industrial society. In the beginning stage the fertility rates fall, which leads to an increase in the labor force that is temporarily growing faster than the dependent population. This is the time the per capita income grows. This economic benefit is the first dividend received by the country through the demographic transition.

GST: AN ATTEMPT TO TRANSFORM INDIA

Merin K. Varghese

Assistant Professor of Economics, Christ College-Pune

Email id: merinvarghese222@gmail.com

Abstract

Goods and Service Tax (GST) a comprehensive dual taxation system replaced the complex multiple tax structure, which prevailed in India on 1st of July 2017. GST is expected to achieve another milestone in the economic growth of India. The primary aim of GST is to submerge the scattered indirect taxation system of India and avoid its cascading effect. GST is expected to reduce the burden on manufacturers and encourage higher production. This study intends to exhibit in detail the features of GST and how it is going to affect the common man in India.

Introduction

GST, which stands for Goods and Service Tax, was passed in the Lok Sabha on 29th March 2017. It came into effect from 1st July 2017. The objective behind implementing GST was to follow – ‘One nation one tax’ system. GST is a single uniform tax levied on all goods and services in India. It has replaced the indirect taxes like excise duty, VAT, general sales tax etc. The main purpose of GST is to fix a single Revenue Neutral Rate (RNR) on goods and services so that the total revenue of the Central Government and the State Government remains the same. GST is an attempt to simplify the giant tax structure of India, which comprised of VAT (Value Added Tax), excise duty, service tax etc. India has adopted dual GST, which means GST will be levied by both Central government and State governments on supply of goods and services. According to the weekly update report by Goods and Service Council, the revenue in July 2018 was Rs. 96,483 crore and the revenue during July 2019 is a growth of 5.80% over the revenue of July 2018. Compared to 2018, in April- July 2019, the domestic component has grown by 9.2%, while the GST on imports has come down by 0.2% and the total collection has grown by 6.83%. There are primarily four types of GST:

- SGST- State GST, collected by the state govt.
- CGST- Central GST, collected by the Central govt.
- UTGST- Union Territory GST, collected by the Union Territories
- IGST- Integrated GST, collected by the Central govt.

Tax structure before GST

The tax structure in India was divided into two parts – Direct and Indirect Taxes. Direct taxes were levied on income earned by the individuals and corporate firms, whereas indirect taxes are levied on sale and provision of goods and services respectively. The Central Government and State governments imposed most of the major taxes and the local authorities like municipality and local governments imposed some minor taxes.

ROLE OF INTERNATIONAL ORGANIZATIONS IN WORLD POLITICS



EDITORS

BISWANATH CHAKRABORTY
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THE NON-ALIGNED MOVEMENT IN THE PRESENT WORLD ORDER

R Radhakrishnan

&

Assunta Mendonca-Sandhir

The Non-Aligned Movement (NAM) which had emerged as an alternate path when the world was shaped by binary opposite camps has traversed a long journey from Third World solidarity to a guarded pragmatism in a globalizing world.

Genesis

The Non Aligned Movement (NAM) which emerged in the aftermath of independence of many colonies was a ray of hope amidst the advent of the cold war, which had emerged after the end of the Second World War. It is perceived that throughout its history, the Non-Aligned Movement had played a significant role in the preservation of world peace and security.

The establishment of the United Nations Organisation (UNO) provided the much needed glimmer of hope in the world that was trying to resurrect itself to normalcy, while the Marshal Plan and COMECON were trying to rebuild the European countries ravished from the wars, along ideological lines.

The NAM came at a very critical juncture when the UNO was under tremendous pressure in stabilizing the international order by assiduously seeking to uphold the elements of internationalism, nurturing and promotion of solidarity and called for cooperation and harmony among the erstwhile rivals in the wars fought over imperial gains and ideological supremacy.

At this juncture the Nehruvian worldview was perceived as a timely intervention that clearly sought to insulate India and other newly emerged independent nations from the vagaries of bloc politics and future conflicts and wars.

In 1960, in wake of the developments attained in the Africa Asia conference in Bandung, the move to usher in the Movement of Non-Aligned Countries got an impetus on the sidelines of the Fifteenth Session of the United Nations General Assembly, during which 17 new African and Asian countries were admitted. Leaders like Gamal Abdel Nasser of Egypt, Kwame Nkrumah of Ghana, Shri Jawaharlal Nehru of India, Ahmed Sukarno of Indonesia and Josip Broz Tito of Yugoslavia, who later became the founding fathers of the movement and its emblematic leaders, played an important role in this development.

The NAM was established based on a broader vision transcending the globe with its First Summit Conference held on 1-6 September 1961 in Belgrade. The Conference was attended by 25 countries. The principles that would govern relations among large and small nations, known as the "Ten Principles of Bandung", were proclaimed at that Conference. These principles were later incorporated as the main goals and objectives of the policy of non-alignment. The accomplishment of these principles was made as an essential criterion for seeking the membership of the Non-Aligned Movement. It was also known as the "quintessence of the Movement" until three decades ago.

The NAM filled in the vacuum created by the cold war that clearly sought to polarize the world into two diametrically opposite camps of free market economy and socialist economy, military pacts of

NATO and WARSAW. These camps rekindled the rivalry between their camp followers in the new setting, through other means which manifested itself in the political, economic, social and psychological fields.

So the emergence of NAM was a timely intervention, as it provided equidistance from both the camps and insulated the newly emerging countries from the bloc conflicts. The NAM began with a committed policy to ensure that the masses of the hitherto suppressed nations due to European colonial rule will be able to assert their freedom and self determination. India, along with other Non-Alignment Movement countries, tried to shift the global political agenda away from the Cold War to the needs of the poorer countries.

Aims and Objectives

The NAM which had emerged as a anti colonial movement and had encompassed the third world has functioned as a moral political force within the domain of the international relations.

Its primary objectives have been to respect human rights, non interference in the internal affairs of the nations, respecting the sovereignty of nations of Asia and Africa, peaceful resolution of international conflicts and promotion of goodwill and mutual interest. These objectives had emanated from the historic Bandung Conference also known as Asian African conference, which is considered to be the precursor to the NAM conference. They are considered to be very relevant since there were apprehensions about the usage of collective defense agreements to the detriment of smaller powers whilst benefiting that of the great powers. In other words the general consensus was to insulate the newly emerged independent nations from the vagaries of the super power rivalries and to instill a spirit of solidarity and partnership which paved the way for the Non-aligned Movement.

The NAM which was formed in 1961 following the initiative taken by India, Egypt and Yugoslavia, had demonstrated its capability in furthering the aspirations of the humanity and had contributed immensely towards decolonization, thus gaining enormous visibility and presence in the global politics.

The NAM started off with non-alignment wherein it was emphasized that the countries must have space to operationalize their respective foreign policy independently based on sovereign equality and peaceful coexistence. Secondly it also stressed that the countries adhering to the principles of NAM must perennially support liberation movements across the globe in order to accelerate the decolonization process, across the world.

The NAM held great promises to change the world view and influence structural changes in the way the international order had been functioning. So in other words it was an age of "belief, confidence and idealism".

Milestones of NAM

The NAM countries played a significant role in the 1970s and 1980s, for seeking a new international economic order. In this context a demand was made in the Algiers Summit in 1973 and was reiterated during the Sixth Summit in Havana. This was in line with the earlier move during the Belgrade Summit wherein a conference was sought under the aegis of the United Nations for the deliberation on the economic problems faced by