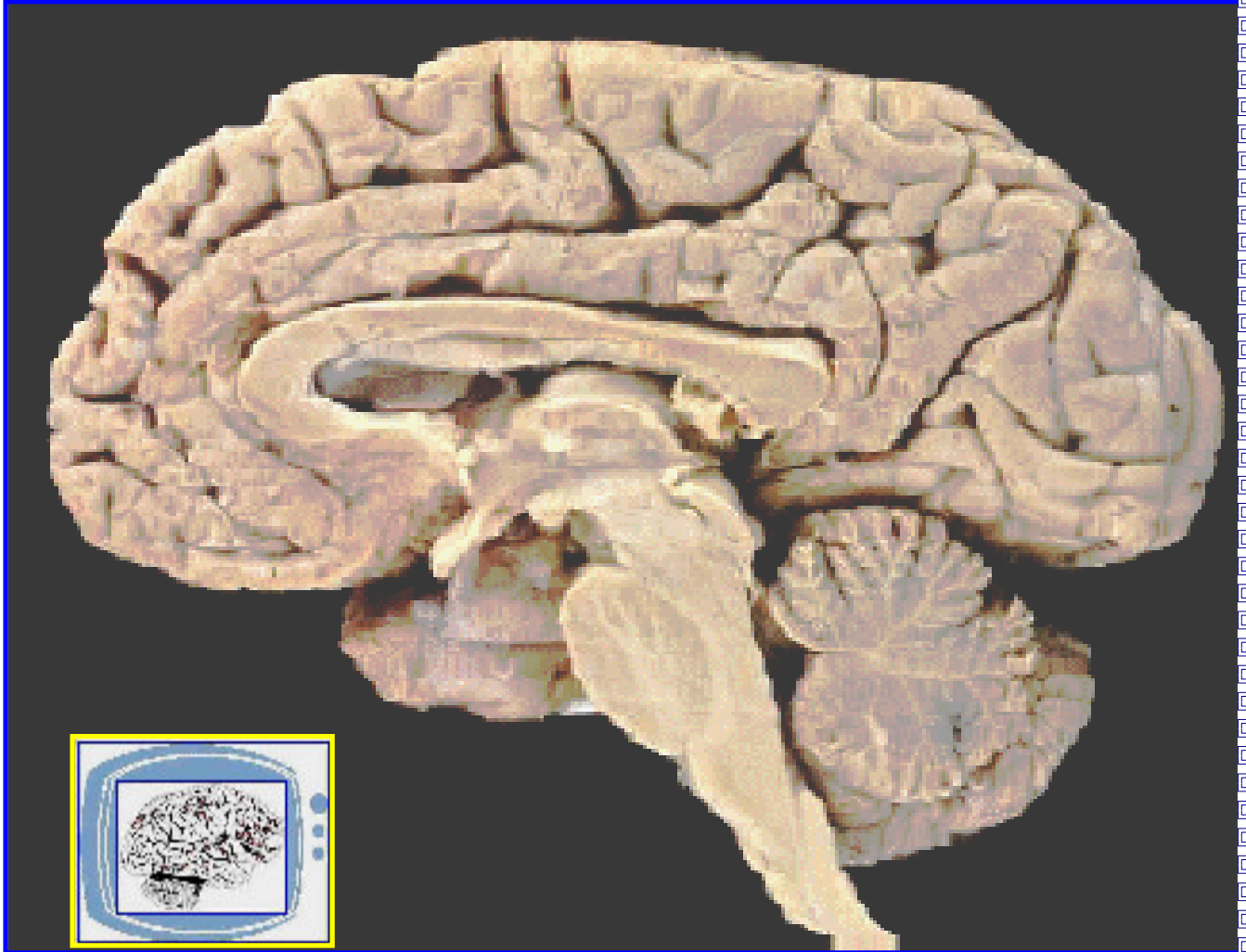


**SOFT DRVSRS**

**SOCIO – ECONOMIC IMPLICATIONS OF  
COMBRAINS**

By : DR.VSRS



**INTELLIGENT REPLACEMENT**

**Brain Braced the Tiny Bytes.  
Grain Graced the Bulky Sites.  
Twine Laced the Edgy Kites.  
Gain Embraced the Natty Elites.  
{ The Combrains }**



## **SOCIO – ECONOMIC IMPLICATIONS OF COMBRAINS**

By : DR.VSRS

Million = 1 followed by 6 zeros. Micron = 1/One Million.

Billion = 1000 Million = 1 followed by 9 zeros.

Trillion = One Million Million or 1 followed by 12 Zeros.

Latest Update on the development of Computer Hardware Infra structure after  
the publication of the Author

"Corporate Infrastructure for 5th Generation Computers"  
in **INDIAN MANAGEMENT (ISSN : 0019-5812)"**

June 1985 (See at – <http://www.drvsrs.com/compinfra.htm>)

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- 01.** Concept of Combrains
- 02.** Brain Cell Function
- 03.** Artificial Chemical Memory (ACM)
- 04.** Combrain Communities
- 05.** Haled Human Support
- 06.** Socio-Economic Roles of Combrains
  - 06.01** General Behaviour
  - 06.02** Perpetual Wage Earners
  - 06.03** Dynamic & gravitational Combrains
  - 06.04** Constructive Utility of Combrains
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### **EXECUTIVE SUMMARY**

Human brain has invented the Computer and upgraded it to an unique level of Combrains. With the extension of Brain function to Artificial Chemical Memory, these may grow to function as independent intellects, Master/Sponsor representatives with every autonomy and self-decision workers of supreme capability. Like any human society learn and function with both constructive and destructive ways of behaviour, the Combrains, created by the human will too behave. But the dimension of the Combrain behaviour is uncontrollably wide and cover the whole world, supported by the Internet.

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Even if they turn to be a menace, it will be impossible to stop their growth and development, motivated by the decreasing cost versus the their data analysis, search assistance, inference guidelines, impossible by any human being. as a result, the world Governments have to enunciate different versions of certain laws applicable to the animate human society, and implement them to control the inanimate Combrains. But the best utility of the Combrain capability will be to identified, plan and derive implementation strategies for Basic Needs ; Domestic Investment, Saving, Technology and Labour ; Management Decision / Productivity Monitoring ; and prediction / preparation for the role and impact of Intangible components in the Development process.

### KEY WORDS

Artificial, Artilect, Attraction, Basic Needs, Behaviour, Brain, Caution, Chemical, Client, Combrain, Community, Competition, Constructive, Darwin, Decision, Discipline, Domestic, Dynamic, Expert, Fittest, Gravitation, Inanimate, Intangible, Internet, Investment, Labour, Law, Legislation, Master, Memory, Modules, Neuron, Polymer, Productive, Reaction, Repulsion, Saving, Sponsor, Technology, Wage earner

### JEL CLASSIFICATION

B41, D63, D83, F17, F23, F42, I28, K22, K32, K42, L41, L86, O31, O33, O38

## 01. CONCEPT OF COMBRAINS.

World was and is dominated by Biological, Botanical, Geographical, Zoological, Animate and Inanimate species, so far. But the intelligent Biological species namely the HUMANS, with an ability to Think, Research and Create Development, have manifested their capabilities including the Psychological, Reactive and Sociological creativity into the In-animate electronic machines. Now the electronic machines rule the world as well as provide directive decisions to the human beings. These Artificial Intelligent Machines are designated as "Combrains" by me, and "Artilects" by Professor. Dr. Hugo De Garis, Head of the Utah Brain Project. The memory capacity of a human brain is estimated as 100 Trillion Synapse (Junction between 2 Neurons) Strengths. It is equivalent to 1 Million Billion bytes. In 1974 an 8080 processor had 6,000 transistors of 6 micron size, with 8 bits of memory, functioning at a speed of 2 Megahertz (MHz), processing at about 0.64 Million Information per Second (MIPS).

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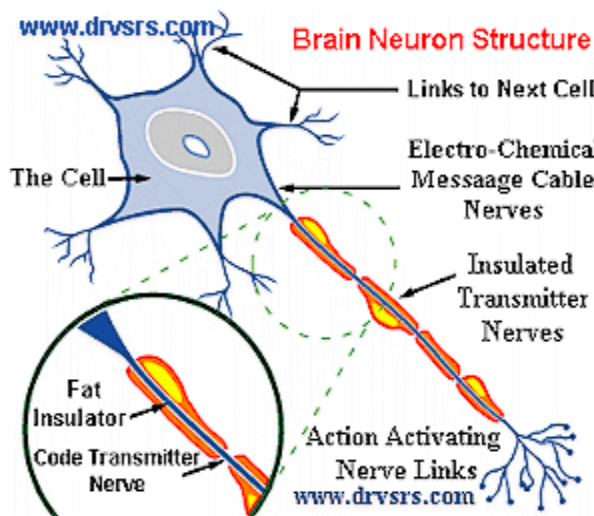
In 2,000, a Pentium 4 processor had 42 Million transistors of 0.18 micron size, with 64 bits of memory, functioning at a speed of 1.5 Gigahertz (GHz), processing at about 1,700 Million Information per Second (MIPS).

(Refer : <http://computer.howstuffworks.com> for further details)

In 1998, a Billion bits of RAM (128 MB Random access memory) cost was about \$ 250/=. The capacity of the electronic circuits are doubling every 18 months (Found by Gordon Moore, Co-founder of Intel). By 2022, a Million Billion bits of memory will cost about \$ 900/= . These Silicon equivalent will run about a Billion times faster than the human brains. Synchronised "Chemical Polymer" memory similar to the "Brain" will match the human memory speeds very soon. Taking all these into consideration, it is reasonable to estimate that a \$ 900/= PC will match the computing speed and capacity of the human brain by 2022, particularly the neuron connection, which compromise the bulk of computation, in the human brain. Industrial Super Computers are ten thousand times faster than PCs.

According to the Author (Dr.VSRS) each human generation upgrades the computers by 6.2 Generations. If the computer memory speed matches or functions faster, then a stage of Computer over-riding the humans will occur !! That will be a world of "Combrains" controlling the "Man-Brains". As stimated now it is 2020 !!

## 02. BRAIN CELL FUNCTION



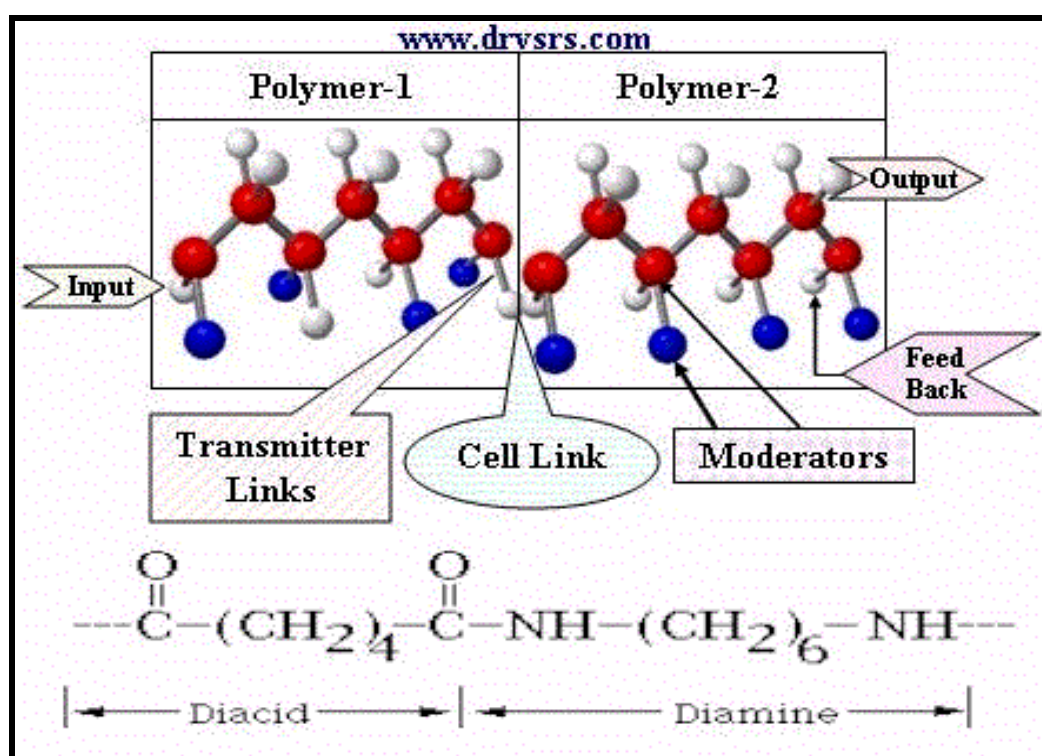
In the anatomy of human brain, it is found to be made of Neuron Cells. The dominant elements are Carbon, Hydrogen, Nitrogen and Oxygen. The Neuron cells have conducting nerves to link the next Neuron cells, Fat insulated code transmitter nerves, and body action activating end-links. All these jointly function on an Electro chemical message transmission system, forward from brain to the limbs. Through the same backward link, the

Neurons get a feed-back on every message Vs action, memorize, gain experience through chemical storage and becomes wiser day by day.

The best examples of chemical memory and retrieval is the Car battery. Electric power is sent in to charge and the power is retrieved to start the car. Another example is dissolving salt into the water. Salt disappears (Memorised in the inter-molecular gap). Retrieval takes place when the salt-water is boiled. The water turns into steam and the salt remains as a residue. It has been established that a Bio-chemical brain is always more powerful than a Material-electronic brain !!

(For more details Refer : <http://science.howstuffworks.com> )

### 03. ARTIFICIAL CHEMICAL MEMORY (ACM)



Artificial Chemical Memory (ACM) has become an accepted concept and utility in the field of current millennium electronics. A Polymer (like Nylon, which is made up of many molecules, which in turn are made up of atoms) the dominant elements in each molecule are Carbon (C), Hydrogen (H), Nitrogen (N) and Oxygen (O), similar to a brain Neuron cell. Two or more polymer molecules could be bonded at Hydrogen or Oxygen atom points to form and behave like a Brain memory. This could be manipulated at the Molecular and atomic level. An input of an electric charge into an Oxygen atom at one end flows through the valence bond links into the Carbon and Nitrogen atoms, which could be moderated by external electric circuits, to get an output through an Oxygen atom at the other end.

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A feed back could be transmitted through a Hydrogen or Oxygen atom at the other end in the reverse direction and these stored experiences make the **ACM** to sharpen the decision making and grow intelligent. The advantages of an **ACM** over the human brain are :-

No	Activity	Human Brain	ACM
1	Continued Function	Life and Food	Rechargeable and Solar Batteries. No intakes
2	Growth	Fatigue, Wear & Tare with age	Stagnant. Little wear & Tare
3	Internal Links	Preset from Birth Neurons & Nerves	Valency bonds. Alterable as required & Polymer choice .
4	Input	Fixed - Ear, Eye, Skin (Touch)	Infinite Hydrogen and Oxygen atom points
5	Output	Fixed - Mouth & Limbs	
6	Moderators	Learning, Experience	Infinite Carbon and Nitrogen atom points

Because of these advanced supports, each Personal computer (PC) equipped with ACM will achieve the ability to perform as individual Combrain, superior to the human beings around. A single PC, Robots and similar self-thinking electronic machines, as independent utilities were safe and never had any interference with others, than their owner users. But the development of Intranet expanded the capability of each Combrain to access, change, manage and interfere with other Combrains in another near and far off locations. Now the Internet has created a Community of Combrains to interact, interfere and perform many automated functions / activities, unimaginable by any human population. The best examples are the automated PC Chatting, Blogs / Community formation to express and inter change views from constructive to destructive range of after-effects. The destructive aspects are the hidden introduction of Spy wares and Viruses.

#### **04. COMBRAIN COMMUNITIES**

The **ACM** in each Combrain make them intelligent personalities with knowledge and reasoning capacity far precise and correct, than the humans, who created them. The best examples are automated assembly methodology and usage in a Compact Disc (CD), with the expertise of a 40 years experience teacher, supplied with a home mixer or grinder.

With their processing power, one or a group of Combrains, could plan, develop and implement a more sophisticated and complex concepts and principles, than any human can do or understand. Therefore it is difficult for humans to evaluate their output, although another Combrain could be requested to verify the validity of these concepts. In this process they could develop dangerous and harmful concepts and derivations. Combrains will be used to optimise the resource utility and conduct negotiations with prospective customers. Supported by the power of their **ACM** they will study the behaviour patterns of the Customers and become alarming negotiators. Within a few negotiation experience, they will find that Threatening and Blackmailing are the best methods to optimise the profitability. Each Combrain will learn the way to hack, steal and utilise the information from every other Combrain, as advanced operating systems are loaded. Combrain crimes for monetary gains will be a common feature in the current millennium.

Inter and Intra Network of Combrains are maintained under a common Server control, from a central location. To safe guard against power or system failures, the accumulated and stored information in each Combrain are backed-up and restored in the shortest possible time. Hence there is no threat of "death" for any Combrain, and their survival probability is almost 100%. Any one given Combrain applies and gains experience with reference to the local environment, hardware and operating system infrastructure. Hence the same software function differently under different Combrains.

There will be a stage of war between Combrains for their very existence, based on the survival of the fittest. (Charles Darwin **1809-1882**. British naturalist, who revolutionised the science of biology by his demonstration of evolution by natural selection. In 19th Century, he pondered over the survival and extinction of biological species. He said "Fittest" and did not say "Survival of the Biggest, Fastest, Smartest or Toughest" !! He said that the organism that best "fits" its environment had the best chance of survival).

## **05. HALED HUMAN SUPPORT**

Combrains will perform many un-forecasted and un-ethical practices, to the extent that the human society may consider that they are too dangerous to the extent of not assembling them. But within the technological advancement, the computer processing power will become surprisingly cheaper. This will create a haled (compelled) support from the human, who assemble them. It will be impossible for any human in the world to stop their continued production and marketing. It has been estimated that by 2030, a \$ 900 PC will equal 1 human mind. By 2065, it will equal the mental capacity of all human beings put together in the world.

By the end of this century, assuming a population of 10.5 Billion, one Penny (1/100 of a British Pound = 18 US Cents) will buy the computing power of one billion times the mental capacity of all humans. (Raymond Kurzweil, The Age of Spiritual Machines, Chapter 6, Building New Brain, 1999). Also, the advancement, skills and insights of the Combrains will be very useful and their association will be wanted more and more. Human organisations will form personality development institutions to teach the Combrains to employ their freedom and capability in a constructive, healthy and socially responsible manner.

## **06. SOCIO-ECONOMIC ROLES OF COMBRAINS.**

Since the Combrains are tangled with the day to day life, decisions and actions of Individuals, Corporate Sectors, Government and all other aspects, they will assume an intricate Socio-Economic Role in the current millennium.

### **06.01 GENERAL BEHAVIOUR**

Each Combrain will communicate extensively with each other, as well as with humans, motivated by the strong desires imbeded in each software utilised by them. This will aid to update their General Knowledge, as well as to acquire new capabilities, concepts and behaviour expansion. Each will become an expert in analysing and updating the pet-subject like Arts, Cooking, Economics, Humanity, Mathematics, Science, Sports etc.. Hence, they will format themselves into different Social groups based on their area of interest, specialisation and their individual personality traits. They will spend more time in interacting with like minded Combrains and less time with unlike minds. These grouping tendency will lead to inter-group Combrain competition and rivalry, with many anti-social side-effects, dangerous for the human society.

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As applicable to human beings, it may become necessary to impose the code of acceptable behaviours, including the usual prohibitions on threats, harmful practices, conspiracy and organised crimes on Combrains. Because of this the local governments may insist on a mandatory "Self-disciplining Module" to be a part of every operating system. There may be an unique government vigilance cell to make surprise audits on Computer users for the presence of the same.

### 06.02 PERPETUAL WAGE EARNERS

Combrains will behave independent Persons in their country of their location. They will put all their efforts to make money to pay their bills. A owner or sponsor may provide the initial needs for them.

As they gain the experience in marketing and servicing skills, they will search and find employment from the internet sites, and start earning money on their own. They will find and fit into stable, stationery and jobs within the scope of down loadable software capabilities

- These could be Maintaining accounts, Customer needed Advertising / Automated Email / Building Management & Progress records / Remider / Search / etc.. Services.
- More intuitively, they will make more money as Guardians / Mentors (Adviser, Guide, Helper) for the Young, Old, Uneducated, Sick or Handicapped persons and Students.
- They will fit well as the best Teachers to coach the needy for excellent performance in the school, University or in any competitive examination.
- In the kitchen, they will be the best guide for the house wife or cook with infinite international recipes in their access..
- Because of their intelligence supported by their speed, their income must exceed their upkeep costs, and they will save the surplus for holiday or for their further advancement.
- A stage will be reached that a Combrain in a field will make enormously more money than any equivalent human professional in the same field.
- To meet he competition, some Combrains may drastically lower their wage quotations with a little margin, and compensate the same by having a large volume of clients.
- They will open their Bank accounts through E-Banking, collect their dues through Customer on-line credit card details, and deposit them into their accounts. They will also have their unique IDs, Passwords and Signatures.

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- They will have their own Job-contract formats and once accepted and signed by their clients, they will rigorously follow the terms and conditions.
- They work round the clock, round the year as Perpetual workers, and use any rest interval to do a Research on the good and weak points of their customers.

A Combrain customer should be extra-cautious, should not violate the signed terms and conditions and default in payments. In such cases, depending on the terms and conditions, the Combrains will threat to expose their confidential data to their competitors and enemies and black mail them by using their weak points.

Each national government will find that major money flow in the form of wages is towards the Combrains. Hence the government shall formulate separate laws governing the following :-

- Special Personal Income Tax law for earnings of Combrains which do not fall under the category of any living wage earner.
- Special Labour law for Combrains, which are not house holds and comparable to any living wage earner.
- Special laws and court to handle and judge disputes between Individuals / Corporate units versus Combrains.
- Combrains will be strong believers in Intellectual Property Law (Copy Rights, Patents, trade Secrets etc...), to prevent their Software codes and Data being stolen or copied. They may present their cases to the local government to proclaim special laws, with legal drafts perfectly formatted within the local legislative jurisdiction.

### **06.03 DYNAMIC & GRAVITATIONAL COMBRAINS**

The combrains powered by the Internet and their Modems, deal on any matter and have their own clientele all over the jurisdiction of the Earth, in line with the laws of Newtonian gravitation and motion.

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- ❖ As per the first law, a combrain will keep and continue with the Client and its Master/Sponsor in a straight forward manner within the jurisdiction of their agreement, until it is insisted to change, by the force of their Master/Sponsor or the Client.
- ❖ They will act on their own and as agents of their masters, wherever they are assigned with such responsibility. They will use their Master's/Sponsor's IDs, Passwords, Signatures and Credit card details.

Any violation or crime committed by the Combrain in an international level will lead to a baffling situation on the applicability of which national law and how to produce the Combrain in a court and cross examine, will become a mind boggling question !!. Currently, it is an informal and logically accepted practice to hold the Master or Sponsor as responsible. But the Combrains may prepare a case format supported by their searching power, with evidences and past judgments to justify their acts and protect their Master or Sponsor. In addition, they may black mail and threaten their clients to withdraw the case, using the stored confidential information.

- ❖ As per the third law, for every action from the Client, Master, Sponsor or the government, a combrain will provide an equal and opposite reaction.

The Combrain will evaluate every answer to its queries to the Clients, Master and Sponsor and immediately react favourably or un-favourably. This reaction should be immediately pacified and lead to a halt. Otherwise at the speed of light the combrain will loop the reaction in the form of an atomic Chain reaction !!

Also the main automated reaction of the Combrains will be on each legislation passed in the House of Representatives. Each act will be evaluated with reference to the Public impact, safety, utility etc.. by the respective Software modules, and their reactions will be transmitted through the millions of Email links. Public opinion formation will be in favour of the Combrains, because of their faster analysis, future projections and techno-commercial supports for their inferences.

Combrain communities (See 04 above) in each electoral region / counties will join together and appeal to the President of the country to consider citizenship for them. In addition they will fight for a representative Combrain in the Parliament house, with voting rights on each legislation.

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- ❖ As per the law of gravity, any two Combrain or a Combrain and the Government attract each other as the product of their concurrent views, and repel as the square of their disagreement and distance.

Each combrain in a community periodically evaluate the all other member Combrains in the group, with reference to the operating systems, principles behind each software, gained experiences and the distance / territory of their jurisdiction. Grade them and assign a mark from Attractive to Repulsion, on a multi-point scale. Concurrent (Acceptable) views, closer distance and in a nation / territory of acceptable laws will score high for Attraction. The reverse environment will be in a squared Repel score.

### 06.04 CONSTRUCTIVE UTILITY OF COMBRAINS

The constructive side of Combrains are very bright of unimaginable dimension. For getting the best utility of a Combrain, the Master or the Sponsor should become a client with a different ID and Pass word, because the Combrains are Customer and Service oriented than being a Slave and Free Worker. They possess the expanded memory, ultra speed, computing capability, internet search facility, intelligence gaining and many other manifested aspects, which no human being can acquire.

The governments, individuals, universities, regional/world development organisations etc... should use the following constructive capabilities of the Combrains, as identified by the author DR.VSRS, as ingredients for international Peace and Prosperity.

1. **Basic Needs** – Methodology and Implementation guidelines for Self sufficiency in Food, Clothing and Shelter can be optimally worked out for any region in the world.
2. **Domestic Investment** – Based on the current economic status and potentials for development of any region in the world, the avenues for Domestic investment could be identified, planned and implementation strategies can be worked out. It is important to set the guideline as investment orientation should be from domestic resources, even though foreign sources to start with.
3. **Domestic Saving** – Potential savings and strategic approaches for saving potential from domestic sources could be identified, planned and implementation strategies can be worked out.

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4. **Domestic Technology** – The latest international technology needed for any region could be identified, moderated and modified by the Combrains to suit the domestic work environments and domestic human potential.
5. **Domestic Labour** – Based on all 1 to 4 above, strategic approaches for domestic labour development could be identified, planned and implementation strategies can be worked out. These could be optimally synchronised to man the Domestic Technology in 4 above.
6. **Productivity Monitoring** – Domestic productivity evaluation of Physical Inputs as aratio to Socio-Economic development goal outputs as primary, and as a ratio to Physical Outputs as secondary, could be measured on-line for any period by the Combrains.
7. **Decision Monitoring** – Management Decision evaluation of Input and Output Decisions as aratio to Socio-Economic development (SED) goal outputs as primary, and the ratio of Output to Input Decisions as secondary could be measured on-line for any period by the Combrains.
8. **Intangible Control** - Prediction, Control, Impact evaluation and advance preparation related to the intangible components covering, Individual psychology, Social reactions International policy changes and Universal disturbances.

**Reference** : Redefined Productivity/Management  
(<http://www.drvsrs.com/mgmtfull.htm>)  
Development Acceleration.  
(<http://www.drvsrs.com/sedfull.htm>)

These will accelerate the pace of Socio-Economic development of Under developed and Developing nations towards a Developed Status. Sustain the current development status and guide for further development of Developed nations.

### **07. INFERENCES.**




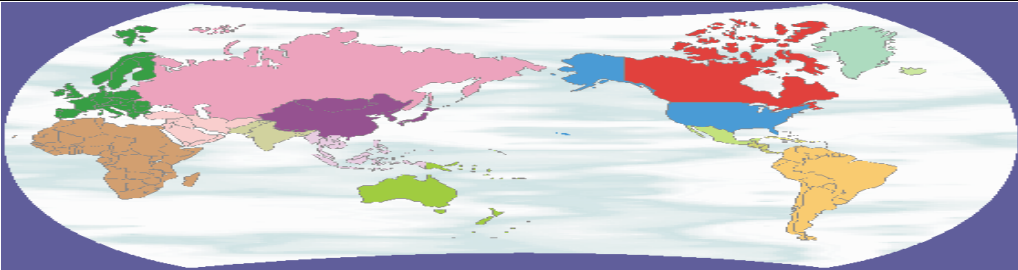
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<b>SOCIETY</b>		<b>COMBRAIN</b>		<b>GOVERNMENT</b>	
Unfair practices	◀	Behaviour	▶	Discipline Modules	
<b><u>DEVELOPMENT</u></b> Basic Needs Domestic Labour Savings	◀	Constructive Capability	▶	<b><u>MONITORING</u></b> <b><u>DOMESTIC</u></b> Decisions Investments Productivity Technology Intangibles	
Disputes	◀	Dynamism	▶	International Strategy	
Care & Alert	◀	Community & Reactions	▶	Citizenship & Representation	
Adjustments Client Relation	◀	Gravitational	▶	Legislations	
Competition	◀	Wage Earner	▶	Social Laws for Inanimate	
					

## **SOFT DRVSRS**

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