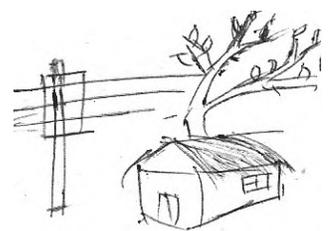


Social Life and Economics





Social Life and Economics

[Review Version]

About Review Version

This text introduces the Nonprofit Economy. Nonprofit Economy is an alternative economic setup for people who are dissatisfied with current conventional economic setup and are looking for alternatives.

This text is available in the free and open access at no charge for the access of everybody. The electronic version of this text can be downloaded at no charge from the below mentioned website.

This is the Review Version of this text. The review version implies that the solutions/Mechanisms given in this text are not yet tested in the real world for its legitimacy and hence not yet verified.

Nonprofit Economy is a project under development. And therefore this text is under the phases of continuous revision and development. Readers are requested to check for the latest version of this text when they are reading it. You can download and check for the latest version of this text at the project website: <http://nonprofiteconomy.wordpress.com>

English is not my native language so readers can expect some language errors. But still I have made efforts to ensure that people are able to understand the language.

Version: 1.00



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Section 1:

Basic Economic Setup

In this section we will discuss and study the basic economic setup of the Nonprofit Economy.

To have a healthy economy and society the first thing that we need to learn is not economics, it is not science either. The first thing that we need to learn is how relationships work. So let us start from the basics let us keep the economics aside for a moment and first learn about how relationships work.

Imagine that you are a fifteen year old guy and you have a loving family and lots of friends.

Your dad brings your favorite stuff whenever he goes on an office trip.

And your dad has enough time for you to work with you and help you to work on your favorite projects.

Your mom loves to cook favorite recipes for you and your friends and she knows exactly what you and your friends like.

An Experiment of Home

Your exams are over and fortunately you are not required to see the face of your teachers and having to open your books for the rest of two months.

You spend all your time playing with your friends and your parents will not say you to stop playing and study instead because you are on the holidays.

You also have a dog in your home who greets you by wagging his tail whenever you arrive at your home.

Now let us carry out an experiment in this home

All the members of the family will work only for personal gains and monetary incentives. Whenever your mom cooks dinner for you and your father, she needs to be paid some incentive.

If your friends are not interested to play with you or play a particular game which you want to play. You can pay them some incentive and they will play with you whatever game that you want to play.

There will be negotiations. Everybody wants to earn more profits. Your mom wants to earn more profits so she will try to negotiate the price of her job and ask the maximum that she can get from you and your father for the job of cooking food for you.

Your friends want to earn more profits, your mom wants to earn more profits, and your dad also wants to earn more profits so there will be negotiations in every relationship. You want to minimize your spending so you will try to negotiate and make them work for lower costs as much as you can.

You can make your friends play any game with you, even the game they dislike the most, the only thing that you need to do is to pay them more money.

You do not have a job and earn anything currently but fortunately the bank has provided you a loan which you can repay later in easy installments when you get older and get your own job.

You have to pay to your mom to make her cook dinner for you.

You have to pay to your father to work with you on your projects.

You have to pay to your friends to make them play with you.

You have done your calculations, how much salary you are expected to earn you start your first job at the age of 18 and how much you will earn in your future. The bank has provided you enough loans which you can repay later in easy installments.

According to your calculations you have enough money that would easily last for all of your needs for the two months of your holidays. Calculations say everything is just perfect.

You have spent your perfect two months of holidays and now it's time to go to your boring school and study the boring subjects.

You are told to write down what are the differences you observe in the holidays you spent in this year and the holidays you spent in the previous year.

Expected Observations

Going to school studying the subjects you don't like doesn't sound so much painful because the home and your friends are no longer interesting.

You realize that you enjoy spending time and playing with your dog, more than you enjoy playing with your friends. You don't even remember the name of few of your friends.

You feel really lonely and alone with your friends and family, it doesn't even feel like you have a home a family and your friends. Your dog is the only one who is closer to you even if he cannot talk to you and speak to you in your language.

You still remember each and every moment you spent with your friends and your parents in the holidays you spent in previous years but you don't remember any special moment of this year's holiday's it feels like time has passed by so fast, two months felt like a week.

Your mom loves to cook because making you happy used to make her happy. Negotiations and being focused on incentives will make her difficult to focus on your happiness. She no longer enjoys cooking as much as she used to enjoy previously. Your mother will lose interest in cooking. Your mom no longer remembers what you like and what you do not like.

There is no harmony in relationships, small disputes and differences in opinions will take shape of big arguments. Your friends will not accept any flaws in you and your behavior. Your behavior needs to be

perfect with everyone like agreements signed on the paper of deeds. If you make any mistake you will be fined and punished for it. You will be nitpicked and judged. You no longer feel loved by your parents, and your friends.

You might end up hurt and dejected and while you lay down in the outdoor beneath a tree in the moonlight with your dog and watch the beautiful sky the only question you will have in your mind is what is wrong with everyone and what is wrong with your life.

The family members will stop caring about each other, and there will be lot of loneliness in the home.

The home will no longer remain a home. The family will no longer remain a family but just a collection of lonely individuals.

What do we learn from this experiment?

The feeling of home and a family disappears when people insist on/resort to personal gains and expectation of incentives in relationships.

The feeling of home and family is due the fact that the people and the family members take care of each other without any expectation of incentives or something in return.

This is the reason why your home feels like a home. This is the reason what makes your friends and family dearer to you because your relationship with them does not involve you being focused on personal gains because you take care of your family members and your friends without any expectation of incentives or something in return.

Now what will happen if we stop being focused on personal gains and incentives in the relationship with every person in the society whether it's the doctor who treats you, the engineers who build your home, and the teachers who teach your children?

The feeling of home will extend. Your family and your home will become a lot bigger and will include many more people. Your entire community, your entire society would become your home.

Isn't the Earth our only true home in this big universe, the only place we know as home?

Let us try to compile what we have learned through this experiment.

Helping other people, taking care of the needs of other people, and making other people happy is the only thing that motivates people to do their job.

Incentives, profits, and personal gains do not motivate people to do their job. This is how human beings function.

Human Services and Incentives

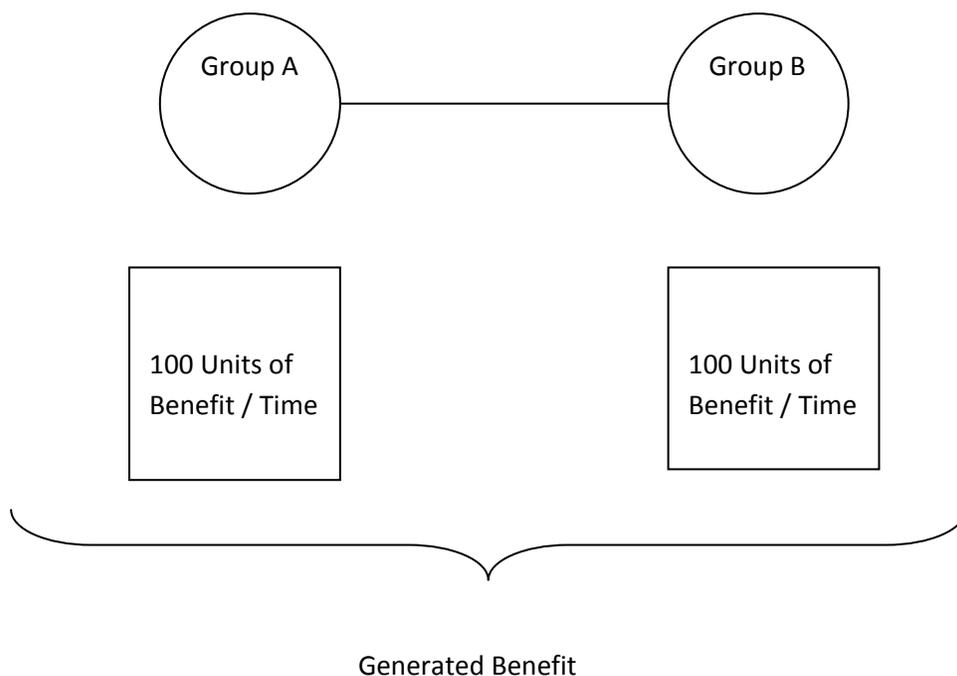
What would happen if people work for incentives or they are made to work for incentives? Because people are focused on incentives or personal gains, they would fail to focus on the needs of other people and because they are not focused on the needs of other people they would lose interest in doing their job. They would not find their job interesting and their interest in doing their job will drop. The quality of the services will also suffer.

It is not in the nature of human beings to work for incentives and profits or expectation of something in return. People can off course work against their own nature. We can off course work for incentives and with the expectation of something in return but that would produce inferior results.

Incentives or the expectation of something in return or personal gains put a layer of isolation between the people and their job. The people who are doing their job fail to see how their work is helping other people. So they lose their interest in doing their job.

A relationship could be between two entities. An entity could be an individual or a group of people.

Elementary Relationships in Nature



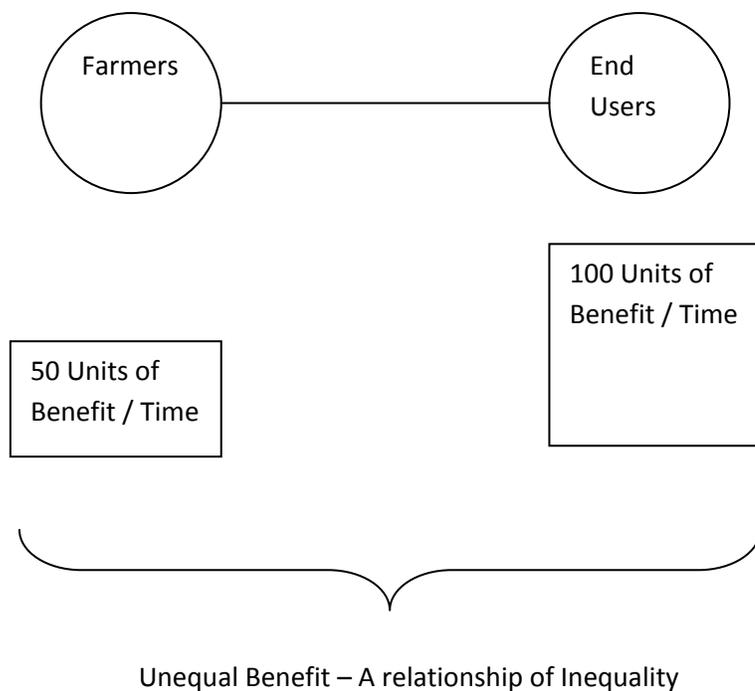
In a normal relationship both the entities benefit equally from the relationship. So give and take doesn't make any sense in this relationship.

But in the human society everything tends to deviate from the truthful behavior and the relationships also tend to deviate from its truthful behavior.

When the relationships tend to deviate from its truthful behavior it no longer remains a relationship of equality. But it becomes a relationship of inequality.

Consider an example: A relationship between farmers and the End users.

The farmers work hard in the fields under the sun to grow the crops so that we have the food to eat and the only thing that we need to do is to eat the food. This is definitely not a relationship of equality. Because farmers are taking a lot more pains and therefore they need to be compensated for that.



The code of morals and ethics say that when we have taken something from someone we need to give it back because if we do not give it back it is equivalent to stealing. Therefore we need to compensate the farmers for the extra pains that they have taken for us.

Therefore we need to have the concept of compensation in order to balance and compensate for the inequalities in the relationship. The concept of Compensation is not same as Monetary Incentives. These two are different things.

The Nature takes care that all the inequalities in the relationships are balanced and compensated appropriately. This is something that Nature does automatically even if we human beings are not aware of that.

Compensation and Incentives are two different things let us try to understand the difference between the compensation and the incentives.

Let us first discuss the dictionary meanings of the two terms.

Difference between Incentives and Compensation

Dictionary Meanings of the term Compensation and Incentives

Compensation: Something, typically money, awarded to someone as a recompense for loss, injury, or suffering

Incentive: A thing that motivates or encourages one to do something: "incentive to conserve".

In the Nonprofit Economy what we have is a concept of Compensation. In Nonprofit Economy we do not have the concept of incentives and particularly the monetary Incentives. Money is not supposed to be used as an incentive to motivate people in the Nonprofit Economy because it is not a proper motivation for doing your job.

Let us try to understand the meaning of monetary incentives and compensation by understanding the difference between the two terms.

People are provided compensation in order to balance the inequalities in the relationship. Even though we have compensation in the Nonprofit Economy but doing your job with the expectation of compensation is again not good ethics because if you live this way you will never really grow up.

Maturity levels, competence of a person is not a criterion for deciding how much compensation a person gets, the compensation is there to balance the inequalities in the relationship and is proportional to the suffering that the person goes through while doing its job. The suffering could be a physical suffering or an emotional suffering.

A job that does not encompass any physical suffering or emotional suffering would have lower compensation even if that job requires higher levels of maturity levels.

Expectation of Incentives is an outcome when people are focused on personal gains. There are no ethical limits for the incentives. When people are focused on incentives they do not care about the boundaries and ethics. Because there are no ethical boundaries and limits on how much incentive a person is supposed to get. People who are focused on monetary incentives and personal gains tend to manipulate the situation and do not bother even fooling other people and taking advantage of their

physical weakness, emotional weakness and intellectual weakness in order to maximize the incentives and profits.

When people are doing their job with the expectation of monetary incentives they often end up crossing the ethical boundaries and end up taking much more than what they deserve.

Nature provides many facilities to the human beings. The trees provide you shade, they purify the air, regulate the temperature and make it more comfortable.

We can see that nature provides you so many facilities but we can also see that Nature does not ask you to pay anything for these facilities. Nature does not ask you for any payments or any monetary incentive for providing you all the facilities that it provides you. Our parents and family members do not ask any incentive for taking care of your needs. And you can see the difference between your home, family and friends and the rest of the economy.

About Nonprofit Economy

What can we learn from Nature, our parents and teachers?

Doing your job with the expectation of monetary incentives (or anything else in return) is not good ethics. It is not a truthful behavior.

Therefore in order to bring people closer to the truthful behavior in the Nonprofit Economy we encourage people to do their jobs as a part of their responsibility in the society without any expectation of monetary incentives or anything else in return.

There are two kinds of Earnings in the Nonprofit Economy.

- a) Resource Earnings and
- b) Services Compensation

Total individual Earnings = Resource earnings + Services Compensation

Let us discuss each of them.

Resource Earnings

I am only providing you a short introduction here because we are going to discuss more about the resource earnings in the other topic.

In the economy raw resources are scarce and therefore raw resources have a cost. Raw resources are provided to us by the Nature. So according the truthful ethics the Nature is someone who actually deserves the cost of raw resources - the money that is generated by selling the raw resources at their origins. But Nature is not asking for the money from human beings. Therefore In this situation for the

sake of simplicity we consider that citizens of the state deserve this money. This money is distributed to the citizens by dividing it equally among them. We call it the Resource Earnings.

We will discuss more about the distribution of Resource Earnings in the topic “Resource Distribution Mechanisms”.

Services Compensation

Services compensation is what you get as compensation for doing your job in the economy.

Total Individual Earnings = Services compensation + Resource Earnings

Nonprofit Economy – An Introduction

In order to encourage people to do their job without any expectation of monetary incentives In the Nonprofit Economy we have an ethical limit on the Services Earnings. Ethical limit is a limit that is accepted by the majority of the citizens in the Nonprofit Economy and this ethical limit is not enforced with the legislative restrictions. It is up to a person/individual to choose for himself whether he desires to live with those ethical guidelines or not. It is legal in the Nonprofit Economy to not accept to live with the ethical limit when you are being honest about it.

At this point there are many questions that would naturally arise in your mind particularly about the sustainability of the Nonprofit Economy.

When we are having an ethical limit on our services earnings in this situation how much would be our earnings. Would that be sufficient enough to take care of our needs?

So we will discuss these questions and the various issues regarding sustainability of the Nonprofit Economy in the topic “Sustainability of the Nonprofit Economy”.

Ethical limit on Services earnings is the maximum Services earnings that the individual accepts to have in the Nonprofit Economy.

In the nonprofit Economy,

Total individual earnings = Services Earnings + Resource earnings

Consider an example: If the ethical limit on the services earnings is 50% for a Nonprofit Economy. In this case the individual accepts to limit his services earnings and not to exceed them more than 50% of the total earnings.

In the Nonprofit Economy citizens choose for themselves what ethical limit they want for themselves. If majority of the people feel that 50% is the appropriate ethical limit for them in this case the 50% would be the ethical limit for that state.

Different instances of the Nonprofit Economy can have different values of the ethical limit. The ethical limit is based on the various factors like maturity levels of the people, the limit people are comfortable with and other such factors.

In the Nonprofit Economy the Resource Earnings act as a means of financial security. Therefore people are not dependent on their jobs for the financial security.

There are many other benefits that come with the financial security and the ethics of the Nonprofit Economy. We will discuss those benefits in the different parts of this text.

Instructions for Reading

This text is not yet in a fully developed stage. So while reading if you find any parts where you are finding it difficult to understand an idea or a concept do not worry because the topic may require more explanation.

Feel free to skip a topic or jump into any topic wherever you feel appropriate.

If there is a topic that is difficult to understand I will try to put more explanation and make it more comprehensive In the future versions of this text

Sections

This text is divided into various sections

- Basic Economic Setup
- Educational Setup
- Mechanisms for Social Administration
- Ecosystems and Relationship Diagrams | Structure of Relationships
- Mechanisms and Services
- Ethics, Values, Culture and Society

Let us discuss each of them in detail.

Basic Economic Setup

In this section we will discuss and study the basic economic setup of the Nonprofit Economy.

Educational Setup

Nonprofit Economy is based on different set of ethics and values which are different from the ethics of conventional economy. Due to differences in the ethics there is a change in the culture and therefore we can expect to have some fundamental changes in the educational setup. The educational setup that exists in the Conventional economy would not work in the Nonprofit Economy. In this section we will study what kind of educational setup would be suitable for the Nonprofit Economy.

Mechanisms for Social Administration

Differences in the ethics and change in the culture provides us with a scope to simplify the social administration in the Nonprofit Economy. We will study some mechanisms in order to simplify the social administration which can bring more transparency, flexibility and accountability in the social administration.

Ecosystems and Relationship Diagrams

Inefficiencies in the ecosystems results into inflexibility, wastage of manpower and resources. We will study that ethics of the conventional economy is something that are acting as a bottleneck to improve the efficiency of the ecosystems that exist in the conventional economy. In the Nonprofit Economy these bottlenecks are removed. We will see some examples where we will discuss how we can improve the efficiency of existing ecosystems and how it could benefit the economy and people.

Mechanisms and Services

If we study the current situation we will observe that the ethics of the conventional economy is currently acting as the bottleneck for the further development in the field of engineering, research and technology.

Consider a scenario and current situation in the software industry.

The progress in the software and technology is being stalled and bottlenecked due to the fundamental issues like lack of open standards, platform independence and the tendency to compete and monopolize the markets by the organizations. The initiatives like open source exist but the benefits of open source are not utilized to the full extent possible. The causes lie in the fundamental ethics and culture of the conventional economy. The ethics of the conventional economy is causing a bottleneck for the further progress in the field of engineering and technology.

The patents act as a huge hindrance and slow down the progress in the field of engineering and technology.

In the Nonprofit Economy due to change in ethics and culture as far as I can expect these issues would not exist. This gives us an interesting set of possibilities. It opens up an opportunity for new solutions and services and scope of improvements in the existing mechanisms and services.

For example: The data communication network in the conventional economy popularly referred to as Internet suffers from these issues.

Non-democratic domain naming system

Addressing issues- lack of address

Wastage of addresses

And some other issues

We will study how the change in the ethics, culture provides us an opportunity to improve the existing structure of the data communication networks so that these issues would not exist.

Ethics, Values, Culture and Society

In this section we will discuss various observations, conclusions and various lessons that we can learn from the Nonprofit Economy. How ethics and culture affect our lives, and our economy. What kind of changes we can expect in the Nonprofit Economy and why do we really need to have a sense of ethics in our lives and in our economy.

Notes for the Reader

Before moving forward there are few things I need to tell you about the Nonprofit Economy. Nonprofit Economy is a concept which is not yet tested in the Real world conditions. I am trying to share this concept with you just for the sake of curiosity and sharing. The discussion in this text is NOT a formal discussion and should be considered as an informal discussion - a kind of a discussion that goes between two friends.

Discussing the Nonprofit Economy with you is like I am providing you an untested software. Because the actual real world testing is not yet done therefore I cannot tell about the bugs that it might contain or might be revealed in the real world implementation.

So please forgive me if some bugs/flaws are found / revealed in future in the concept of Nonprofit Economy. If I found any flaws in this concept I will try to put that up on the project website as soon as possible.

If you find any flaws in this concept you are welcome to send it to me. I will review those flaws and if I found them legitimate I will put them on the project website.

- Sumeet

Resource distribution mechanisms are the mechanisms used for the distribution of scarce resources in the Nonprofit Economy.

Resource Distribution Mechanisms

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Resource lifecycle

Let us study how the resources originate then sustain and get destroyed/consumed in the economy. The entire cycle of the origin of resources up to the destruction of resources can be described with the help of resource lifecycle diagram.

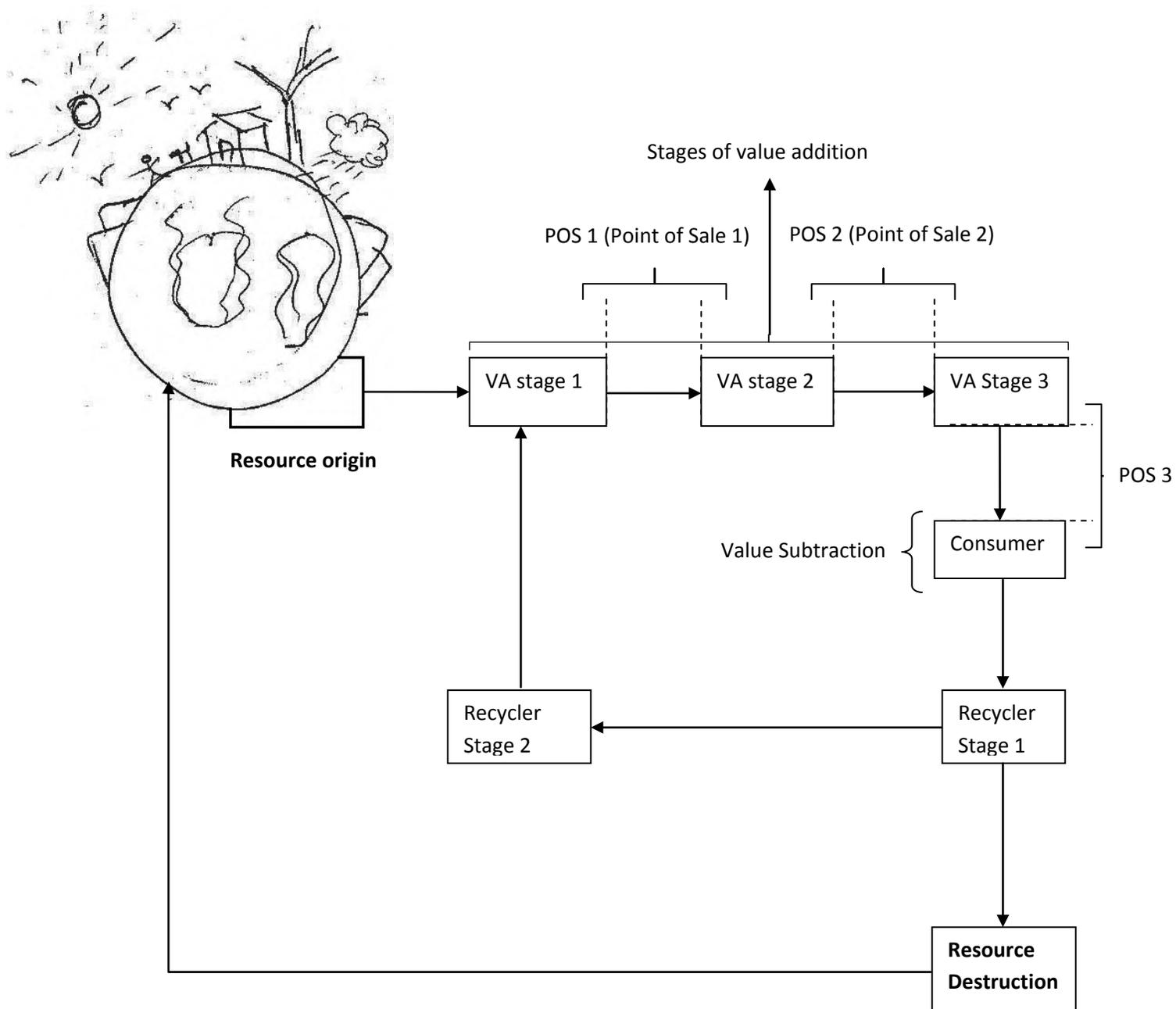


Image: Resource Lifecycle

Every resource in general has an origin. For example the origin of coal will be coal deposits, origin of steel will be iron deposits and so on. We can see that resources are obtained from their origin. When resources are obtained from the origin they are in their raw form. The resources cannot be used in their raw form. Therefore some people need to add value to those resources. We call these people value adders or service providers. Value adders take the raw resources and transform them into a useful commodity. This process of transformation can be termed as value addition. We can say that value has been added to the resources in the process of transformation of raw resources into a useful commodity.

The value can be added in multiple stages therefore the value addition can consist of multiple stages of value addition. After the value has been added into the resources the raw resources gets converted into a useful commodity. The commodity goes to the consumer who then converts the commodity into a non useful form after using it for some time. After the usage of commodity by the consumer the commodity again gets converted into a non useful form. After you have used your vehicle for lot of years your vehicle will get old and after further usage it may even get completely useless whose value will be equal to the junk. Now it's time to throw away that commodity.

So we say that in the process of usage of the commodity the value gets subtracted from the resources. We can also say that the consumer subtracts the value from the commodity. It is now time to send the resources to the recycling. The recycler converts the junk commodity back into the raw form. So recycler is also adding some value into the resources.

So we can see that in the entire resource life cycle the value adders and recyclers are adding value to the resources and the consumers are subtracting the value from the resources. And hence the cycle is balanced.

In the successive stages of value addition and subtraction the resources will be getting destroyed. Your vehicle might be manufactured from 200 kg of steel. But after recycling you might recover only 150 kg of steel. So resources are continuously getting destroyed / consumed in the economy and at the same time they are also being originating from their respective point of origins. Because resources are constantly getting destroyed so there needs to be a constant supply of resources from the point of origin of resources.

Ownership of the Resource Origins

Raw resources are not provided to us by any individual, any organization or even our governments therefore claiming the ownership of the resource origins by any individual, organization or even the government doesn't make any ethical sense. The raw resources are provided to us by the Earth and the Nature. So Earth and the Nature is the one who actually owns all the resource origins and raw resources obtained. But the Earth and Nature is not asking for any human money and it doesn't need anything from the human beings.

So for the purpose of distribution of resources in the Nonprofit Economy we will assume that the resource origins of the scarce resources that are obtained in the country are owned by the citizens of that country.

We need to note in the context of this text the "citizens of the country" and the government of the country is considered as two different entities. "Citizens of country" is not the government of that country. Government of the country would not own the resource origins, and it would not claim any share in the resource earnings.

Resource Earnings are the earnings generated by selling the raw resources at the resource origins. Citizens of the country own the resource origins so the resource earnings would go to the citizens of the country. Resource earnings are supposed to be distributed among the citizens by dividing it equally among them. We will discuss more about resources earnings later in this chapter.

Individual citizens can own the resources privately after they have paid for their share of raw resources to the end user group "citizens of the country" which is the owner of the resource origins.

Terms and conventions

Resource Cost

Resources are scarce and everything that is scarce has a cost in the economy. Therefore even if the resources are in the raw form they will have a cost in the economy. We call this cost of the resource as the resource cost.

Resource cost is adjusted by the natural demand supply constraints in the economy.

Services Cost

A service provider would add value to the raw resources and transform the raw resources into a useful commodity. He might demand a compensation for adding value to the raw resources and manufacturing the useful commodity.

Commodity Cost

When you add value to the raw resources what you get is a useful commodity. The cost of the commodity involves

Commodity cost = Resource Cost + Services Cost

This resource cost would include the cost of raw resources that goes into manufacturing that commodity and it would also include the cost of resources that are consumed/ used in the process of value addition.

Resource Origins

Resource origin is the point from which the raw resources originate in the economy.

Resource Earnings

Earnings generated by selling the raw resources at their origins are the Resource Earnings. Resource Earnings go to the owner of the Resource origins. In the Nonprofit Economy we consider citizens of the country as the owner of resource origins so the resource earnings would go to the citizens of the country.

We can see that there needs to be constant supply of raw resources in the economy in order to compensate for the destruction/consumption of the raw resources. Therefore there is a constant supply of the resource earnings in the Nonprofit Economy.

Resource Earnings provide financial security to the people and people are not dependent on their jobs for the financial security.

Simple mechanism for distribution of Resource earnings

Each resource has an origin. The resource origin is the point from which the resources are originated and enters into the economy.

Say for an example if we consider the case of iron and steel the resource origin in that case would be the iron deposits.

The ownership of the resource origin of all the raw resources in the country is held by the group "citizens of the country."

That would mean all the iron deposits in the country would be owned by the group "citizens of that state".

The raw resources would be sold at the resource origin at the market prices which depends on the scarcity of the given resource.

The profits earned by selling the resources at their origins would belong to the group “citizens of the country”.

These profits need to be distributed to the people/citizens by dividing it equally among all of them. Say for an example, if 100,000 bucks are generated as profits and there are 1000 people in the state, each person would get

$(100,000 \text{ profits}) / (1000 \text{ Number of people})$

= 100 bucks

These 100 bucks is the resource earnings for each person of the State.

In the economy which has the Resource distribution mechanism people can have two kinds of earnings.

Resource Earnings - Earnings obtained by the people due to ownership of the resources obtained in the state.

Service Earnings - Earnings obtained by the people as a compensation for offering the services in the economy in simple language it is the earnings that you get as a salary for doing your job.

So we have now understood the underlying concept of the distribution of Resource earnings to the people.

Examples of Resource Origins

Agricultural farms, Metal Deposits, Forests, Wireless Frequency, petroleum deposits, sources of electricity, Coal deposits

Distribution of Resource Earnings

Resource origins are owned by the citizens of the country. Therefore resource earnings are distributed to the citizens by dividing the resource earnings equally among them.

In the Nonprofit Economy Each citizen has a Resource Earnings Account in which the citizen would get his share of resource Earnings.

For example:

If 1000 bucks are generated as resource Earnings and there are 100 people in the country. Then each person would get $1000/100 = 10$ bucks.

Adjustment of costs

The costs of resources and commodities are adjusted by the natural demand supply forces existing in the economy.

The cost of a non-scarce resource is zero.

This natural regulation of costs ensures that people have proper share of production and the economy is free from the situations of panic and there is a proper distribution of scarce produce among the people.

Implementation of Resource Distribution Mechanisms

The current topic contains only the overview of the basic ideas of the Resource Distribution Mechanisms. The detailed description of the Resource Distribution mechanisms is discussed in the topic Resource Specific Distribution Mechanisms. Readers can navigate to the topic with the help of main index of this text.

Let us study various issues regarding the Sustainability of the Nonprofit Economy.

Sustainability of Nonprofit Economy

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Behavior of Earnings in the Nonprofit Economy

In the Nonprofit Economy

Total Individual Earnings = Resource Earnings + Services Compensation

Let us try to study what kind of effect does the changes in the ratios of the Resource earnings and the services compensations have on the Total Individual Earnings.

For the sake of simplification we will consider here that all the people in the Nonprofit Economy have equal total individual earnings.

In the Nonprofit economy

Commodity cost = Resource cost + Value addition cost + Services compensation

The value addition cost will ultimately breakdown into resource cost and services compensation so we can reduce the above equation into the following equation.

Commodity cost = Resource cost + Services compensation

If you study in more depth you would see because the cost of the commodity is adjusted according to the scarcity of the commodity in the economy the cost of commodity would remain same/unaffected in the economy while the “resource cost” and “service compensation” which are the components of the cost of commodity will compete with each other. Higher the percentage of resource cost in the commodity lower will be the percentage of services compensation in the commodity and vice versa.

Further we can also observe that when the Percentage of Resource Cost goes up in the commodity cost it results into an increase in the percentage or Resource earnings in the total individual earnings.

Total individual Earnings = Services Earnings + Resource Earnings

The total earnings remain unaffected by changes in the ratio's of resource earnings and services earnings because any decrease in the percentage of Services Earnings is accompanied by an equal increase in the percentage of Resource Earnings. I am talking about the total Earnings being unaffected in terms of Purchasing capacity not the actual numbers.

To sum up:

So when the Resource earnings would increase we would see a drop in Services earnings and when the services Earnings would increase we would see a drop in Resource Earnings.

Total individual earnings = Services earnings + Resource earnings

The services earnings would go down and Resource earnings would go up such that the total earnings in terms of purchasing capacity would remain unaffected.

We can see that for different values of the ethical limit there is no actual difference in the total earnings of the people and therefore the purchasing capacity of the people would remain unaffected.

But there is an important observation we need to make here. In order to have higher resource earnings which can provide us financial security we need to have lower Services Earnings.

But the question arises

How can we reduce the services earnings?

The answer is - We can reduce the services earnings by having an Ethical Limit on the services Earnings. By accepting the ethical limit on the services earnings people choose to reduce their services earnings by themselves and this helps us to achieve an increase in the Resource Earnings.

We can observe that lower the percentage value of ethical limit higher will be the resource Earnings

Resource Earnings	Services Earnings
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We can see that this box represent the total earnings (in terms of purchasing capacity) when we are varying the services earnings the size of this box remains fixed but the ratios of resource earnings and services earnings vary. We can also observe that lowering the services earnings does not have any effect on the purchasing capacity of the people because it is accompanied by an equal increase in the resource earnings.

What will happen if there is no ethical cap?

When people do not accept any Cap/Limit on the services earnings in this situation the greed that is naturally present in the human nature will tend to pull up the percentage of services earnings. When the percentage of the services earnings goes high, the percentage of the resource earnings will go down and hence the resource earnings will die and would be naturally reduced or even eliminated.

If we do not have a limit on the Services Earnings the percentage of services earnings would go up and resource earnings would come down and Nonprofit Economy would fail to sustain. Because lower resource earnings do not provide financial security and in this situation nobody would want to conform to this ethical limit and we would be back to the conventional economy.

So this observation can help us understand and appreciate the reason why we need to have an ethical limit on the services earnings in the Nonprofit Economy.

Ethical Limit

Ethical Limit = Percentage of the Services Earnings in the total Individual Earnings

= (Max Services earnings / Total Earnings) X 100

Max Services Earnings is the maximum services Earnings that are allowed in the Nonprofit Economy for the conformers.

For example if the max services earnings is 50% of the total earnings we say that the ethical limit is 50%. When the max services earnings are 40% of the total earnings we say that the ethical limit is 40%.

We can see that Resource Earnings are generated when people make sacrifices in their services earnings by accepting an ethical limit on their services earnings. If the people do not accept the ethical limit in this situation the resource earnings would reduce or does not even exist.

So we can see that only those people deserve the Resource earnings those who are sincerely conforming to the ethical limit on their services earnings.

Therefore in the Nonprofit Economy It is illegal for a non-conformer to claim the resource earnings in the Nonprofit Economy.

Immunity of the Nonprofit Economy

Nonprofit Economy is an economy where majority of the people choose to sincerely live with Nonprofit Ethics. The meaning of Majority means that more than 60% of the people in the given State choose to live with Nonprofit Ethics.

Now consider the case where both the Profit Based organizations and nonprofit organizations are allowed to function in this Nonprofit Economy.

Profit Based organization is a group of people who does not wish to follow or accept any ethical limit on their services earnings. Because these people are not contributing to the resource Earnings they cannot claim the resource earnings.

Consider a scenario where both the Profit Based organization and a Nonprofit are selling a same product/commodity or service in the Nonprofit Economy.

Scenario 1:

Consider a case that they both try to sell a mobile device.

For this Nonprofit Economy we consider that the ethical limit that is accepted by the people is 50%.

Case 1: Nonprofit Organization

Cost of Mobile Device = 500 bucks (Resource Cost) + 500 Bucks (Services Compensation)
 = 1000 bucks

Case 2: Profit Based Organization

Because in the Nonprofit Economy the non-conformers cannot claim the resource earnings in order for them to have their individual earnings equal to that of the conformer they would have to ask higher services compensation just for having their individual earnings equal to that of a conformer.

In this Nonprofit Economy 50% is the ethical limit so half of the income of an individual comes from the Resource earnings. When a conformer is earning 1000 bucks per month he is receiving 1000 bucks per month as resource earnings which accounts to 2000 bucks per month. So if a conformer is asking a compensation of 100 bucks for a given job a non-conformer would have to ask at least the double compensation which would be 200 bucks in order to have his earnings equal to that of a conformer.

So in order to compensate the loss of resource earnings a Non-conformer would have to ask the double compensation just to have their annual incomes equal to that of the conformer.

In this situation,

Because the conformer is asking for 500 bucks a Non-conformer would ask for 1000 bucks as a services compensation for the same job.

Cost of mobile Device = 500 Bucks (Resource Cost) + 1000 bucks (Services Compensation)
 = 1500 bucks

A non-conformer needs to have some advantage over a conformer. So most likely the Non-conformer would only choose not to conform to the ethical limit only when he is able to earn more than conformer. This implies that he is going to ask for even more than double compensation in this case.

So a profit based organization would most likely sell this mobile device above the cost of 1500 bucks. Say for example at the cost of 1600 bucks or 1700 bucks. In that case only it would make sense for a profit based organization to choose to not to conform to the ethical limit on the services earnings.

So in this Nonprofit Economy if a profit based organization wishes to sell a product / commodity the cost of that commodity would be much higher than the cost of the same commodity being sold by the Nonprofit Organization. Let us try to calculate the cost difference.

Cost Difference = [Commodity Cost of (profit Based Organization)] – [Commodity Cost of (Nonprofit Organization)]

= 1500 bucks – 1000 bucks = 500 bucks

Cost of the product from a profit based organization is 50% higher than the cost of the product that is being sold by a Nonprofit.

Scenario 2:

Now consider the cost difference for different ethical limit

Ethical limit = 40%

Commodity Cost (Nonprofit) = 600 bucks (Resource cost) + 400 bucks (Services compensation)

Commodity Cost (Profit based organization) = 600 bucks (Resource cost) + 1000 bucks (services compensation)

Cost difference = 1600 bucks – 1000 bucks = 600 bucks

We can see that the cost difference goes on increasing with the decrease in the ethical limit.

In this scenario Cost of the product from a profit based organization is 60% higher than the cost of the product that is being sold by a Nonprofit.

Observations

The cost difference goes on increasing with the decrease in the ethical limit.

Further due to better work culture the Nonprofits are inherently more efficient therefore they are good at cutting cost and save more costs compared to the Profit Based Organization

In the Nonprofit Organization due to healthy work culture the employees are more productive and satisfied which results into better quality of services.

So we can see due to these factors the product that you are buying from a Nonprofit would be cheaper, and would be of better quality, more reliable and more efficient compared to the product that you are buying from a profit based organization.

Now in this situation why would someone want to buy less efficient product at a higher cost?

Therefore we can see that in such a situation a Profit based Organization cannot survive in the Nonprofit Economy. Because a profit based organization would fail to compete with the Nonprofit in the Nonprofit Economy.

We can see that just the presence of the Nonprofit Organizations renders the Unethical Profit Based Ventures unable to survive in the Nonprofit Economy. When majority of the people choose to conform to the Nonprofit Ethics the Unethical ventures automatically fail to survive in the Nonprofit Economy.

We call this characteristic of the Nonprofit Economy - Natural immunity to the unethical ventures.

When more than 60% of the people sincerely choose to accept the Nonprofit Ethics the Nonprofit Economy gains a Natural immunity to the unethical ventures.

I am underlining this point because this is the key conclusion of this topic that we get after all the discussion in this topic.

Natural immunity to the unethical ventures is an important characteristic. Because a Nonprofit Economy cannot really be called a Nonprofit Economy when a profit based or unethical ventures are able to survive in the Nonprofit Economy and further it is practically not feasible and is practically not possible to restrict the presence of unethical ventures with the help of legislative restrictions.

Due to natural immunity we do not require any legislative restrictions in order to restrict the presence of unethical ventures in the Nonprofit Economy.

In the Nonprofit Economy a profit Based Venture or any other venture which does not conform to the Nonprofit Ethics would automatically fail to survive even if they are allowed to function and even if there are no legislations or laws to restrict their presence in the Nonprofit Economy.

Therefore in the Nonprofit Economy we do not need any special legislations and laws to restrict the presence of the Profit Based / Unethical Ventures.

Effect of Ethical Limit on sustainability of Nonprofit Economy

We can have different values for the Ethical Limits in the Nonprofit Economy. Let us study the effect of the variation of the ethical limit in the Nonprofit Economy.

There are two key factors which decide the sustainability of the Nonprofit Economy

1: Immunity to Unethical Ventures

2: Financial Security and other benefits

Resource Earnings	Services Earnings
-------------------	-------------------

Let us discuss them in detail

Factor 1: Immunity to Unethical Ventures

If the Nonprofit Economy does not have a natural immunity to the Unethical ventures then it cannot really be called a Nonprofit Economy. Therefore a Nonprofit Economy needs to have immunity to the Unethical ventures.

Restricting the presence of Unethical Ventures with the help of legislative restrictions is not practical in real world situations and is not a proper way to do it. Natural immunity to the unethical ventures is the only thing that ensures that Nonprofit Economy remains a nonprofit Economy.

From the discussion in the previous topic we observed that

The nonprofit Economy gains a natural Immunity to the Unethical ventures due to the cost difference between the products sold by the Nonprofits and the profit based organization.

The higher the cost difference higher will be the natural immunity.

The cost difference goes on increasing with the decrease in the ethical limit.

So we can see that lower the ethical limit higher is the immunity to the unethical ventures.

If we increase the ethical limit we lower the Natural immunity to the unethical ventures and if we decrease the ethical limit we increase the Natural immunity to the unethical ventures.

Further we can also observe that if we go on increasing the ethical limit we might reach a point where the Nonprofit Economy loses its natural immunity to the Unethical ventures.

Factor 2: Financial Security and other benefits

The question that would arise in our mind is

Why would people really bother to take the pains to sincerely follow an ethical limit on their Services Earnings?

So there needs to be some benefits/ desired changes which encourage people to sincerely accept the ethical limit on their services earnings.

Does living with these ethics better you life? How does ethical limit really help you, your family, your friends and your entire society?

There are many benefits/desired changes that comes with the financial security and the ethical limit.

With the decrease in the ethical limit we see an increase in the financial security and the behavior of the people getting close to the truthful behavior.

It is not possible for me to sum up the entire benefits of the financial security and the ethical/truthful behavior in this one topic and we are going to discuss them at the different places in this text.

So these benefits/desired changes would encourage people to sincerely conform to the Nonprofit Ethics.

We can see that lower the ethical limit the behavior of the people would be closer to the truthful behavior and financial security will also be higher.

Conclusion:

The improvement in the immunity from the Unethical ventures improves the sustainability of the Nonprofit Economy.

The increase in the financial security improves the sustainability of the Nonprofit Economy.

From these observations we can conclude that lowering the ethical limit on services earnings improves the sustainability the Nonprofit Economy.

Ethical Limit cut-off for sustainability

In the previous topic we discussed that if we go on increasing the ethical limit we might reach a point where the Nonprofit Economy loses its natural immunity to the Unethical ventures.

If we go on increasing the ethical limit the resource earnings would decrease and the financial security that comes with the resource earnings would also decrease.

If we go on increasing the ethical limit we would reach a point where the nonprofit economy no longer retains the natural immunity to the unethical ventures and does not provide enough financial security and other benefits and hence does not encourage people to sincerely conform to the ethical limit on their services earnings.

Speaking in simple terms it means that if we go on increasing the ethical limit we would reach a point where the Nonprofit Economy loses its sustainability.

We could call this value of ethical limit an Ethical Limit cut-off for sustainability.

If the value of ethical limit is higher than this cut-off value then the Nonprofit Economy would not be sustainable.

If the value of ethical limit is lower than this cut-off value then only the Nonprofit Economy would retain its sustainability.

The actual value of the Ethical Limit cut-off for Nonprofit Economy can only be verified by the real world experiments.

But from my intuitive guess and my own understanding of Nonprofit Economy I would guess that the ethical limit cut-off for the Nonprofit Economy would be/needs to be around 50%.

I guess that if we assign the ethical limit higher than 50% then the nonprofit economy may not be sustainable.

Standards of Living in Nonprofit Economy

There would be a natural question that would arise in people's mind. What would happen to our standards of living in Nonprofit Economy?

We can expect to achieve an equality of earnings in the Nonprofit economy therefore production efficiency of the economy will improve. The production efficiency has a direct effect on the increase in the middle class purchasing capacity. Therefore the middle class purchasing capacity would go up.

It is commonly taught in our history classes that the health of our economy improved in the past due to the emergence of middle class. The pattern that we can observe is that the health of the economy improves whenever there is an increase in its equality in the people's earnings. Due to equality of earnings the production in the economy would become efficient, the economy would function efficiently. Therefore we can expect the middle class living standards of Nonprofit Economy to be higher than the middle class living standards of the conventional economy.

Benefits of living with Nonprofit Ethics

Let us discuss the benefits of living with Nonprofit Ethics

First of all we need to observe that there is nothing to lose for people because your earnings would not go down. Second thing to observe is if you are a middle class person your purchasing capacity and living standards would only go up so there is nothing to lose for a middle class person.

If you are a person who is earning lower than middle class earnings there is obviously nothing to lose for you because you will be a middle class person.

We can see that there is nothing to lose for majority of the people since majority of the people generally consists of middle class and the categories which have lower than middle class earnings. Now we can discuss the benefits people can have by living with nonprofit ethics.

The financial security

In the conventional economy the job is seen as a means of financial security, people are generally worried about their financial security and they are also worried about their children's future financial security. In a nonprofit economy since job is not the means of financial security you are not dependent on your job for the financial security. People would not have to live in the fear of losing their jobs and losing their financial security. The future of your family and your children is secure.

In the Nonprofit Economy your job is no longer a means of your financial security so you are no longer tied to a particular job.

I can go on and list many more benefits. But I don't want to sound like a sales man. I've discussed enough to get you started thinking so I won't discuss more on this at this time I would leave that to the reader as an exercise to go and figure out other benefits of living with nonprofit ethics.

There is one more question that would arise in people's mind.

In a profit based economy if you are not satisfied with your current standards of living you can simply earn more profits and increase your standards of living.

But what if, if you are not satisfied with your standards of living in the 'Nonprofit Economy'. Since there is no way to earn more incomes so we would be stuck in the middle class living standards? Isn't that bad and a disadvantage of a "Nonprofit economy"?

If you think you cannot do anything to increase your standards of living in a nonprofit economy you are wrong. In the nonprofit economy everyone pretty much have middle class earnings but people can always try to increase the middle class living standards. The middle class living standards of a nonprofit economy would be higher than the middle class living standards of Conventional economy due to improvements in the production efficiency.

There are many more ways by which we can improve the living standards of people in nonprofit economy.

All the following measures would have an increasing effect on the purchasing capacity of the people and their standards of living

Eliminating/ Cutting down on wastage

People can always cut down or reduce the wastage of a given resource this will increase the availability of the given resource and hence the cost of the resource would come down.

Improving the efficiency of a commodity/Device by research and engineering

Use low cost alternatives

If a certain resource is scarce and costlier you can always search for alternatives which are available in larger amounts and cost lower.

Improving the utilization of commodity by sharing of resources

Increasing the percentage of Recycling of the resources

Increasing the production of given resource

If a certain resource is a scarce resource we can always find ways to increase the production rate of a given resource by exploration and digging into the earth automating the production lines and other such measures.

But another question that someone could ask is. Are we not already doing these things?

We are doing it but we are not doing it effectively. In the conventional economy the potential benefits of above measures are not yet properly utilized. Failure to fully utilize the potential benefits of the above measures is the inherent drawback of a profit based economy there is nothing you cannot do about that. We will see that a nonprofit economy helps us to improve the utilization of potential benefits that we can get from the above listed measures. For example the measures like patents and copyrights lower the effectiveness of research and engineering we will see that patents and copyrights is not necessary in a nonprofit economy. We will also see how the percentage of recycling can go up in the nonprofit economy. We will discuss all of that later.

Our governments and Nature enforce certain restrictions in the society in order protect people and ensure proper law and order. Stealing from other people's home is restricted by law and it is a kind of a restriction that is enforced by the law.

Now what kind of flavor of ice-cream I like is not something that is enforced by legislation. I can eat whatever flavor of ice-cream that I like. Similarly choosing the ethical guidelines is like choosing what kind of flavor of ice-cream you like.

Ethical Guidelines and Restrictions in Nature

So we can understand the difference between the ethical guidelines and the legislative restrictions that are enforced by law. Ethical guidelines are not the restrictions that are enforced by the nature or our government in the form of legislation. Ethical guidelines are not the legislative restrictions.

Nature has provided every person the freedom to choose to live with the ethics they want to live with. So whenever I am discussing the ethical guidelines for Nonprofit Economy readers need to be aware of the difference between the ethical guidelines and Legislative restrictions and they need to be aware that ethical guidelines are not the Legislative restrictions.

Nonprofit Economy is like a group of people who like the similar flavor of ice-cream. Nonprofit Economy is a group of people formed by the people who desire to live with same/similar set of ethical guidelines.

When more than 60% of the people in an Economy/State/Country live with truthful ethics then ventures based on untruthful ethics fail to survive in the Economy.

Phenomenon of Ethical Retention

When more than 60% of the people in the Economy live with Untruthful Ethics then ventures and relationships based on truthful Ethics fail to survive in the Economy.

When more than 60% of the people in the economy live with truthful ethics the economy gets locked up in truthful ethics and retains its state of ethics.

When more than 60% of the people in the Economy live with untruthful ethics then economy gets locked up in untruthful ethics and retains its state of ethics.

We can see that when more than 60% of the people live with truthful ethics the unethical activities, ventures automatically fail to survive in such an economy/society. Therefore we can see that there is no requirement to restrict the presence of unethical ventures in the Nonprofit Economy with the help of legislative restrictions.

Lessons to Learn

What can we learn from this?

When you are willing to live with the truthful ethics nature takes care that your needs are fulfilled, and Nature provides you an automatic protection by unethical elements in the society.

When you are willing to live with truthful ethics Nature offers you all the protection that you need in order to live with truthful ethics.

We discussed in the previous topic that the Nonprofit Economy can have different values for the ethical limit. It is an interesting observation that the value of the ethical limit that people accept for the given instance of Nonprofit Economy can actually indicate the maturity levels of that Nonprofit Economy.

Higher maturity implies that the behavior of the people is closer to the truthful behavior.

Lower the maturity levels higher the deviation from the truthful behavior we will observe in the behavior of the people.

Maturity Level / Metric of ethics for Nonprofit Economy

Maturity levels = $(\text{Resource Earnings} / \text{Total Earnings}) \times 100$

Lower the ethical limit higher the maturity levels.

A fully mature Nonprofit Economy is an economy which has achieved fully maturity. And the ethical limit is zero. In such a Nonprofit Economy people do not ask for any compensation for doing their job. They almost live like a family and a close community.

It is difficult to comment at this point on the existence of a fully mature Nonprofit Economy. I wonder if a fully mature Nonprofit Economy even has a practical existence or not. It is because if people live like a family why they would even require an economic setup at the first place.

When we are initializing the Nonprofit Economy we might want to initialize it at a lowest possible value of ethical limit say for example the value of 50% for the ethical limit. Initializing the Nonprofit Economy at the lowest value of the ethical limit would help us to achieve a smooth transition.

Later we can decrease the value of ethical limit according to the increase in the maturity levels of the people.

We have situations where we deal with the scarcity of resources. Similarly we can also have situations where we are dealing with the scarcity of human Services.

Human services are not really scarce because Nature provides exactly according to the requirements of the society. But still in the Nonprofit Economy sometimes we might face a situation where there are more takers of the Human Services compared to the Providers. So how do we really deal with such a situation?

Human Services and Scarcity

Let us consider a situation

There are 10 patients who are waiting to see the doctor for the treatment. But due to some situation the doctor has the time to see only 5 patients. Therefore in this situation what the doctor should really do?

Case 1: Conventional Economy

If the doctor has to go according to the logic and ethics of the conventional economy the objective of the doctor is to maximize profits/incomes.

If we go according to the ethics of the conventional economy the doctor should hold an auction. Patients are told to write down the maximum that they can pay for the doctor's time.

Consider for example one patient might be willing to pay 100 bucks for 10 minutes while other patient might afford to pay 150 bucks for 10 minutes of the doctor's time.

After the auction is complete the doctor will now sort out the list in the descending order of bucks/time.

Let us look at the sample list

Patient	Paying capacity
A	25 bucks/minute
B	20 bucks/minute
C	18 bucks/minute
D	16 bucks/minute
E	15 bucks/minute
F	10 bucks/minute
G	10 bucks/minute
H	10 bucks/minute
I	10 bucks/minute
J	10 bucks/minute

The first five people might be economically privileged and therefore they are able to pay huge amounts even for the minor ailments which are not critical and do not need the immediate attention of the doctor.

The other five people might be poor who cannot afford to pay the doctor more than 10 bucks/minute even if they are suffering from serious or critical ailments which require the immediate attention of the doctor.

The logic of the conventional economy tells the doctor to maximize profits therefore in this situation if we go according to the ethics of conventional economy the doctor should pick up the first five patients. And the doctor would tell the other five patients to go home and do not see his face. It doesn't matter to the doctor that the five patients to whom he rejected the treatment might be in more critical condition compared to the other five patients to whom he allowed the treatment.

In real world even in the conventional economy we might not see such inhuman and brutal doctors. Because thankfully doctors are generally good human beings and they have a sense of ethics.

If you're a doctor please do not mind this example. I have used this hypothetical example only in order to contrast the difference between the ethics of the conventional economy and the Ethics of the Nonprofit Economy.

Case 2: Nonprofit Economy

In the nonprofit Economy we have an ethical limit on the services Earnings so compensation is not something that people are really concerned about.

In the Nonprofit Economy the doctor is encouraged to work with his natural objective which is to help other people to the maximum extent possible.

In this situation the doctor has the time to see only 5 patients but there are 10 patients who are waiting for him. So in this situation what the doctor would really do?

He would first listen to the problems of all the patients. Then he would shortlist the 5 patients who are in the most critical condition and need the doctors help the most.

He might tell his assistant to do the job of short listing. Out of the 10 patients it is likely that 5 people might be having very minor ailments and does not need the immediate attention of the doctor. The doctors would not see these patients and tell them to visit another time.

Conclusion

With the help of this example we can appreciate why we need to have a sense of ethics in the economy, in our society and in our lives in general.

In the Nonprofit Economy whenever such a situation arises where there are more takers compared to the providers. It is the responsibility of the Service Provider to shortlist the receivers in order to make sure that his services are utilized efficiently and provided to the people who deserve them the most.

If we observe we will see that some resources like land, gold and silver go through huge variations in their cost throughout their resource life cycle. Let us see what kind of effects such variations would have in the economy.

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Artificial Demand Effect

In the economy the prices of some resources are changing throughout their resource lifecycle. Consider for example If a piece of land costs 1000 bucks after sometime the demand of land might increase and the price of the land would go to 1500 bucks, further we can also witness a situation where the price of the land would decrease say it would become 500 bucks.

If the resource price would increase the resource owner would get profits and if the resource price would decrease the owner would suffer losses.

For someone who is not interested in earning profits by change in resource prices it is always an extra risk or Burden on the owner, the risk of losing money due to drop in resource prices. So what does such a person do who wants to be protected from risks of losing money due to drop in resource prices?

Further the question that arises now, is it legitimate? Is it legitimate to earn the profits by change in resource prices? If it's not legitimate what can we really do about it?

The earnings obtained by the people and organizations due to increase in the resource prices are illegitimate because they are not taking any useful efforts for generating those earnings.

Further the individuals and organizations also do not deserve the losses that they suffer due to decrease in the resource prices.

We can say that the profits and losses generated by the people due to change in the resource prices are illegitimate. Let us see what happens if the people and the organizations bear/receive the profits and losses due to change in resource prices.

It will give rise to artificial demand effect. Let us study the artificial demand effect.

Change in resource prices give rise to an opportunity to generate profits due to increase in resource prices. Due to such opportunity more number of people would want to buy the resource compared to the number of people who originally wanted to buy the resource. Due to more number of people wanting to buy the resources, the demand of such resources would increase. Let us call the extra demand generated for the resource due to interest of people to earn profits due to change in resource prices as an artificial demand.

Total demand = Artificial demand + original demand

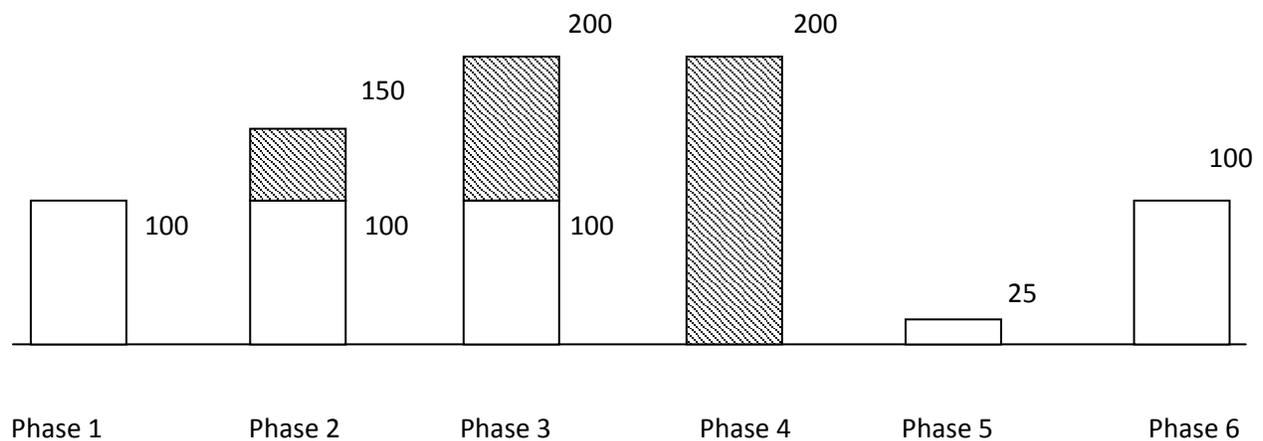
Total cost = Artificial cost + original cost

The total cost would be more than the original cost due to original demand. We can observe that the artificial demand can exist only in the presence of original demand. It is the change in the original costs that give rise to artificial demand therefore in the absence of original demand the artificial demand cannot exist.

In the normal conditions the artificial demand would be under reasonable limits and the total cost would be still under the limits where people can afford to buy the resources. Now what will happen if the artificial demand increases to an extent where total cost becomes unreasonable for the original buyers? In this situation the original buyers would stop buying the resource. Now the original demand is absent the artificial demand is like a bubble which is waiting to be burst anytime. Soon people would discover that they can't make profits due to change in prices. And there would be a sudden drop in prices a bubble burst would occur.

A bubble burst may not always occur but artificial demand is something that magnifies the changes in resource prices therefore it increases the risk of losing money due to change in resource prices. Due to magnification of price changes the prices of the resources become highly unstable. Instability of prices gives rise to further problems in the economy. When a resource is suffering from huge artificial demand the bubble burst can also result where people can make huge losses.

Let us try to study how the artificial demand can give rise to bubble burst



Phase 1: No artificial Demand

Phase 2: Building up of Artificial Demand

Phase 3: Prices become Unreasonable

Phase 4: Creation of bubble

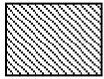
Phase 5: Bubble burst

Phase 6: Restoration of original Demand

Indications



Cost due to original Demand is represented by white box.



Cost due to Artificial Demand is represented by grey box.

Phase 1

There is no artificial demand

This is the initial phase in this phase there is no artificial demand. The prices are lower and due to only original demand of the resource in the economy.

Phase 2

Building up of artificial demand

There could be changes in resource prices now people sense the opportunity to make profits due to increase in resource prices. The artificial demand would start to build up.

Phase 3

Total price reaches to unreasonable magnitude

In the phase 2 the artificial demand may go up and down and someday it might increase to an extent where the prices of the resource would become unreasonable.

Phase 4

Original demand ceases and bubble is created

Due to unreasonable levels of prices the original buyers stops buying the resource due to lacking the ability to afford the resource. We can see that without the original demand the artificial demand cannot

exist. So when the original demand ceases a bubble is created. This bubble is waiting to be burst anytime.

Phase 5

Bubble burst

Soon the people would discover that they cannot make profits due to increase in resource prices, so they would start selling the resources. The prices would come down a little. But it will trigger a cyclic chain reaction and panic in the market. So everybody will start to sell in the fear of making losses. It will result into a sudden drop in the prices which can be seen as a bubble burst.

Phase 6

Restoration of original demand

After the prices have fallen to a level or below the reasonable limits the original buyers would start to show interest in buying the resources and the original demand would be restored. We now reach the phase 1, these phases would keep repeating with more or less the same pattern.

Non consumable resources like land which cannot be consumed suffer from huge artificial demand. The pattern we can observe is that the resources which cannot be consumed or have a large shelf life for example the resources like gold are likely to suffer from the artificial demand effect. The resources like land and gold generally suffer from artificial demand.

Drawbacks of artificial demand effect

Increase in resource cost

If a resource is suppose to cost 100 bucks it would cost you 150 bucks or even 200 bucks. Due to more demand for the resource the resource would appear scarcer than what it actually is. People would have to pay more in order to buy the resource compared to what they would pay if the artificial demand did not existed.

Instability of prices

Artificial demand effect magnifies the change in the prices of the resources. It induces the huge instability in the prices of the resources.

Increased risk of losing money

Artificial demand effect magnifies the changes in resource prices so it induces or creates an extra risk of making losses due to drop in resource prices. Due to higher risks the banks would be afraid of lending to people for buying resources like land and build their homes because resources like land suffer from

artificial demand. This is something that is unfortunate for the people because many people would find it difficult to build their homes.

Inequalities in society

Artificial demand increases the inequalities in the society. It is because those who have spare money can invest in resources and make more money, while people who are poor, working class and middle class would not be able to make money in such a way. Therefore artificial demand effect is something that is widening the inequalities in our society.

Alive state Mechanism

People lose their earnings and suffer huge losses due to artificial demand effect. So how can we protect people from the risks of losing money due to artificial demand effect?

We will need some mechanism or solution to fix/address the artificial demand effect.

Let us see what that solution is

Alive state Mechanism is an answer for that. Alive state Mechanism is not for all the resources it is only for those resources which suffer from artificial demand effect. The resources like land, gold and silver are an example of resources which suffer from artificial demand effect. We would call such resources as alive state resources.

In order to eliminate the artificial demand effect we have a mechanism of alive state and alive state transaction. We can eliminate the artificial demand effect by keeping the resource which suffer from artificial demand effect in the alive state. Let us see what that means.

Resources which are in the alive state are owned by the alive state resource owner. We will abbreviate the term alive state resource owner as ASRO for the sake of convenience. The resources in the alive state can be bought by the individuals and organizations for usage under the usage rights after payment of the resource cost to the ASRO (alive state resource owner).

The owner of the alive state resources would be same as the owner of the resource origins in the nonprofit Economy and it would be the ASRO (alive state resource owner). In the Nonprofit Economy we have considered the group "citizens of the country" as the owner of the resource origins. Therefore the ASRO (Alive State Resource owner) would be the group 'citizens of the country'.

The end user group 'citizens of the country' is the owner of the resource origins so it will also be considered as ASRO (alive state resource owner).

The cost that the individual or the organization pays to the ASRO (alive state resource owner) in order to hold the resource is termed as the 'cost of holding'. And the individual or the organization which is holding the resource in the alive state for its usage is termed as 'resource holder'.

In the alive state the unit price of the resource may change and therefore the cost of holding would also change accordingly. The cost of holding can change dynamically for the resource which is in the alive state.

If the cost of the resource increases thereby increasing the cost of holding in that case the resource holder would pay the difference to the ASRO (alive state resource owner).

If the cost of the resource decreases thereby decreasing the cost of holding in that case the ASRO (alive state resource owner) would pay the difference to the resource holder.

For example if the individual is holding 10 units of gold in the alive state. The current cost of 10 units of gold is 1000 bucks costing 100 buck / unit.

Now consider if there is an increase in the price of the gold from 100 bucks/ unit to 150 bucks/ unit. In that case the resource cost of 10 units of the gold will be 1500 bucks. Now the resource holder would pay the difference $1500 - 1000$ bucks (New resource cost – old resource cost) = 500 bucks to the ASRO (alive state resource owner).

In another case consider that there is a decrease in the price of the gold from 100 bucks/ unit to 50 bucks / unit. In that case the resource cost of 10 units of gold will be 500 bucks. Now the ASRO (alive state resource owner) will pay the difference $1000 - 500$ bucks (Old resource cost – new Resource cost) = 500 bucks to the resource holder.

Further individuals and organizations can also sell the resources in the alive state to another individual or organization. In that case the buyer would pay the cost of holding to the ASRO (alive state resource owner) and the ASRO (alive state resource owner) would return the sellers cost of the holding back to the seller.

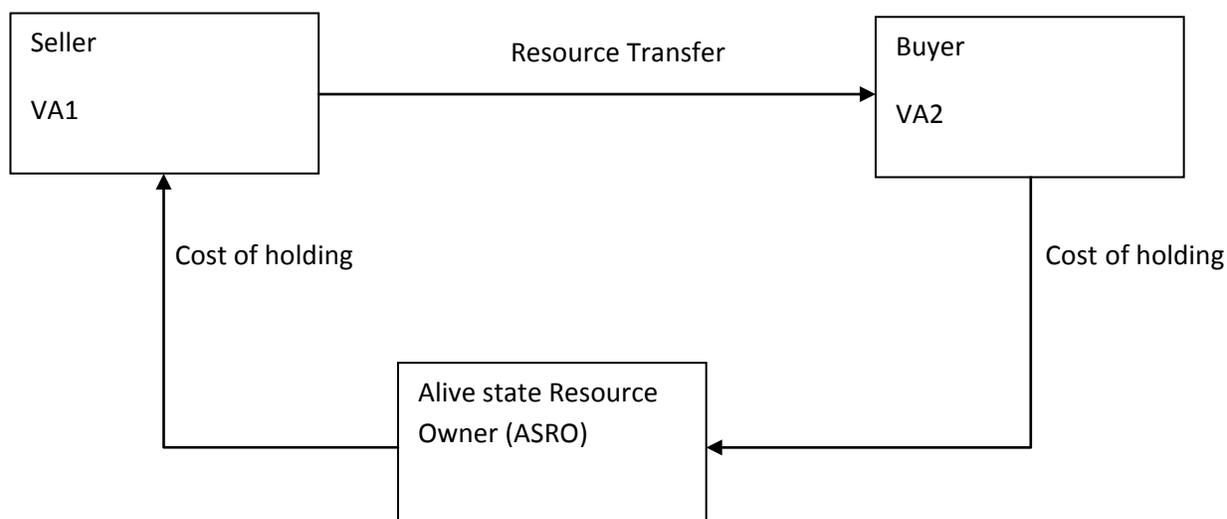


Image: Alive State Transaction at Point of Sale (POS)

In short when the resource is in the alive state the profits/ losses due to change in resource cost is borne by the ASRO (alive state resource owner) which is the 'citizens of the country' instead of the individuals or organizations holding that resources. While in the conventional case the profits/ losses due to change in the resource cost is borne by the individuals and the organizations which are holding/ owning that resources.

Due to such arrangement the individuals and organizations cannot profit from increase in resource prices and further they cannot lose money due to decrease in resource cost either. Because individuals cannot profit from increase in resource cost so there will be an elimination of artificial demand effect which is caused due to the artificial demand generated by the buyers whose purpose of buying the given resources is to profit from increase in resource prices. Further there is also an elimination of the risk of losing money due to drop in resource prices.

It will help us get rid of artificial demand effect and thereby overcome the disadvantages caused by the artificial demand effect. The prices of the resources suffering from the artificial demand effect tend to be unreasonably higher than what they normally should be. Therefore elimination of the artificial demand will lower the prices of the resources and bring them to the reasonable normal levels.

Due to artificial demand effect there is a huge instability of prices in the resources. So after elimination of artificial demand effect we can expect the prices of the resources like land and gold to stabilize and does not go through huge variations.

Terms and conventions

Let us compile all the terms discussed above so that we can find them in one place.

Alive state resources

The resources which suffer from artificial demand effect and therefore distributed through alive state mechanism in order to reduce/eliminate the artificial demand are termed as Alive State Resources.

Resource holder

The individual or the organization which is holding the resource in the alive state is termed as the Resource Holder.

Cost of holding

Cost of holding is the cost that the resource holder needs to submit with the ASRO (Alive State Resource Owner) in order to hold and use the given alive state resource. This cost can change dynamically and with the change differences need to be paid accordingly.

Alive state resource owner (ASRO)

Alive State Resource Owner is the End User group which owns the resources in the Alive State. In this text for the Nonprofit Economy we have considered the group 'Citizens of the Country' as the Alive State Resource Owner (ASRO).

Consumed State

When the individuals and organizations are holding the resources they can get consumed / destroyed in the course of time or duration of usage. So in that case the holder of the resource may report the resource as consumed.

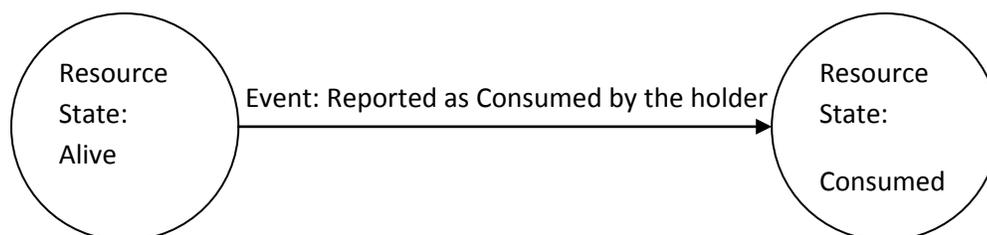


Image: Resource States

When the resources in the alive state are reported as consumed they are considered to be consumed or destroyed. There will be no accounting of the resources after they have been consumed. The cost of holding at the time of reporting consumption would be fortified by the alive state resource owner as the cost of consumption and will not be returned to the resource consumer.

For example the individual is holding 10 units of gold at 100 bucks/ unit. The cost of holding would be 1000 bucks. Consider that the individual used those 10 units of gold to make some gold jewelry. In the process of making gold jewelry assume that 3 units of gold is lost/destroyed. The gold jewelry consists of only 7 units of gold.

So in that case the individual would report the 3 units of gold as consumed. 300 bucks of 3 units of gold would be fortified by the alive state resource owner as the cost of consumption and will not be returned to the resource consumer. There will be no alive state accounting 3 units of hold. 3 units of gold will be subtracted from the alive state account of the resource holder. And the Resource holder would be considered to be holding only 7 units of gold in the alive state.

Now there are issues

Issue of Fake reporting

Consider in the above case that there is no actual destruction of 3 units of the gold but still the resource holder is reporting the 3 units of gold as consumed. This is fake reporting.

After the individual has fake reported the 3 units of gold as consumed. Consider the price of the gold drops to 50 bucks / unit. In this case if the individual had not reported the 3 units of gold as consumed he was suppose to get back $50 \times 3 = 150$ bucks as the difference from the alive state resource owner.

Due to fake reporting the individual has lost 150 bucks. Even if the individual sells the 3 units of gold in the market he would only recover the market cost of the gold which is the $3 \times 50 = 150$ bucks. The individual would not be able to recover the 300 bucks that he originally invested in the 3 units of gold. He would lose 150 bucks.

In short when you are fake reporting you are no longer protected from the risk of losing money due to change in resource prices.

So it is in the benefit of the resource holder that he is not 'fake reporting'. And this would encourage the individuals not to do the 'fake reporting' of the resources in the alive state.

Issue of Not Reporting

Now consider another case. There is an actual destruction of the 3 units of the gold and the individual fails to report the consumption of 3 units of gold. What would happen?

Consider the price of the gold increases from 100 bucks/unit to 150 bucks per unit. In that case the individual would have to pay the price increase for the 3 units of gold which is 150 bucks. If the individual had properly reported the 3 units of gold as consumed he would have saved 150 bucks.

The individual cannot recover those 150 bucks by selling the resource in the market because he does not have the actual resource. Whenever the individual is selling 10 units of gold to the buyer, the buyer is suppose to ensure that 10 units of gold actually exist. Because the buyer would fail to find 10 units of gold he would not pay for 10 units of gold and instead only pay for 7 units of gold which actually exist.

So there is no way the individual can recover his 150 bucks that he lost due to not reporting the consumption of 3 units of gold at the time of consumption.

If the individual had properly reported the resources as consumed at the time of consumption his cost of consumption of 3 units of gold would have been 300 bucks. But due to not reporting the consumption appropriate time he ends up paying 450 bucks as the cost of consumption for 3 units of gold.

So the individual is losing the 150 bucks by not reporting or delayed reporting of the consumption of the 3 units of gold.

There is risk of losing money in the case of not reporting or delayed reporting of the consumption. So it is in the benefit of resource holder that he does not get involved in such practices.

Case of land as a resource

If we consider the case of land we can see that we cannot destroy or consume the land so land cannot be reported as consumed and would stay in the alive state.

In the case of land there is no headache of reporting the consumption of land.

Example of Alive State Resources

Land, Gold and Silver

Data structures for Alive State Transaction

The alive state mechanism needs to keep some information for the normal operation of the Alive State Mechanism. Let us study the data structures used to store this information.

In this topic we will study the technical details of how the alive state transaction can be carried out.

There would be many different types of alive state resources. Each type would be identified by its type ID.

Resource Type -Each resources type would have few details attached with it.

Type ID – Each resource type would have a type ID which is used for identify the resource type. Gold and silver are two different types of alive state resources each would have its own id.

Type Name – We need some human friendly name which helps the people to refer to the given resource type.

Alive State price – Each resource type would have its alive state price. The alive state price is the price of one unit of the given resource type. The alive state price can change dynamically according the to market situations.

Resource Instance

If you are buying jewelry made from 10 units of gold then the jewelry would be the resource instance of the resource type gold.

There are some extra details need to attached with the resource instance. This information is used and needed at the transaction at the Point of Sale of the alive state resources.

Type ID – ID of the resource type of the given resource instance.

Quantity – in the above case the quantity would be the 10 units.

Resource cost/Cost of holding – Resource cost is equal to quantity multiplied by the alive state price.

Resource cost = Quantity x Alive state price

For example in the above case if the alive state price of the gold is 75 bucks/unit then the resource cost of the gold would be $10 \times 75 = 750$ bucks.

At the time of selling the alive state resource the information about the resource instance is provided by the resource holder and is supposed to be verified by the buyer of the alive state resource for its legitimacy.

Resource Holders alive state account

In order to hold the resources in the Alive state the holder needs to be registered with the alive state resource distribution mechanism. The Alive State mechanism keeps a Resource Holders account for each Resource Holder. Let us study the details of that account.

Resource holders ID – Resource Holders ID is something that identifies the Resource Holder.

Net balance

Net Balance = Total Cost of Holding – Total Amount Paid

If the net balance is negative it indicates that the difference that needs to be paid by the holder to the ASRO. If the Net balance is positive it indicates the amount that the Resource Holder can withdraw from its account. The Net balance can vary with time.

The following table will hold the information required for the resource holder's account.

Resource Type ID	Quantity	Cost Of Holding
	Total Cost of Holding =	

Alive State price table

Alive State mechanism maintains the Alive State price Table in order to know the current price of the Given Resource Type ID.

Resource Type ID	Alive State Price

ASRO's (Alive State Resource Owner's) Alive state account

Resource Holders ID	Total Cost of Holding
Alive State Account Total	

Commodity Tag

Commodity tag will consist of the information of the alive state resources contained in a particular commodity that is being traded in the given alive state transaction.

Resource Type ID	Quantity

The information contained in the commodity tag is used for the alive state transaction.

Alive state transaction at POS (Point of Sale)

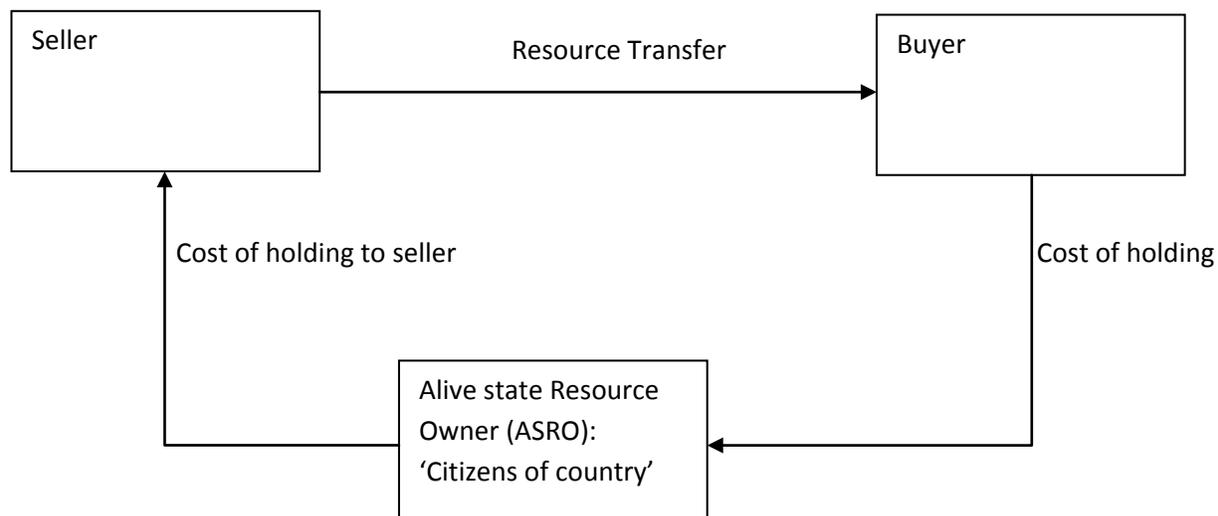


Image: Alive State Transaction at Point of Sale (POS)

The seller wants to sell a commodity to the buyer which consists of alive state resources. We will see how the transaction will proceed step by step.

Transaction Sequence

Step 1: Identification of the buyer and the seller

The buyer and seller would need to identify themselves to the ASRO.

Step 2: Calculation of the cost of holding for the commodity

The seller supplies the commodity tag to the ASRO. The commodity tag will contain the information of the alive state resources contained in the commodity. It is the responsibility of the seller and buyer to ensure that the information contained in the commodity tag is legitimate and not fake. The ASRO is not affected by the legitimacy of the information contained in the commodity tag. Therefore ASRO doesn't need to verify the legitimacy of the information contained in the commodity tag. We will discuss more on this after this topic.

The ASRO will use the information contained in the commodity tag to calculate the cost of holding for the given commodity.

Step 3: Buyer issues the request for buying and pays the cost of holding to the ASRO.

Step 4: Seller approves the sale.

ASRO asks the seller to approve the sale. The transaction can proceed only after the seller has approved the sale.

Step 5: ASRO returns the seller's cost of holding to the seller.

Step 6: ASRO updates the buyer's alive state account and the seller's alive state account.

Example of the Alive state transaction

Commodity consists of 6 units of gold and 4 units of silver. Assume that gold and silver suffer from artificial demand effect and hence they are kept in alive state.

Benefits of Alive State Transaction

In the conventional economic setup it is the resource holder which bears the profits/ losses due to change in resource prices. While in the nonprofit economy resource holder does not bear the profit/ losses due to change in resource prices. The profits / losses due to change in resource prices is borne by the owner of resource origins which is the end user group 'citizens of the state'.

The individual or the organization is relieved from the risk of losing money due to change in resource prices.

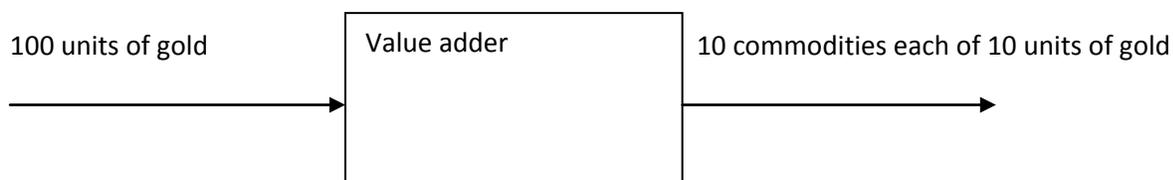
This benefit may encourage people to prefer to keep the resources in the alive state and use alive state transaction for the resources like land, gold and silver which suffer from artificial demand effect.

Because people cannot profit from the change in resource prices this will eliminate the artificial demand which causes huge variations in resource prices and therefore it will bring stability in the prices of the resources.

Lower prices, elimination of risk of losing money and stability of the resource prices

For example in case of Land as a resource people can expect the land to be available at lower prices due to elimination of artificial demand, they are protected from the risk of losing money due to change in land prices and prices of the land will not go through huge variations and would stabilize.

Issue of wrong reporting of resources in alive state transaction



We have an issue here,

Consider a scenario, a value adder buys 100 units of gold from the ASRO (Alive State Resource Owner) and manufactures 10 commodities out of that each consisting of 10 units of gold.

We can see that it is the responsibility of the Value adder to report the right amount of resources that are contained in each of the commodities.

What if the value adder fails to report right amount of resources in the commodities?

Case 1: The Value adder reports less than what is contained in the commodity

For example if the commodity consists of 10 units of gold each if the value adder reports 5 units of gold in each of the commodities. Let us see what would happen. After selling 10 commodities, the value adder would be able to recover only the cost of $10 \times 5 = 50$ units of gold he will not be able to recover the cost of another 50 units of gold.

So whenever the value adder is reporting less amount of resources than what is contained in the commodity he is making losses and therefore it is not in the interest of the value adder to report less amount of resources than what is contained in the commodity.

Case 2: The Value adder reports more than what is contained in the commodity

For example if the commodity consists of 10 units of gold consider that the value adder reports 20 units of gold in each of the commodities. Let us see what would happen.

The cost of each commodity would increase the buyer would have to pay for 20 units of gold to the ASRO (Alive State Resource Owner) when he is suppose to be paying for only for 10 units of gold. So in this situation the buyer would automatically avoid such a value adder and would not trust such a value adder and in the end the value adder would end up losing the buyers.

It is not in the interest of buyers to get higher amount of resources reported than what is present in the commodity.

To sum up

We can say that it is in the interest of buyer and seller that the right amount of resources are reported for the given commodity in the “alive state” transaction at the point of sale (POS).

So the ASRO (Alive State Resource Owner) and other people do not have to worry about the issue of wrong reporting of resources contained in the commodities consisting of “alive state resources” because it will be something that will be automatically taken care by the buyer and the seller.

Ownership of Alive State Resources

The alive state resources are technically owned by the end user group ‘citizens of country’ which is identified as Alive State Resource Owner (ASRO) by the Alive State Mechanism. The alive State resources are provided by the ASRO to the resource holders under certain usage rights.

The resource holder is allowed to consume or destroy the alive state resource and use the alive state resource in whatever way he wants to.

When the Resource Holder consumes or destroy the alive state resource the cost of holding for that resource will be fortified by the ASRO.

Distribution of Alive State Resource Earnings

Distributing the resource earnings obtained by selling the non-Alive state resources at their origin is really simple. We can simply distribute the total resource earnings generated by dividing it equally among the citizens.

But distribution of the resource earnings generated by selling the Alive State Resources is tricky.

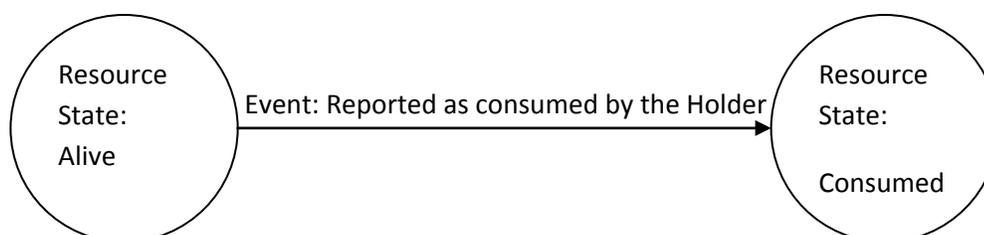
Let us call the resource earnings generated by selling the alive state resources as Alive State Resource Earnings (ASRE).

For the distribution of the Alive state Resource Earnings (ASRE) the ASRO (Alive state resource owner) maintains two accounts.

ASRO's Alive State Account

ASRO's Consumed State Account

The summation of all the cost of holding for all the alive state resources sold by the ASRO would lie in the Alive state account of the ASRO.



When the resource in the alive state is reported as consumed. The cost of holding at the time of reporting the consumption would be fortified by the ASRO as the cost of consumption for the given resource. This cost of consumption would go to the ASRO's Consumed state account.

All the earnings generated in the consumed state account can simply be distributed to the citizens by dividing it equally among them.

Distribution of money in the ASRO Alive State account

Distribution of the money in the alive state account is tricky.



Consider that the above box represents the total money in the ASRO's Alive State account.

The alive state account total can increase and decrease both.

After some amount of time there will be no net increase or decrease in the alive state account total although the amount will keep varying.

The total money in the ASRO's alive state account can vary therefore we cannot distribute the total money to the citizens and we need to find the safe distribution amount.

Safe distribution amount is the amount that we can safely distribute to the citizens such that the ASRO's alive state account does not go in the negative. The safe Distribution amount can be obtained in various ways according to the different real world situations.

We can obtain the safe distribution amount.

We will distribute the safe distribution amount by dividing it equally among the citizens.

Each individual a citizen in the Nonprofit Economy would have an Individuals alive state account. The alive state earnings of the individual would be available in his alive state account.

Usage of individual alive state earnings

The individual can use the alive state earnings to buy the commodities in the economy. But he needs to ensure that he returns the alive state earnings after he dies. It means that individual can use the alive state earnings only until he is alive.

Such an arrangement would ensure the fair distribution of alive state earnings across the generations of people. Without such an arrangement there would not be the proper distribution of alive state earnings across the generations and the newer generations would complain. Alive state Earnings are like the paternal property and it needs to be passed on to the newer generations after the people are dying.

So whenever the individual is withdrawing the money from his alive state account he needs to guarantee that he is using it in a way that he can return that money after he dies.

How can we really do that?

The simple way of doing that is to restrict the usage of alive state earnings to buy only the alive state resources whose value does not depreciate with the usage. The resources like land and gold.

If the individual uses his alive state earnings to buy a piece of land and consider that he dies without being able to return the alive state earnings. The state can recover the alive state earnings by selling the piece of land which was bought by the individual from his alive state earnings.

What is the benefit of alive state earnings to the individual?

Considering from an individual's perspective the individual would not need the piece of land after he dies. Why the individual would need a piece of land after he dies? So with the help of alive state earnings the individual can buy himself a place to live until he is alive. And this is what he really needs, a place to live until he is alive.

So in the Nonprofit Economy the best way to use your alive state earnings is to buy a piece of land.

To sum up

In the Nonprofit Economy each individual/citizen would have two accounts to receive the resource Earnings.

Individuals Alive State Resource Earnings Account

Individuals Normal Resource Earnings Account

In order to use the money in his alive state account the individual needs to guarantee that he can return that money after he dies. There are no such restrictions for the usage of the Money in Individuals Normal Resource Earnings Account.

Resource Specific Distribution Mechanism: Land

Land is a resource whose value doesn't depreciate. Land is a resource which suffers from artificial demand. Further land is a non-consumable resource. Therefore land cannot be reported as consumed and will always stay in the alive state.

Land situated at two different locations can have different value and different levels of demand in the economy. So the land situated at two different locations can be treated as two different resource types each having different and independently adjusted alive state price.

All the land in a city/state/country can be divided into different zones. A zone is a collection of connected land pieces or just a bigger piece of land which has same level of demand in the economy. All the pieces of land in the given zone would be identified as resources of same resource type having same alive state price.

Zoning of land

In the economy there could be changes in the situations of demand and supply. The pieces of land which had same level of demand and placed in same zone previously can have different levels of demand after some time in future. In such a situation we need to shift/change/reconfigure the boundaries of the zone accordingly.

A zone consists of the land having same levels of demand and thereby having the same price.

New zones can also be created and two or more zones can be merged.

You continuously have to rezone the land according to the changing demand levels of the land pieces situated in their respective locations in the economy.

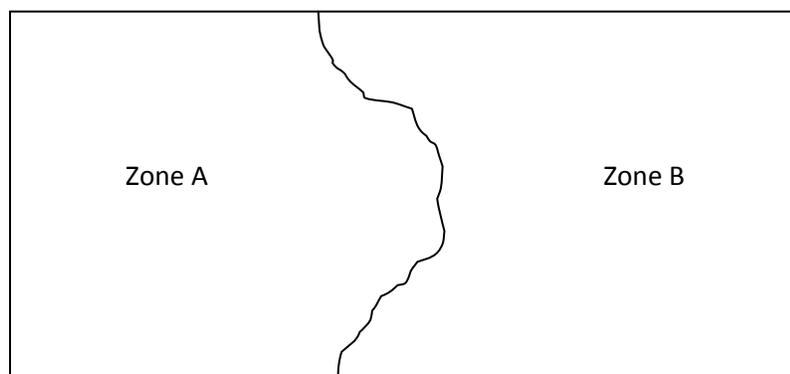


Image: Example of Land Zones

Consider that the above figure represent two zones of land in the particular area.

All the land pieces in the zone A would have the same alive state price and would be considered as same resource type by the ASRO (Alive State Resource Owner). Land in zone A can be used by dividing it into many smaller plots by the people according to their needs.

Consider an example if I am buying 100 units of land in zone A and another 100 units of land in zone B.

Cost of holding = quantity x alive state price

Alive state price for land in zone A = 100 bucks / unit

If I am buying 100 units of land in zone A I would pay

Cost of holding = 100 bucks x 100 bucks/ unit = 10,000 bucks

Alive state price for land in zone B = 150 bucks / unit

If I am buying 100 units of land in zone B I would pay

Cost of holding = 100 bucks x 150 bucks/ unit = 15,000 bucks

Further we can also observe that the land in zone A has same levels of demand and land situated in zone B has same levels of demand. But in future the demand patterns of zone can change therefore the zones can be reconfigured accordingly.

Let us consider an example

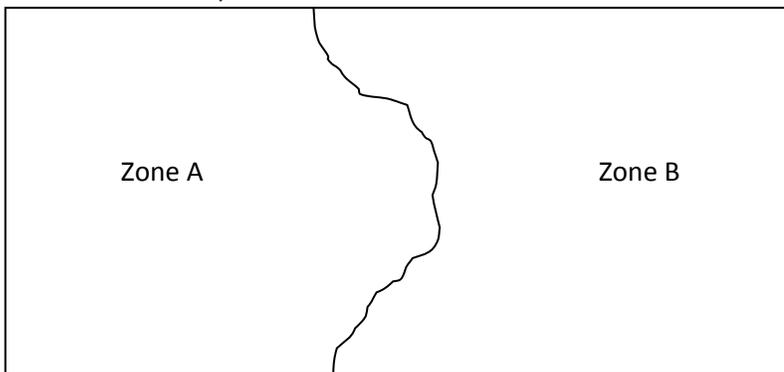


Image: initial zoning configuration

This is an initial zoning configuration

After some time due to changes in demand levels zones can be reconfigured into

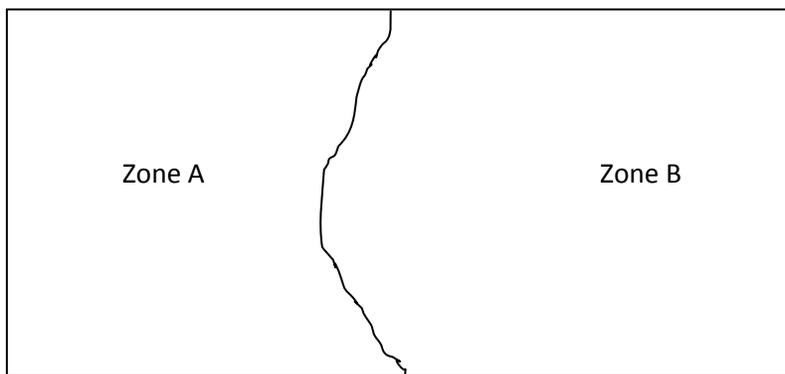


Image: zoning configuration 2

After some time due to further changes in demand levels zones can again be reconfigured into three zones

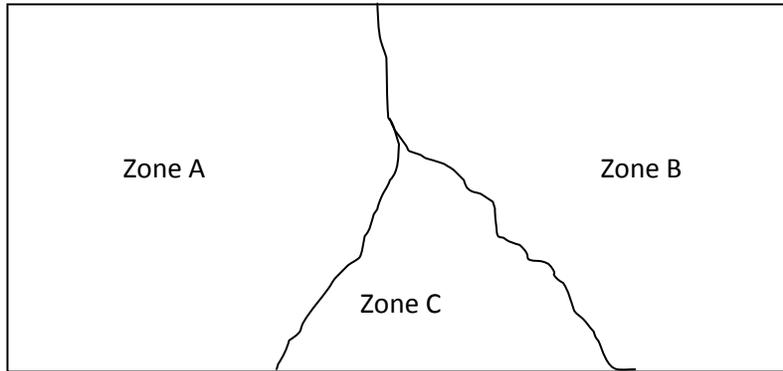


Image: zoning configuration 3

We can see that we can zone and rezone the land pieces according to changing demand levels of land pieces in the area or a city.

Finding the Alive State price of Land

There could be many different ways for finding the alive state price for the land zones.

One such way would be to have surveying agencies which will keep an updated record of the demand levels of the land in various areas. They would report whenever an update is required in the land price. They would also help in zoning and rezoning of the land according to the changing demand levels of the land.

Due to the alive state transaction mechanism we can expect the prices of the land to stabilize so finding and updating the alive state price of the land zones would not be a difficult job.

Just like conventional economy has its own set of ethics similarly nonprofit economy also has its own set of ethics.

Ethical Guidelines for Nonprofit Economy

Ethics are the set of mutually agreed protocols that people in the economy choose to live according to.

Nonprofit Economy also has its own set of ethics which are different from the ethics of the conventional economy.

Nonprofit Economy can function properly only if more than 60% of the people in the economy desire to live with the ethics of Nonprofit Economy.

But in order to live with those ethics people first need to know what those ethics are. Therefore I will be enlisting the ethics of Nonprofit Economy at the appropriate places in this text.

Further you can also find all the ethics of the Nonprofit Economy compiled together in one place in the topic named as "Ethics of Nonprofit Economy" at the end of this text.

In the society people can form different kinds of organizations where each organization can have different kinds of ethics and ways of functioning and governance.

We define here a new class of service provider organization which also has its own set of ethics and the set of protocols and mechanisms which defines the way the organization is governed.

We would call our new class of organization a Nonprofit in Nonprofit Economy

Nonprofits in Nonprofit Economy

A nonprofit in a Nonprofit Economy is an organization formed by the group of people who wish to accept to live with Nonprofit Ethics. They conform to the ethical limit on the services earnings that is exists in that instance of Nonprofit Economy. Nonprofits do not have the concept of shareholding. There would be no concept of profits because the organization is a nonprofit organization. The organization would function entirely on the nonprofit basis.

We already have the concept of nonprofit organization then why are we defining a new type of nonprofit organization?

We are defining a new type of nonprofit organization for the different needs of the Nonprofit Economy. We will discuss later the significance of nonprofit organizations in the Nonprofit Economy. For now we will just focus on studying the functioning of the organization.

The nonprofits in the conventional economy do not take the mainstream jobs the jobs like manufacturing the vehicles, computers and construction of building and homes. In the Nonprofit Economy which we are going to discuss later we will see that a Nonprofit in the Nonprofit Economy can take and do all the mainstream jobs like manufacturing vehicles and computers and the construction of building and homes.

A Nonprofit in the Nonprofit Economy can sell its services to the people on a cost. But the nonprofit would recover only the money that is required for the operation of the organization and recovering the input costs like the cost of raw resources and other inputs. The organization would not generate profits and would not recover more than what it spend for offering the services.

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Ethics of the Nonprofit Service Oriented Organizations

Nonprofit Service Oriented organization complies with the ethics of end user and service provider relationship stated before.

In the Nonprofit Economy people receive resource Earnings so they can do their jobs at a lower compensation compared to the compensation that is offered in the profit based organization.

Now there would be some questions that would naturally arise in people's mind.

How much would be the resource earnings?

Would the resource earnings be enough to sustain our needs?

We have already discussed these issues in the topic "Sustainability of the Nonprofit Economy".

Obtaining the funding and Investment

For the Nonprofits in the Nonprofit Economy there is no concept of shareholding. But still the organization needs to obtain the funding in order to start its operations. In order to obtain the funding the organization would borrow the money from the bank and will return the money to the bank after it has recovered that money.

Asset ownership

All the assets would be considered to be owned by the organization and no single person can claim any share in the asset of the organization.

Joining the group

For joining the group the individual will require the approval of the governance body of the organization.

Leaving the group

A person could leave the organization by his desire and choice. But we do not have a concept of shareholding in this organization. So when a person is leaving the organization the person cannot claim any share in the assets or the capital held by the organization.

Dissolving the organization

All the money and the assets that have been obtained by the organization belong to the people because people fund the operations of the organization when they are buying and paying for the services. So when the organization desires to be dissolved. The assets and the capital held in the account of the organization will to be returned to the state. When the organization decides that it no longer wants to function and have the desire to stop the functioning it would transfer all the capital and its asset on the account of the “people of the state”.

Structure of the organization

A group is formed in the society when there is a common consensus between people. Let us explore in detail what the common consensus mean.

The common consensus is the desire of the people to work on the same purpose in the society. People group together from a service provider group when they want to work on one purpose.

The people with diverse backgrounds, and different skills can group/organize together to work on a same purpose in the society.

Take for an example of the group of vehicle designers.

Designing a prototype of the vehicle require many different skills and understanding.

Ergonomics

To design the vehicle with better ergonomics people need to have an understanding of the human anatomy, comfort and utility.

Fuel efficiency

To design a vehicle with better fuel efficiency people need to have an understanding of how the engine works and the mechanical functioning of the vehicle.

Safety

People with the past experience of analyzing the causes of the accidents of the vehicle would have better understanding to design the vehicle that is safe.

Aesthetics

We need someone who understands the aspect of aesthetics.

Cost efficiency

To make the vehicle cost efficient, people need to have understanding of the economics, the materials the production of the materials and their costs and the availability in the economy.

So we can see that people with highly diverse backgrounds work together on a single project / purpose in the society.

We have people with diverse skill sets and backgrounds, ranging from the economics, mechanical engineering, human anatomy, and accident investigation all working together to build a prototype of the vehicle. I don't really have any knowledge of how a vehicle prototype is actually designed so pardon me if I am wrong anywhere but what we are trying to see here is how people from diverse backgrounds and skill sets can organize together to work together on a single purpose/project in the society.

A service provider organization is a group of people with same/similar backgrounds and skill sets who work together on the same purpose/project in the society.

We can also have a group of doctors, where doctors with different specializations can organize/group together to start a hospital. It would help the doctors because doctors could collaborate together effectively when they are in the same hospital.

The hospital would be more responsive to the needs of the people. The treatment of a single patient can involve the consultation and the analysis of the case by many doctors with different specializations. So when we find doctors with different specializations in the same hospital that would help in faster diagnosis of the case which is good for the patient and the doctors both.

We can see that a single organization can have many functional units each functional unit having different responsibilities. The tasks of the project/ purpose are delegated to the different functional units. The common consensus between the people is something that holds the organization together.

These functional units collaborate together to work together on a single purpose and a relationship in the society.

Every project is a relationship with the society. Whenever service providers are working on the project they are forming a relationship with the society.

Governance of the organization

The service provider organization many people from different backgrounds, different interests and capabilities contribute and work together on one purpose.

It is the founders and the visionaries of the organization who provide the organization its purpose. Founders are aware of the organizations original purpose and they have better understanding of its purpose. Therefore the governance of the service provider organizations can be efficiently carried out by the original founders and the visionaries of the service provider organization.

The governance of the "Nonprofit Service Oriented organization" will be carried out by the founders and visionaries of the organization.

Employees are aware of the organizations purpose in general but they do not understand how they are supposed to collaborate and what exactly the organization expects out of them in order to fulfill organizations purpose. Therefore it is the job of the founders and the visionaries to tell the employees what the organization is expecting out of them.

The founders need to have the understanding of the organizations purpose and they need to understand the job and responsibilities of each and every person. All the employees would work under the guidance of the founders and visionaries.

The tasks of the governance include

Approval/ disapproval for the relationships the organization forms in the society

The organization forms many relationships in the society. The founders need to approve and disapprove the proposals for the relationship for the organization.

Deciding the future course of the organization

The founders have an understanding of the future of the organization so they can make decisions that require the understanding of the future of the organization.

Defining the ethics of the organization

The culture of the organization is formed by the ethics with which people work in that organization. The founders understand very well what kind of culture is required for the purpose of the organization there it is their responsibility to define the ethics of the organization.

Transferring the governance to other people when they are leaving the organization

When the founders are leaving the organization they need to transfer the governance of the organization to the people who can suitably carry out the governance of the organization.

Observations

Size of the organization

We can see that larger the organization becomes the governance of the organization would become more tedious and complicated. It will be more difficult to govern the organization when the organization gets bigger, consists of large number of the people and own large number of assets. So the size of such an organization would remain in the order of small to medium. This is good because in the small organizations the governance of the organization is democratic and distributed where people could have more freedom and flexibility of working and the work culture of the organization is healthy.

Hierarchies in the organization

Because people do not work for profits, and no person receives a salary we could not have a hierarchy of designations in such an organization where designations are categorized in the order of competence and importance. Due to absence of hierarchy there would be a sense of equality among the people and people would not be judged and categorized in the order of importance/competence. This would foster better culture in the organization and healthy work environment for the people.

Payrolls and attendance

Because people do not work for profits, we do not have the concept of payrolls and the check in check outs and attendance. There will be a lot of flexibility. People could work anytime they want to. They could work from anywhere they want to. People could take a break and enjoy a holiday. Because the organization is not focused on generating profits there are no monetary goals which people are suppose to be achieving. People could work at their pace. If they feel like they have done a lot of work this week they could just take a break and relax, because they are not bound to any goals like generating profits and earning incentives. So people will always have an opportunity to take a break and relax whenever they feel like.

Designation of managers

The organization does not require having people on the designation of “managers” to monitor the work of the other people. Because people do not work for profits, they are always trying to work with best of their capabilities so we will not require the designation of “managers” to monitor and push the people to work.

Increased productivity due to better work culture

People enjoy their job and take more interest in their job when there is a better work culture in the organization. The work culture in the “Nonprofit service oriented organization” would be better than what any profit based organization could provide. This will increase the productivity of people and people would take more interest in doing their job. So the productivity of this organization would be higher than any profit based organization.

Availability of Investment

The proposals for a non-profit organization would be made only when there is a genuine possibility and opportunity/ requirement in the economy. While the proposal for the profit based organization is generally made for the sake of earning profits so a proposal for profit based organization can be made even when there is no justified and real requirement in the economy. What does that mean with reference to the investments? It implies that the proposal for a non-profit service oriented organization is less likely to fail in the economy. It would always have lower risks of failure compared to a profit based organization. This would help the organization to obtain the investments easily, and the costs of the investments would also be lower due to easier availability of the investments and funding.

Lower cost of services

The services offered by the non-profit service oriented organization would have lower costs let us see why

The organization does not work for profits

The organization is not generating profits so it can offer its services at lower costs compared to a profit based organization.

People demand lower compensation

Due to existence of resource earnings and the ethical limit on the services earnings. People demand lower compensation for their jobs so this will further reduce the cost of services.

Savings obtained due to lower costs of investments

We will study later that due to lower risk of failure the “nonprofit service oriented organization” can obtain the loans at lower margins. Higher the risk of failure the higher the organization would have to pay to the lenders. So lower risk would save the organization the costs it spends in to obtain the investments. To understand this in a better way let us consider an example. For obtaining the loan of 100 bucks the “nonprofit service oriented organization” would be required to return 110 bucks to the lender. While in the same case a profit based organization would have to return 150 bucks for the loan of 100 bucks. So we can see that a “nonprofit service oriented organization would save costs in obtaining funding due to the lower risks involved”.

Savings obtained due to increase in productivity and efficiency

We will see that “nonprofit service oriented organization” would be inherently more efficient due to better work culture better ethics and ability to collaborate better with the people and the other organizations in the society. Improvement in the efficiency of the functioning of the organization would result into cost cutting, reduction in wastage and the organization can pass on the benefits to the people by lowering the cost of services.

So we can see that there are many factors which enable the “nonprofit service oriented organization” to offer better services at much lower costs.

Governance of the organization

The relationship between the lenders and the organization ends after the organization has returned the loaned amount. Due to this the service providers and founders can govern the organization independently and there would not be any disputes between the organization and the lenders over the governance of the organization. Due to this the service providers would retain the governance of the organization.

The service providers are the founders of the organization so they have better understanding of the purpose of the organization. When service providers retain the governance of the organization this would help the organization to have better governance and hence better future.

The shareholding organizations suffer from the conflicts over governance. The founders and the investors generally have different views over the governance of the organization. The investors are more focused on generating profits and short term gains while the founders are more focused on the original purpose of the organization. We can see that there are likely to be conflicts and disputes between the founders and the investors when they are both governing the organization together.

There are many real world examples which can verify this observation. I would not provide the specific examples but readers can do their own research if they really interested to see those examples.

To understand this issue we will consider an example of a hospital. Doctors are more interested in taking care of the patients, and the future of the hospital and the welfare of the people and society. The doctors will be willing to take some decisions which might not sound good from a profit oriented perspective but will be good considering the purpose of the hospital and the future of the hospital which is to offer services to the people and taking care of the people’s health. So we are always likely to have a divergence between the views of investors and the views of the doctors over the issues of the governance of the hospital. The shareholders and investors would be focused on maximize their profits and short term gains without any consideration of organizations original purpose which is to take care of people’s health. While the doctors will understand the original purpose of the organization and will take the decision which is good for the original purpose of the organization even if it does not sound good from a profit oriented perspective.

In a “nonprofit service oriented organization” we do not have the concept of shareholding so the governance of organization would be under the hands of better people who can govern the organization in a legitimate and better way. Better governance of the organization is good for the employees and the society also.

Sharing and collaboration between the organizations

Two organizations who do not work for profits are more likely to collaborate in the society and help out each other compared to the organizations which work for profits and have competing interests.

In an economy, many organizations need to help and collaborate with each others in order to have efficient utilization of resources and manpower. The collaboration is required in many aspects.

For the sake of end user convenience the organizations need to design and adhere to open standards while designing the products so that the services offered by different organizations are interoperable with each other.

We can see that just by having open standards, interoperability and better collaboration between the organizations would add a lot for the user convenience.

Lack of proper collaboration between the organization results into the hassles and unnecessary inconvenience for the end user it would also result into wastage of resources, money and the manpower. We will study that aspect in more detail in other topics of this book.

The profit oriented organizations have competing interests and hence lack proper collaboration between them, due to lack of proper collaboration, there is an inefficiency wastage or resources and manpower, and inconvenience for the users.

A profit based organization would end up designing ten different proprietary solutions based on the same concept where two or three non proprietary open solutions designed with open standards would be sufficient for the needs of the society. So we can see that profit based organizations end up wasting manpower, resources due to competition among themselves.

A nonprofit organization would not have to compete with each other because generating profits is not their objective.

We are often told that the generation of new currency and other such factors is the cause of the inflation. But there could be some other factors also that could also be causing the inflation which we might be neglecting. In this topic we will study and explore how ethics of the Economy could be the cause of inflation.

We would also see that generation of new currency does not NECESSARILY cause inflation.

We will also study the effect of the savings and lending in the Nonprofit Economy. So that it would help us understand what is ethical and the truthful behavior when it comes to the lending and borrowing.

Rates, Cash, Prices and Inflation

A Note for the Reader

This topic is going to be a bit technical and mathematical in nature. And I haven't really put a lot of effort to make it comprehensive in order to avoid further delays in releasing the current version of this text. So do not worry if you fail to understand some parts of this topic or even if you fail to understand the entire topic. In the future versions of this text I will try to make this topic somewhat more comprehensive so that more number of people can easily understand this topic.

Terms and conventions

Production rate

It is the rate at which resources and commodities are produced in the economy.

Earnings rate

It is the rate at which people are earning the money in the economy.

Spending rate

It is the rate at which people are spending the money in the economy.

Consumption rate

It is the rate at which resources and commodities are consumed in the economy.

Prices

"Prices" is the sum of the per unit price of all the resources. When prices increase inflation would occur and when prices decrease deflation would occur.

Earnings rate = prices x production rate

Spending rate = prices x consumption rate

Cash Pile Generated

If you are spending at a lower rate than you are earning you would get some cash with you. The cash you get is represented by this equation.

Cash pile generated = (Earnings rate – spending rate) x time

The difference between the earning rate and the spending rate would be varying with time so in that case we will need to take the help of integrals.

Cash Pile generated = $\int (\text{earning rate} - \text{spending rate}). dt$

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Cash Pile Consumed/Released

If you have some cash with you the cash would go away when you would spend at a higher rate than the rate at which you are earning. This is represented by equation below.

Cash pile consumed = (Spending rate – earning rate) x time

Cash pile consumed = $\int (\text{spending rate} - \text{earning rate}). dt$

Savings Generated and Savings released

When you are saving money and not putting it into the bank

Savings generated = cash pile generated

Savings released = cash pile released

Purchasing capacity = avg. production rate

Cash per person = (Total money / number of people)

Savings comfort ratio = (Cash per person / Earnings rate)

If savings comfort ratio is lower people would not be able to save, due to lack of cash in the economy. We will discuss more on that later.

“Cash”, “Money”, “currency” mean the same thing. Money doesn’t mean the actual printed money it just means the total money in the economy.

Savings and Release of Savings

Savings generated = (Earnings rate – spending rate) x time

Spending Rate = Prices x Consumption rate

Whenever you are saving money, spending rate would go down and with the drop in the spending rate would cause either the

Drop in the consumption rate

Or

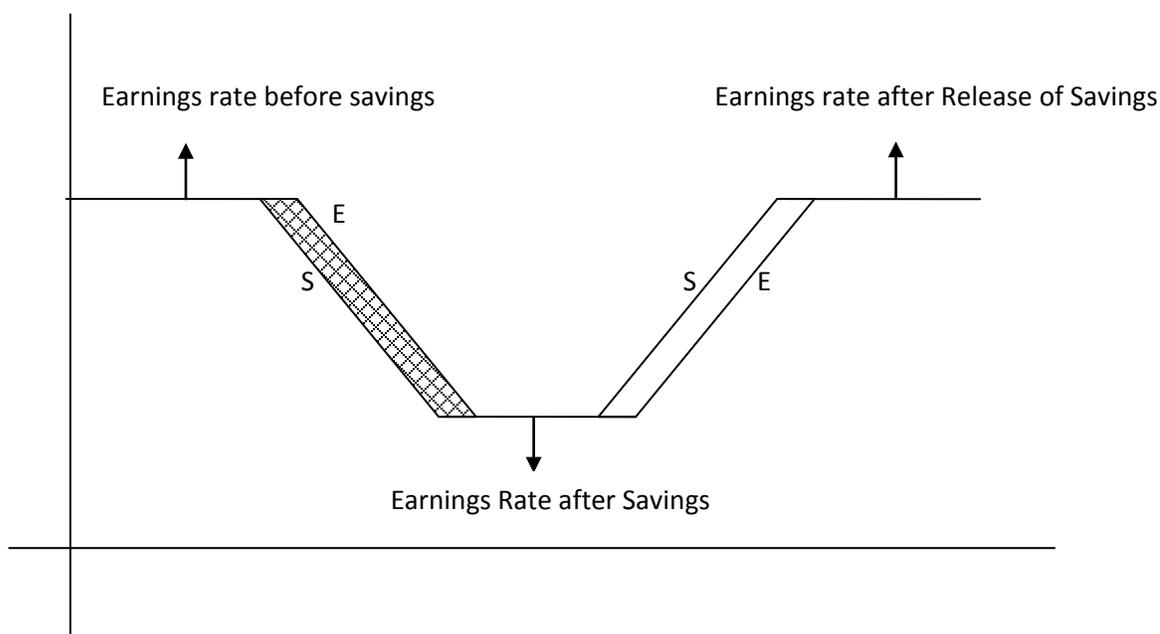
Drop in the prices

If there is a drop in the consumption rate people's purchasing capacity will go down. If there is a drop in prices there would be deflation.

Case of drop in the consumption rate

Drop in the spending rate would cause drop in the consumption rate. Drop in the consumption rate would cause drop in the earnings rate. Since whenever people are saving and there is a difference in earnings rate and spending rate so the drop in the earnings rate would further cause drop in the spending rate.

So the spending rate and the earning rate both will continue to fall down until people have not stopped saving the money.



E -> Earnings Rate

S-> Savings Rate



Shaded Region Indicates the Savings Generated. Area of shaded region equals' savings generated.



White Region indicates the savings released. Area of White region equals' savings released.

Image: Savings and release of Savings

We can see in the graph that when people started saving spending rate dropped. The shaded area in the graph is the savings generated.

Savings generated = (Earnings rate – spending rate) x time

After saving the money the earnings rate has dropped down. Drop in the earnings-spending rate would cause drop in the consumption rate and hence the purchasing capacity of people would go down.

Purchasing capacity = avg. Consumption rate

Now people have saved the money and saved money will be released someday.

Savings released = (spending rate – earning rate) x time

When people are releasing the savings the spending rate would increase and will be more than the earning rate. So with the release in the savings there will be increase in spending rate and earning rate and this will go until people have no more savings to release.

Savings released = Savings generated

Therefore the earnings rate would get back to exactly where it was previously.

The consumption rate would be restored. But again there would be drop in the avg. consumption rate and hence the purchasing capacity of the people would go down.

Case of drop in prices

This time we will assume that the consumption rate will not go down with the drop in the spending rate. Instead due to drop in spending rate the prices would go down while the consumption rate would remain same.

Spending Rate = Prices x Consumption rate

In this situation due to drop in prices the deflation would occur and when people would release their savings there will be an increase in prices and the inflation would occur.

Whenever money is saved a release of money is inevitable because saved money would always be released someday in future. Deflation would be followed by inflation. And the magnitude of inflation would be exactly equal to the magnitude of deflation. So there is no/would be no net inflation or deflation in the economy.

Observations and conclusions

When people are saving money and releasing money there would be either

A drop in consumption rate resulting in drop in purchasing capacity

Or

Either a deflation followed by an inflation of equal magnitude such that there is no net inflation or deflation in the economy.

Generation of currency

When you are generating the currency what you are doing you are giving people money which they can go and spend.

Cash pile released/consumed = $\int (\text{spending rate} - \text{earning rate}). dt$

So whenever currency is generated spending rate is increasing.

Spending rate = prices x consumption rate

Now we can see that the consumption in the economy is already at the optimum levels would be the most likely case. Therefore the consumption rate would not increase. If the consumption rate would not increase the prices has to go up with the spending rate.

Therefore with the generation of currency inflation is something that is inevitable and would occur in the most likely case. Except in a situation where the consumption rate goes up with the spending rate which would be a rare case or it would not occur at all.

So whenever there is a generation of currency or money the inflation would occur in the most likely case.

But are we missing something?

Cash per person = (Total money / number of people)

Savings comfort ratio = (Cash per person / Individuals Earning rate)

In most of the cases the generation of currency would result into inflation but not always. We are missing something. Generation of currency will not always result into inflation.

Social Life and Economics

When the savings comfort ratio is decreased it is difficult for people to save the money due to lack of money in the economy, the ratio can decrease due to increase in production rate, change in demographics and could be also due to some other possible reasons.

Lowering of savings comfort ratio might result into deflation, I don't really know for sure but this is what I suspect.

Irrespective of whether the deflation is the result or not but when we are generating the currency in the situation of lack of money in the economy, in such situation this money would not result into increase in the overall spending rate because it will be absorbed in the economy as the savings.

So whenever there is a lack of or shortage of currency in the economy, we can generate the new currency without causing inflation. But we need to refrain from generating new currency when there is no lack of money in the economy in this situation it will inevitably result into inflation.

In the Nonprofit economy we need to know that whenever new currency is generated it needs to be distributed to the "people of the state" by dividing it equally among them. So the new currency is generated only when there is a lack of money in the economy and whenever it is generated it is distributed to the "people of the state".

Net price pull up

Assume that there are four resources in the economy the a, b, c, d.

A, B, C, D is the per unit cost of resources a, b, c, d

So prices = $A + B + C + D$

The ratio's of A, B, C, D is adjusted according to the ratio's of the production rate of each resource. The negotiations between the seller and buyer and the cost adjustments due to demand and supply all is resulting only in the change in ratios of A, B, C, D

It does not result in the change in Prices.

Prices = $A + B + C + D$ which is the sum of the unit cost of resources. The ratios would vary but the sum will remain the same.

Even if the production is going up the prices would not go up. It is only the ratios of the production rate that is reflected in the ratios of A,B,C,D. The change in net production rate results in the change in earnings rate it will not cause change in the prices.

Earnings rate = Prices x production rate

So now the question that arises is what factors really pull up or pull down the prices. Whenever prices is going up we call it net price pull up and whenever prices are going down we call it net price pull down.

The change in the demand supply, change in the production rate/ consumption rate does not cause net price pull up or net price pull down. In simple language changes in demand supply change in production rates, consumption rates do not cause deflation or inflation. There are some other factors which create a net price pull up or net price pull down.

Inflation due to ethics

Ethics of the people cause inflation!! Sounds crazy! I know, but let us try to see. I am not really sure about whether the ethics cause inflation, but this is something that could be a possible reason behind the inflation. Let us try to see and explore how

Earnings rate = (Prices) x (production rate)

In this equation production rate is an independent variable.

Earnings rate is a dependent variable.

“Prices” is the variable which represents the prices of resources, commodities and services.

“Prices” is actually an independent variable in this equation.

Understanding of math tells us that there could be only one dependent variable in the equation for a given situation. So prices cannot be a dependent variable because we already have a dependent variable.

The production rate is an independent variable and it is already available to us.

The value of prices is an independent variable so it is something that people can set independently. Value of “Prices” does not depend on anything or any variable in this equation because “Prices” is an independent variable. The value of “prices” is an independent variable that people can set independently.

Let us try to see what forces could affect the value of “prices”.

In the economy,

Sellers initiate increase in prices.

Buyers initiate increase in prices when resources become scarcer.

Buyers initiate decrease in prices when resources become less scarce.

We can see that it is the buyer who regulates the prices of everything in the economy. The seller has no necessary role in the regulation or changing the prices. Buyers initiate an increase in prices also and a decrease in prices also therefore the buyers initiatives cancel each other and therefore have no net effect in the cost of resources and the value of prices.

But when sellers work for profits, they try to pull the prices up. It creates a net increase effect in the prices. The prices are pulled up and the inflation occurs.

Now compare this to another situation.

Sellers do not initiate any change in prices.

Buyers initiate increase in prices when the resources become scarcer.

Buyers initiate decrease in prices when resources become less scarce.

We can see that in this situation buyer's initiatives cancel each other and there is no net effect of pulling up or down of the prices because there is no initiative from the seller to change the prices.

So there is no net pulling up and pulling down effect on the prices of the resources, commodities, and services. The inflation therefore would not exist.

So when such a situation would occur?

It would occur when sellers would not be focused on profits when sellers do not work for profits. Now you can see or appreciate better why ethics can cause or affect the inflation in the economy.

In fact it is an interesting observation.

The rate of inflation can actually tell you about the ethics of people. Higher the inflation rate in the economy more profit oriented the people would be. If people are less profit oriented the inflation rate would be lower. But you need to be careful here and not jump into conclusions about people's ethics as there could be many other factors that can be causing inflation in the economy.

Seller's Psychology

If the consumption rate falls down, they would think of decreasing the prices in order to raise the consumption. But decreasing the prices will decrease their earnings also, if the consumption rate fails to increase at an equal proportion.

Would the drop in prices create an equal increase in consumption rate so that the earning does not fall down or at least remain same?

It is like taking a risk to the seller. So rather than taking a risk the seller would simply not decrease the prices or would be reluctant to decrease the prices. If a seller can decrease the price to 10 bucks in order to restore the consumption rate he will decrease only about 7 bucks.

While if there is an opportunity to increase the price to 10 bucks the seller would not hesitate to increase the price to 10 bucks, because it will not affect his earnings and is not risky.

This is creating a net pull up in the prices.

When a seller is a nonprofit seller decreasing the prices would not be like taking a risk for a nonprofit seller because profits is not something that he cares about and he is more focused on people's needs rather than the profits so he will genuinely try to let the consumption increase by decreasing the prices as much as he can.

A nonprofit seller would not cause a net price pull up while a profit based seller would end up causing net price pull up.

So working for profits could be something that is causing inflation in our economy. I am still not sure about it so we will wait to comment about it until we get a clear idea to see if that really is the case.

Deferring of spending

If I am earning 1000 bucks in a month and I decide to spend only 600 bucks and save the 400 bucks, I would spend 400 bucks sometime in future. I might have some commitments like building a home or paying for college in the future for which I need to save.

What I am doing, I am deferring my spending to the future.

When people defer their spending it causes a drop in the spending rates. The rate of spending is also deferred.

In the economy production is happening at a certain rate people are earning at the same rate but when people do not spend at the same rate would happen. Let us see

The spending rate would fall down

Due to falling in spending rate the consumption rate might fall down or in another case consumption rate would not fall down. We would get two cases

Case 1: Consumption rate does not fall down

It would result into deflation.

When the spending rate is lower than the earning rate, it would result in drop in the prices of commodities, resources and services. The rate of consumption would not drop but prices of everything would drop, this would be caused by a temporary change in currency resource value representation/prices.

A deflation caused by deferring of spending would always be temporary and would be accompanied by an inflation of equal magnitude.

There would be no net deflation or Net inflation in the economy.

Whenever people are deferring their spending they are saving their money somewhere, this saved money would someday come out and will be spent in future. When this will happen an increase in the spending rate would occur, the spending rate would go above the earning rate this would result into temporary inflation.

Spending rate going below the earning rate would always accompany the spending rate going above the earning rate and vice versa.

When spending rate goes below the earning rate a deflation would occur.

When spending rate goes above the earning rate inflation would occur.

Due to deferring of spending we would witness a temporary periods of deflation and inflation. There would be no net inflation or deflation in the economy because inflation would always accompany a deflation of equal magnitude and a deflation would always accompany inflation of equal magnitude.

Inflation and deflation can occur at anytime and with random sequence. Sometime there could be a period of inflation followed by a period of inflation or a deflation followed by a deflation. Inflation or deflation can occur at any sequence the only thing that we can say is...

The dynamics of inflation and deflation would be such that there would be no net inflation and net deflation in the economy if we see it on the overall period of time.

There would be periods of temporary inflation and temporary deflation. We would call it "Hiccups of deflation and inflation". It occurs due to deferring of spending rates.

Why do we call it "hiccups of deflation and inflation" it is an interesting thing to see. If you have observed the actual hiccups, hiccups are something that can be surprising and the timing of hiccups can be surprising to the person and can be a little disruptive.

To the economy inflation or deflation caused by deferring of spending rates would be like a hiccup. It would occur surprisingly and would be a little disruptive.

Case 2: Consumption rate would fall down

Sometimes the drop in spending rate could be huge to an extent that consumption rate would also fall down with that.

The drop in the spending rate may not result in the drop in the prices, in such a case deflation would not occur consumption could drop down and earnings will also drop down.

A possible drop of consumption rate would occur and resulting into drop in production rate. Due to drop in the production rate the purchasing capacity of the people would go down.

To sum up

Deferring of the spending rates would result into

“Hiccups of inflation and deflation”

Or

Drop in purchasing capacity of the people (If the spending rate drops too much)

Drawbacks

But it would result into creation of unfairness in the economy. Some people would make unfair losses, and some people would make unfair gains.

“Hiccups of deflation and inflation” creates unfairness in the economy. Unfairness is something that creates imbalance in the economy. Any kind of imbalance would end up having adverse effect in the economy which would be bad for everyone in the economy.

If the deferring of spending result into falls in consumption rate it would directly result into fall in the purchasing capacity of the people.

Relationship of lender and borrower

So if we want to overcome these drawbacks what do we need to do? We need to do something so that the rate of spending remains nearly equal to the rate of earnings.

How could we do it?

We can do it by allowing the money that we are saving to be spent by other people. In simple terms it means that lending the money to other people so that they could spend it. If you have some spare money that you are planning to spend later, you would lend that money to other people and let them spend it.

So in this way we prevent falling in the rate of spending. But this is only half of the full story.

So when we are lending the money and after the enough time have passed we will need that money back in order to spend for the commitments that we have been planning for. In this case the in order to return your money the lender would lower his spending rate so that you can now increase your spending rate. The overall effect would be the spending rate would remain nearly equal to the earnings rate/ production rate. This is what we want/need in order to get rid of the drawbacks of deferring of spending.

Why are we really discussing it?

The thing that I am really interested in showing here is the “benefits of lending and borrowing”. What difference the lending and borrowing would make in the economy and the benefits we would obtain from lending and borrowing. And there is one interesting observation that we can make here.

Lending and borrowing helps in reduction/elimination of creation of unfairness in the economy, it helps to overcome the drop in the purchasing capacity of the people.

A very interesting observation that we can make here is

Both the Lender and borrower are benefitting equally from the relationship of lending and borrowing. What does that mean?

It means that “the Lender and borrower is actually a relationship of equality”.

It is because the lender and borrower is the relationship of equality if the lender would collect incentive from the borrower that would create inequality in the relationship. If this would go on after the long amount of time, you would see that the borrower would not be capable of returning the money the borrower would be rendered incapable of returning the money.

Or due to fear of incapability of returning the money the borrower would simply not borrow the money. The potential of lending and borrowing would not be utilized to a full extent.

If the borrower has the capacity/ supposed to be borrowing 1000 bucks, he would borrow only 800 bucks or even 600 bucks but he would not borrow 1000 bucks. Failure to utilize the full potential of lender and borrower relationship would render us unprotected from the “hiccups of deflation and inflation” which causes unfairness or the drop in purchasing capacity which obviously is not something that people would want.

Inflation and banking

In the economy if the inflation is happening at a constant rate it would deter our initiatives to have an ecosystem of lending and borrowing where people can lend without incentives, it is because due to inflation people might find it unreasonable to lend without incentives. So inflation is not something that is not good for nonprofit banking. What can we do about inflation?

Inflation due to generation of currency can go away we just need to stop generating the money unless there is a lack of money in the economy and we need to stop unnecessarily releasing the money in our economy. Now if we consider that there is inflation due to ethics I am not sure about it but if that really is the case the kind of inflation would automatically go away in a Nonprofit Economy because people are living with nonprofit ethics.

Therefore we can see that if the people want to live with nonprofit ethics inflation would not be something that could deter our initiatives to have nonprofit banking in our economy.

Notes of Precaution

People need to observe a precaution that Ethics are something that is not supposed to be enforced by legislation. People are free to choose for themselves what ethics they want to live with. These ethics are only for those people who find them useful and those who desire to live with these ethics.

These ethics are applicable only for the “Nonprofit Economy”.

Ethics of lender and borrower relationship

Ethics

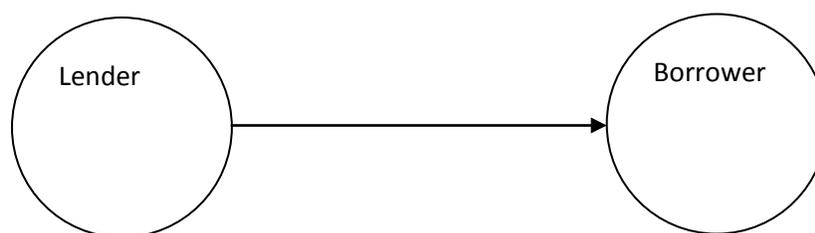


Image: Lender and borrower relationship

In the nonprofit Economy the relationship between the Lender and borrower could be the relationship of equality or it could be the relationship of inequality depending upon the situation.

If I am sacrificing some of my commitments in order to lend my money then in this situation the relationship between the lender and borrower is a relationship of inequality and the lender deserves a compensation in this situation. Consider an example if I am cancelling my holiday trip or some another commitment in order to lend some money then I might deserve a compensation. The Compensation would be a simple interest on the loaned amount.

In another case if I have some spare money and which I am not going to use anywhere and I do not have any commitments for this money. In this situation the relationship between the lender and borrower would be the relationship of equality where both the lender and borrower benefit equally from the relationship. Therefore the give and take doesn't make any sense in this relationship.

Speaking from the perspective of ethics in this situation the lender does not deserve any compensation and he need not ask for any compensation from the borrower. For example consider that I have around 10000 bucks with myself and currently considering all my commitment I do not require more than 6000 bucks at least for next 6 months. In this situation the remaining 4000 bucks that I have is the spare

money that I have and speaking from the perspective of ethics I can lend this 4000 bucks for 6 months without asking for any compensation.

In the Nonprofit Economy we have two different kinds of banks - a zero interest bank and a simple interest bank.

If a person seeks a compensation for the money that he is lending then he would put his money in a simple interest bank. If a person does not seek a compensation for the money that he is lending then he would put his money in the zero interest bank.

Regarding the Simple interest and Compound Interest

We had already discussed that in the Nonprofit Economy monetary incentives are not supposed to be used in order to encourage people or motivate them.

There is a difference between monetary incentive and the compensation which we have already discussed in this text.

Asking for compound interest is like asking for a monetary incentive and using monetary incentive in order to motivate/encourage people. Therefore in the Nonprofit Economy the compound interest doesn't make sense and needs to be discouraged.

If my friend is sick and he needs to borrow some money to pay the medical bills and recover his health then I would be easily willing to cancel my trip that I've been planned for near future and lend some money to my friend, so that he could get the medical aid and recover his health.

Banks

Now if we put a layer of isolation between me and my friend. I don't know who I am lending to and what cause I am lending for. I am being told that if you lend the money you will be provided XYZ incentive.

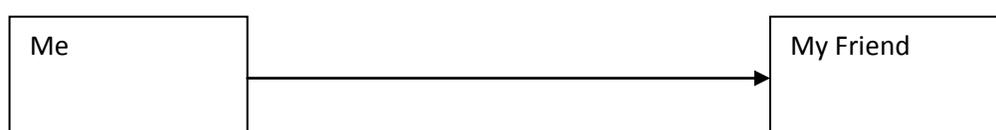


Image: Initial Case. Case of lending without incentives

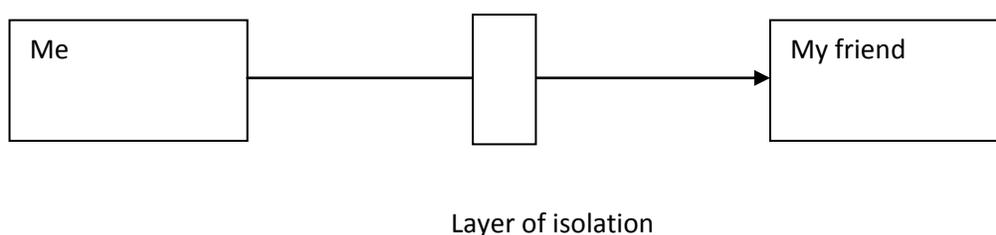


Image: Case of lending for incentives

My friend is really poor and he might not be able to pay good enough incentive to get the lending.

So I would think like let the incentives go to hell and I would enjoy my trip because I've been planning for my trip from a long time ago.

And maybe behind that layer of isolation, my friend could be really sick, and he would even die if he does not get the lending.

My point is

For many people the concept of incentives does not work, they are more motivated by the obligation to help other people rather than the incentives. Helping other people and organizations is a good enough motivation for the people to lend to other people and organizations so there is no requirement of the concept of incentives when it comes to lending. In fact for some people helping other organizations and the people would provide a greater motivation for the people to lend when compared to the incentives. Incentives put a layer of isolation between the people due to which people fail to see how they can help other people.

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Bank Fund Mechanism

People save their savings in a fund. People can save their money and withdraw their money anytime they want to.

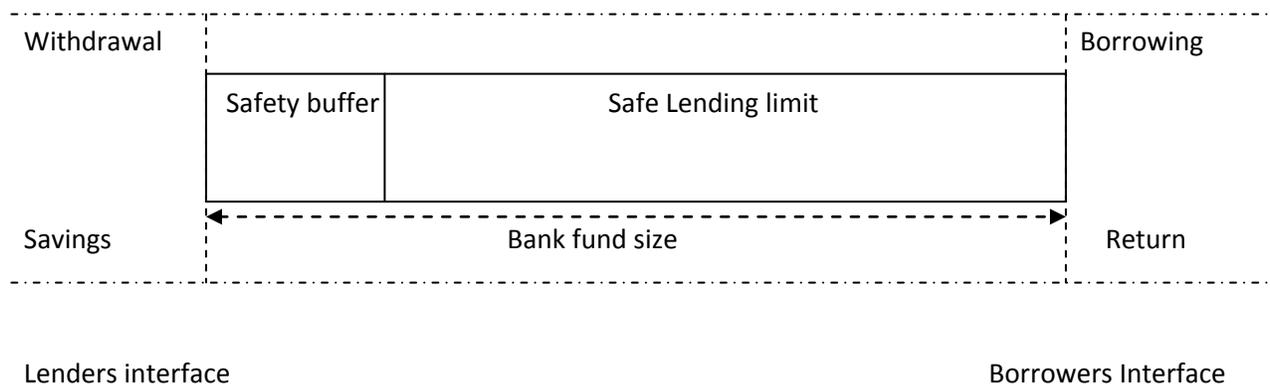


Image: The Bank

Savings rate

It is the rate at which people are saving the money in the bank fund.

Withdrawal rate

It is the rate at which people are withdrawing their saved money from the bank fund.

Lending rate

It is the rate at which the money is loaned to the borrowers.

Return rate

It is the rate at which the borrowers are returning the money to the bank.

Total Money (Size of the bank fund)

It is the total money that is the part of the bank fund.

Current money

It is the total money that is currently available in the bank.

Total money – loaned money

Observations

When the withdrawal rate is higher than the savings rate the size of the bank fund/ total money would decrease.

When the savings rate is higher than the withdrawal rate the size of the bank fund/ Total money would increase.

Initially the savings rate would be higher than the withdrawal rate and the bank fund would grow after some time the rate at which the people are saving would become and stay nearly equal to the rate at which the people are withdrawing.

Stable fund size

So after some time the bank fund would grow and stabilize at a certain size we call it a Stable fund size. Stable fund size is the size at which the bank fund is stabilizing.

After stabilizing the size of the stable bank fund might increase or decrease a little bit but it would stay nearly the same over time.

We get a stable fund and we can loan this money to the other people, organizations and help to solve their needs of borrowing the money.

Due to variations in the bank fund size for the purpose of safety and preventing the situations of frequent bank runs or withdrawal overshoot where withdrawers would not be able to withdraw their money from the bank we should not loan all the money available in the bank fund to the borrowers.

We will need to define a safe lending limit.

Safe lending limit = % of Stable fund size.

What percentage of stable fund size can be used as a safe lending limit would be decided after doing proper research and real world experiences.

Safety buffer size = Bank fund size – safe lending limit

Safe lending limit = Bank fund size – safety buffer size

Safe lending limit would have a constant value while the safety buffer size and the bank fund size can vary up or down with the passage of time.

Withdrawal Overshoot

Sometimes there could be situations when the withdrawal rate becomes greater than the savings rate and because the bank has loaned the money it has it would not be able to cater to the increased requirement of withdrawal. We call it the withdrawal overshoot or in simple language the bank runs.

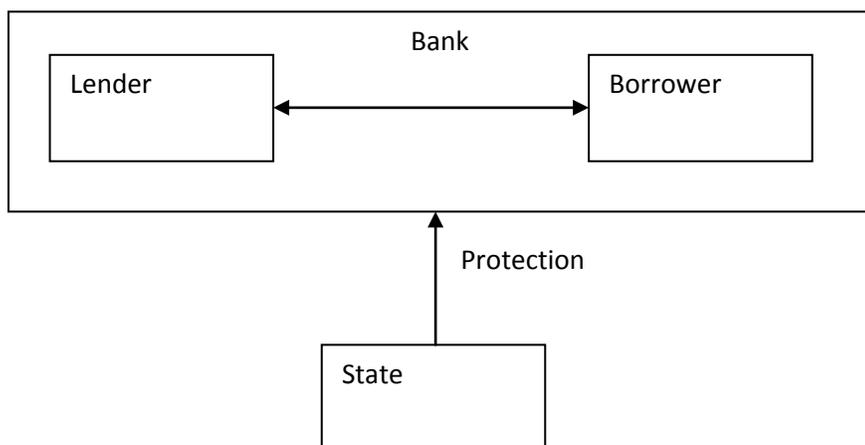
In this situation we need to put a freeze on lending and try to encourage the borrowers to return their money as soon as possible.

In the normal operation of the bank such a situation would not occur if the bank is adhering to the safe lending limit. Such a situation can occur when people lose their faith in the bank and develop a fear of losing their savings due to such fear all the people would want to withdraw their money.

We can see that we can fix this issue with the help of concept of “State protection for Banks” which we would see later. With the help of state protection such a situation would not occur.

State protection for banks

In order to have a healthy ecosystem of lending and borrowing our banks need to be protected from the risks of all kinds. If the lenders have to face the risk of losing their money when they are keeping their money in the bank nobody would keep their savings in the bank and the relationship of lending and borrowing would not survive.



There are three entities involved whenever the relationship of lending and borrowing is concerned.

The lender is the one who lends his savings to the borrower. The borrower would return the lender the borrowed money according to the mutual agreement between the lender and the borrower.

The state is the one who benefits from the relationship of lender and borrower because this relationship helps the state to prevent from the drop in the purchasing capacity of people or the “hiccups or inflation and deflation” causing unfairness which is bad for the economy. So it is in the interest of the state the relationship between the lender and borrower is healthy and it survives. But there is the possibility of losses due to risks involved in the relationship of lender and borrower.

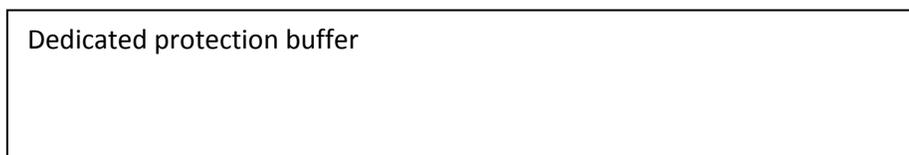
The lender would not bear the risks in any case. The borrower would bear the risks which are inherent in the purpose of borrowing. There could be many other risks in the relationship of lending and borrowing so all losses which are not paid by the borrower would be paid by the state. The state would pay for all the losses even if the borrower fails to pay for its losses hence the state would act as an ultimate protector for the losses in lending and borrowing.

So the individuals and organization that are saving their money in the bank would be protected from all the kinds of risks and losses.

Such a kind of a setting where state acts as the ultimate protector of all the losses that might result in the relationship of lender and borrower is termed as “State protection of banks”. Let us call such a bank as “State protected Bank”. Even if the borrower fails to pay for the losses which it is suppose to be paying “the losses inherent in the purpose of borrowing” the state would pay for such losses.

The other losses like the losses due to cheating and fraud would also be paid by the state. So approving the loans from a state protected bank would require the approval of the state. All the loans which are given by the state protected bank would need a direct or indirect approval of the state.

Mechanisms for state protection



The state would maintain the dedicated protection buffer. Whenever the losses are reported by the bank the state would pay for the losses with the money available in the dedicated protection buffer.

All the money that goes in the dedicated protection buffer is ultimately recovered from or paid by the “People of the state”.

To sum up

The state would act as an ultimate protector for the bank. We would call such a bank “State Protected bank”. If a state protected bank goes through any kind of losses and even if it fails to recover the borrower’s losses the “losses due to risks inherent in the purpose of borrowing” all the losses would be ultimately paid by the state so that the lenders could keep their money in the bank without any fear of making losses.

Home Loans

In the Nonprofit economy the holder of the resources would not make losses due to drop in resource prices.

So we would not have situations where banks would make losses due to real estate market crash or bubble burst and situations like that.

If the cost of home drops due to drop in the cost of the land the holder of the land would get the difference from the ASRO (Alive State Resource Owner).

So if the banks are providing home loans the banks would not have to worry about making losses due to drop in land prices. The kind of losses the banks would make in the situations like real estate bubble burst. Providing a home loan would be one of the safest lending options. There would be no cases of cheating and fraud because the bank can actually go and see whether the home for which the loan has been taken do actually exist or not.

Personal loans

If I am planning to go on a trip with my friends in this month, but I don't have the money right now and it is going to take me few months to arrange for that money. So I would have to defer the plans of my trip.

In such a situation I would be really happy if someone loans me the money to cover up the expenses of my trip.

People need personal loans for a lot of reasons.

Providing a personal loan is safer because we already have estimate of the individual's earnings. Further since the source of the earnings the Resource Distribution Mechanism is something that is governed by the state. So the state can always recover the personal loan money from the individuals account at the Resource Distribution Mechanism.

Education Loan

Education loan is like a personal loan the only difference is the loan amount would be higher and the expected time to return would also be greater.

In the Nonprofit Economy we already have an estimate of individual's earnings so we can accurately predict and determine the ability of the individual to return the loan.

Therefore providing an Education Loan and Personal Loan would be a safe lending option in the Nonprofit Economy.

In the conventional economy we have the angel investors and venture capitalists for funding the proposals for new ventures similarly in the Nonprofit economy we have the venture startup Helper (VSH) for funding the proposals for new ventures.

Lending to Venture Startups

In the nonprofit economy the organizations are nonprofits and there is no concept of shareholding. The funding capital is loaned to the new ventures and ventures try to return the loan as soon as they can.

Venture startup helper (VSH) is someone who studies the proposal for the new venture and approves the loan for that proposal.

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Risks in funding to new ventures / Losses in funding to new Ventures

Funding to new ventures involves some risks. A venture can fail and doesn't necessarily always emerge successful. And whenever there is a failure of a venture it will make losses and fail to return the loan.

Consider that out of every 100 venture startup proposals that have been approved by the Venture startup Helper 10 are failing. For example out of every 1000 bucks loaned we are able to recover only 900 bucks and 100 bucks are accounted into losses. In this case the rate of recovery is 90%. The rate of recovery is the percentage of loaned money that we are able to recover without charging the interest. These are the losses that we would be making in the lending to the venture startups. We call it losses due to genuine failures.

Genuine failure means that there was no intention of fraud and cheating in the failure of the venture startup.

So we need some kind of arrangement to recover these losses. To recover such losses we can have the concept of risk interest.

For all the money that we have loaned to the venture startups we would recover the money with the risk interest. Risk interest is a simple interest that is charged on the loaned money. In the above example for every 1000 bucks loaned we are able to recover only 900 bucks consider that we charge the risk interest of 11.12 %. We would be able to recover all the loaned money which is equal to $900 + 100 = 1000$ bucks.

So risk interest is there to recover the losses due to genuine failure of the venture startups.

Risk interest is directly proportional to the risk involved in the venture startup proposal. Consider that if a venture startup proposal is based on a new idea it might involve a higher risk. Out of every 100 such proposals 50 ventures are failing account for the 50 % losses.

While consider another case we are lending to the doctors for the proposal for setting up a new hospital in a city. A hospital is an essential service therefore there is a very little chance that it will fail. Consider that out of every 100 proposal for lending to new proposals for hospitals only 10 are failing. And we are able to recover 90 % of the loaned money without interest.

So in case of lending for the proposal for new hospital the risk interest on the loaned money would be lower say around 11.12% in the above case. While in case of lending to the venture startup proposal where failure rate of recovery is around 50% the risk interest would be 100 %. In this case for every 100 bucks loaned the successful venture would have to return 200 bucks consisting of 100 bucks for loaned money and 100 bucks for risk interest.

We can see that risk interest is directly proportional to the risks of failure in the given venture startup proposal. Risk interest may be different for each venture startup proposal and would be calculated specifically for each venture startup proposal.

Loan Profile

Loan profile is the profile of the loan approved for the single venture startup proposal.

Total Loan Amount

It is the total amount of money that has been approved as a loan and loaned to the given venture startup.

Risk Interest

It is the simple interest charged on the loan amount in order to recover the losses made due to failure of venture startups. Risk interest is directly proportional to the risk involved in the venture startup.

Time of Return

Time of return is assigned by the VSH. It is the time up to which the loan must be returned.

Max Time of Return

The time of return cannot be extended beyond this limit. This value is defined by the state.

Terms and Conventions

Venture Startup Proposal – The proposal for starting the venture which describes the entire details.

Founders – The founders of the venture startup proposal.

Dubious Proposals – The venture startup proposal submitted with the intentions of fraud and cheating.

Dubious Proposers – The people who put up a dubious proposal for venture startups.

Venture Startup Helpers – A service provider group which approves the loan for the venture startups.

Risk Interest – A simple interest charged on the loan amount in order to recover the losses.

Responsibilities of the Venture Startup Helper

Invite proposals for the venture startups

Grant Approval / Disapproval for loan requests

The VSH would study the each proposal

Study the venture startup proposals and grant approval / disapproval for each proposal for the venture startup

Actively engage with the startup organization

Actively engage with the startup organization and help the organization to emerge successful and survive in the economy so that the organization is able to return the loan

Ensure that there is no case of corruption by the venture startup proposers.

Corruption could occur in the case when the failure of the venture startup is done deliberately by the founders or venture startup proposers to acquire the loan money with the intents of fraud.

Calculate the risk margin for each proposal

The VSH would study the proposal and assign the risk margin based on the risk involved in the venture startup proposal. If the risk of failure is high the risk interest would be higher and if the risk involved is lower the risk interest

Assign the time of return for each proposal

Extension of the time of return

Sometimes a genuine startup organization fails to return the loan money in the prescribed time of return but still the organization may have the capability to return the loan if the time of return is extended. In such a situation it is the responsibility of the VSH (Venture startup helper) to study such requests and grant the extension whenever appropriate.

VSH (Venture startup Helper) has the privileges to freeze the venture startup

The VSH can freeze the venture startup on the basis of suspicion of corruption or the inability of the venture startup to return the loan after the loan has been approved.

Carry out the venture failure routine for the failed ventures

If a venture has failed in this situation the VSH would carry out the Venture Failure Routine. Let us see what a venture failure routine is.

If a venture startup fails to return the loan within its allotted time of return in that case also the venture can be considered as failure and liable for venture failure routine.

Venture Failure Routine

Venture failure routine is the routine or a set of steps/sequences that is required to be carried out whenever there is a failure of the venture startup.

Step 1:

When there is a failure of the venture startup. The founders would report the failure.

Step 2:

After the founders of the startup venture has reported a failure of the venture. The VSH (Venture Startup Helper) would freeze the assets and the capital of such a venture.

Step 3:

VSH would try to recover the loan money by selling the assets and acquiring the capital. If the recovered money is lower than the loaned money that would be accounted as the losses on the account of the given VSH (Venture Startup Helper).

Block Algorithm

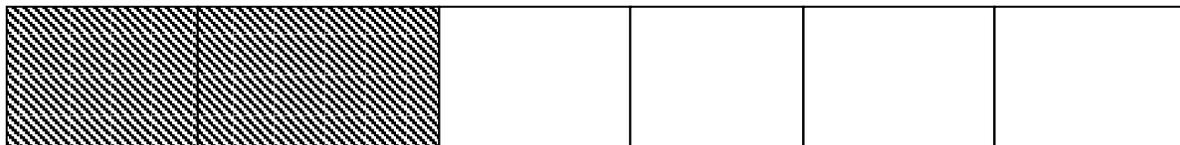
Venture Startup Helper is someone who approves the loan for the new venture proposal. VSH also calculates the risk interest for each loan proposal. As we have read before the purpose of risk interest is to recover the natural losses that arise in the process of lending to venture startups due to risk of failure of new ventures. And the VSH is the one who calculates the risk interest.

Therefore it is the responsibility of the VSH to recover the losses occurring due to failure of venture startups.

The performance of the VSH is the ability of the VSH to recover the losses. If the VSH fails to recover the losses or in other case results into huge losses the bank would not want such VSH and would want to terminate the lending privileges of such a VSH.

Therefore we need some kind of logic or an algorithm in order to keep the track of the performance of the VSH and automatically terminate the lending privileges of the VSH when its performance drops below acceptable levels.

Let us say that each loan profile is represented by a block



Loan Block

State = Open / Closed

Social Life and Economics

The loan block will stay open state until the venture startup hasn't returned the loan until the time of return is not elapsed. The loan block will go to the closed state after the time of return has been elapsed or after the venture startup successfully returns the loan before the elapsing of time of return.

Loan amount = Total amount that has been loaned

For State = Open

The Recovered Amount = NA (Not Applicable)

For State = Closed

The Recovered Amount = is the total amount that is recovered after the block has been closed.

Terms and Conventions

Total Loaned Money = Summation of total loan amount for the closed blocks

Total Recovered Money = Total Money that has been recovered out of the total loaned Money

Net = Total Recovered Money – Total loaned Money

When VSH has made net losses the value of net will be negative and the magnitude of the net will represent the losses VSH have resulted for. 'Net Losses' is the magnitude of net when the net is in negative.

When VSH has made net gains the value of net will be positive and the magnitude of the net will represent the gains VSH have resulted for.

Open Block Money – Total sum of the money in the blocks that are in open state

Max Open Block Limit (MOBL) – The maximum value that is allowed for the Open Block Money for the given VSH.

Max Net Losses Limit (MNL) – The value of maximum losses that has been allowed for the VSH

If the net losses for the given VSH crosses the MNL for given VSH it will be considered as falling of the performance of VSH below the accepted level.

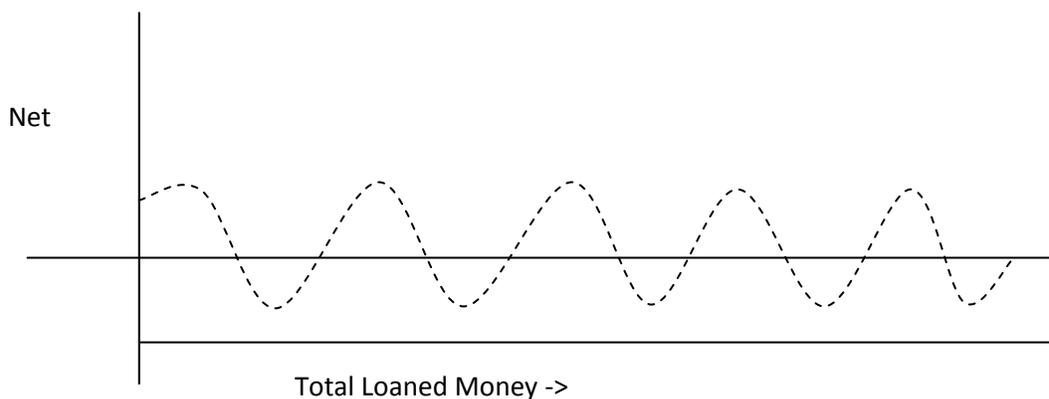


Image: Typical Pattern for Net Vs Total Loaned Money

Profiles for Max Net Losses Limit (MNL)

Normal Profile

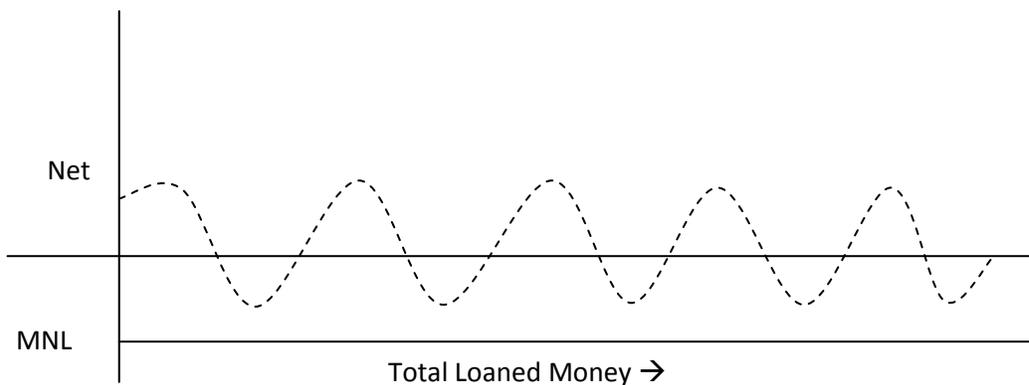


Image: Normal Profile

In the normal profile Max net losses limit would not change with the total loaned money. The value of Max Net Losses Limit would remain constant.

Break Even Profile

In the Break Even Profile the “Venture Startup Helper” is suppose to break even and cannot register any losses after his “Total Loaned Money” reaches a certain magnitude which we would call as ‘break even range’.

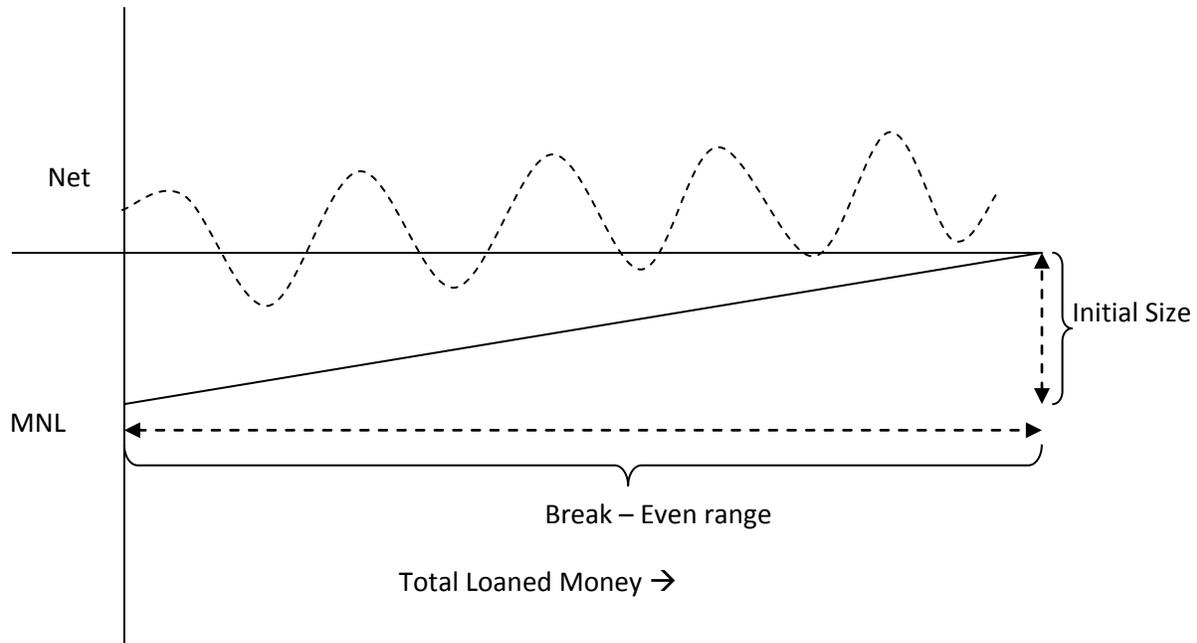


Image: Break Even Profile

Break Even Range = (% or (Times of)) (Max Open Block Limit (MOBL))

Break Even Curve

Current Max Net losses Limit

Case 1: TotalLoanedMoney <= BreakEvenRange

$$\text{MaxNetLossesLimit} = -\text{InitialSize} \left\{ 1 - \left(\frac{\text{TotalLoanedMoney}}{\text{BreakEvenRange}} \right) \right\}$$

Case 2: TotalLoanedMoney > Break Even Range

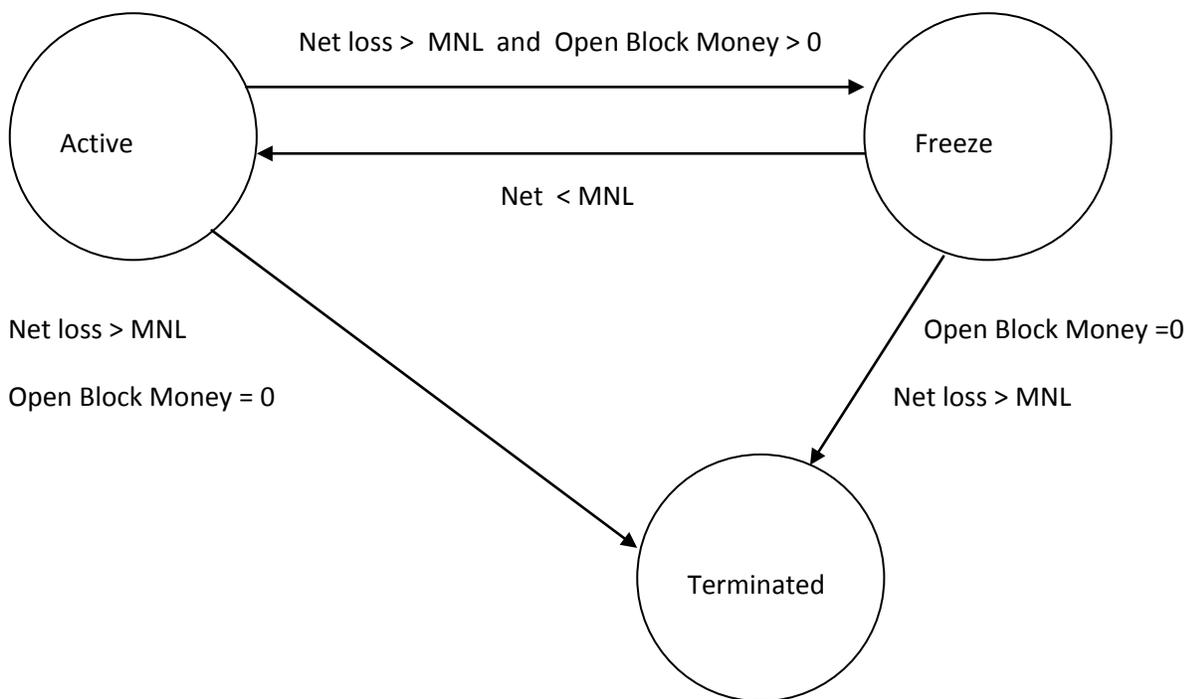
CurrentMaxNetLossesLimit = Zero

Max Block Size – It is the maximum size of the block that is allowed for the one loan block. In simple terms it means the maximum money that can be loaned to the one organization.

Max Time of return – this value is defined by the state. The time of return cannot be extended beyond this value.

Trust level - Max Open Block Limit (MOBL) can be increased or decreased as the trust with the VSH increases or decreases. For example in the case of new Venture startup Helper the value of MOBL can be low which can be increased in future.

State Diagram



MNL – Max Net Losses Limit

Net Loss – Magnitude of Net when Net is in Negative

Open Block Money – Total Money in Open Blocks

Let us try to study the how the block algorithm works with the help of state diagram.

States

Active

Active State indicates the lending privileges of the venture startup helper are enabled and hence active.

Freeze

Freeze state indicates that the lending privileges of the venture startup helper has been suspended but can be enabled after some time if the performance of VSH gets under acceptable limits.

Terminated

It indicates that the lending privileges of the VSH needs to be permanently terminated because it has fallen below acceptable limits and there is no scope that it can get back under acceptable limits.

State Transitions

Let us study the different cases of State transition

Case: 1

Initial/Current State: Active

Condition

Net (Net losses) > MNL and Open Block Money > 0

It indicates that the net losses of the VSH have exceeded the max acceptable limit which is MNL (Max Net losses Limit). But still there is some money in open blocks (OBM) so the losses could decrease in near future. In this situation we will freeze the lending privileges as a precaution and wait and watch.

Final state: Freeze

Case: 2

Initial/Current State: Freeze

Condition

Net (Net Losses) < MNL (Max Net Losses Limit)

The current state is 'Freeze' which indicates that the lending privileges were frozen due to exceeding the MNL. But in due course of time as the results of open blocks are declared. The Net losses has become lower than MNL (Max Net Losses Limit) indicating that the performance of VSH has come under the acceptable limits. Therefore the lending privileges has been activated again.

Final State: Active

Case: 3

Initial/ Current State: Freeze

Condition

Open Block Money = 0

The open Block Money has become equal to zero so the value of 'Net' will no longer change. And still $\text{Net} > \text{MNL}$ (Max Net Losses) which indicates that there is no scope of the performance of the VSH would recover and come under the acceptable limits. Therefore the lending privileges of the VSH are now permanently terminated. VSH can now pack his bags and go home.

Final State: Terminated

Case: 4

Initial / Current State: Active

Condition: $\text{Net (Net Losses)} > \text{MNL (Max Net Losses)}$ and $\text{Open Block Money} = 0$

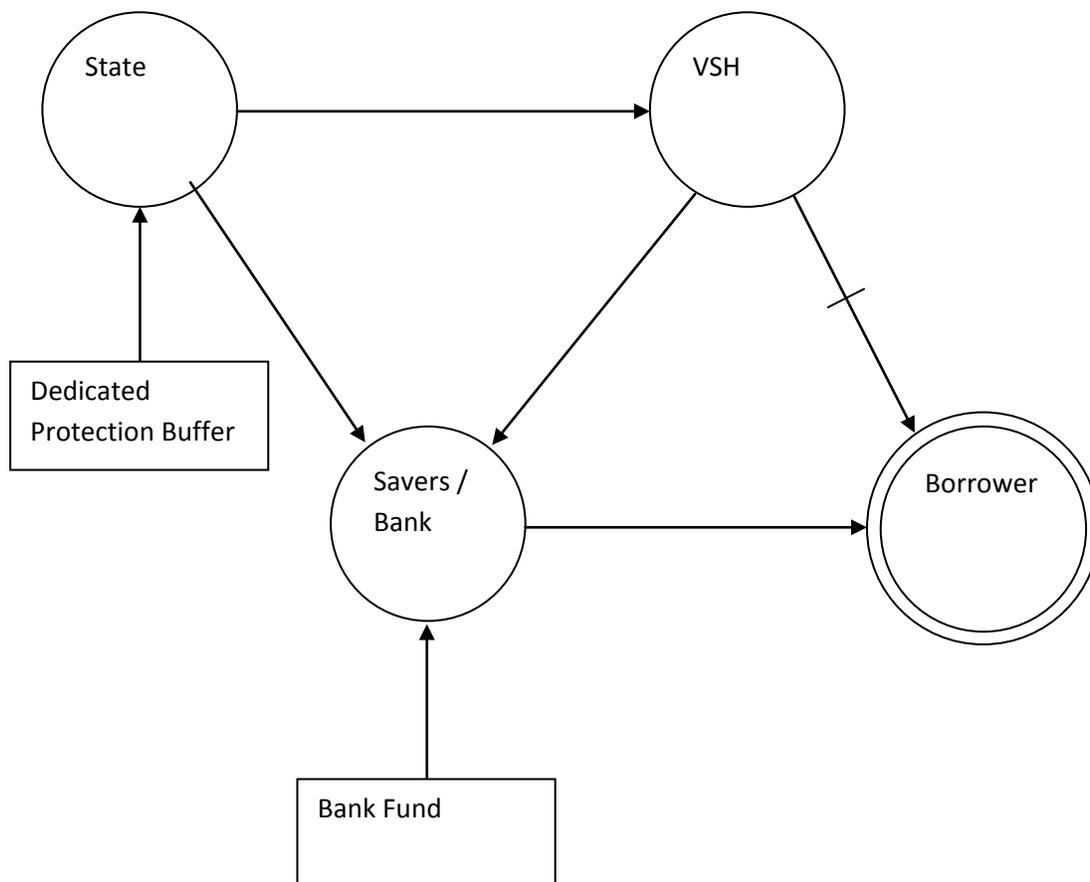
Open Block money = 0 which indicates there is no scope for the revision/change in the value of Net. The Net losses have exceeded the maximum limit and there is no scope for its change. In this situation the lending privileges of the VSH (Venture Startup Helper) would be permanently terminated.

Final State: Terminated

Ownership of the venture startup

All the assets and the capital of the startup venture would be owned by the bank until the loan is not returned. When the loan amount is returned the ownership needs to be transferred to the founders of the respective startup organization.

Relationship Diagram



To understand the relationship diagram you will need to understand the chapter “Relationship Diagrams”. You can find this topic from the main contents of this text. Even if you do not understand the relationship diagrams do not worry you can skip this topic and come back to this topic later.

The bank is protected by the state. It means that the state would cover whatever losses the savers will go through in case if there are any losses. The state has a special dedicated protection buffer for that purpose. The losses might result due to bad performing venture Startup Helper (VSH). A bad performing VSH is the one who is unable to recover the losses that naturally occur in the process of lending to venture startups.

The savers are protected and are not suppose to bear any losses. Because in the Nonprofit Economy Savers are lending at zero interest and zero profits and incentives. So if savers have to go through the losses it would discourage the savers from keeping their money in the bank. Therefore all the losses that occurred to the savers are borne by the state.

If a VSH (Venture Startup Helper) if bad performing there would be some losses.

It is in the interest of the State that the losses are minimized/ reduced to the maximum extent possible or even completely eliminated if possible.

There it is in the interest of the state to ensure that VSH is able to do its job properly and not a bad performing VSH. Therefore the state will have the privileges to approve / disapprove the lending privileges to the VSH.

Any interested Group of people in the economy can request to play the role of VSH. The state would interview those groups which might involve background checks and other checks.

In this way the state could insure only genuine and responsible people / groups get to play the role of VSH in order to minimize the losses due to bad performing VSH.

Therefore in the relationship diagram we can see that

The State approves the interested group on the role of VSH. And the VSH has the privileges to assign the loan to the interested venture startup proposals.

Ecosystem of Lending to Venture Startups

A state could approve many interested groups which are interested to play the role of VSH on the role of VSH. The founders of the new ventures can take their proposal to any VSH. This freedom would ensure that if one VSH is not providing a good service they can approach the other VSH which is providing a good service.

Therefore the presence of VSH's who are providing good service would ensure that people are getting good service. People have the freedom to avoid the corrupt VSH and go to the genuine VSH.

Further there could be VSH's specialized for lending to different kinds of proposals. For example some VSH's would have more experience to lending to hospital startups while another VSH's would have more experience of lending to engineering or research startups.

Ethics of VSH

The VSH is a service provider so the ethics of service provider and end user relationship would apply to the VSH.

The VSH would offer its services without any expectation of incentives and profits in return.

Cases of Corruption

VSH asking for bribe

If there is a VSH which is asking for bribe in order to approve the loan for venture startup proposal. The founders of that startup proposal can approach another VSH which is not asking for bribe. So in the presence of genuine VSH a corrupt VSH cannot survive.

Corrupt VSH approving corrupt venture startup proposers

Corrupt venture startup proposers are those proposers who are asking for loan with the intentions of fraud and cheating.

How the founders of venture startup proposers can cheat?

The venture startup is allowed to fail due to genuine reasons for example a venture fails to survive in the economy and in that case the losses would be accepted and borne by the state.

Corrupt/Dubious proposers may steal the loan money and capture the loan money and put in into their personal accounts and they might try to get away with this by trying to show that the venture has failed due to genuine reasons and the losses are genuine.

Let us term such proposers as Dubious Proposers and call their proposals as dubious proposals.

Further the corrupt proposers can also offer a share of their stolen money to the VSH in order to approve such a dubious proposal. Because it is not practical and feasible to investigate each and every proposal the VSH is approving the question that arises.

How can we really ensure that dubious proposals do not get approved?

Let us see

If a VSH is corrupt and approving dubious proposals he would make more losses. In order to break even and keep its net losses under acceptable limits he would have to increase the risk interest compared to what he would have charged if he was not corrupt.

Therefore a genuine VSH can lend at lower risk interest and a corrupt VSH would lend at higher risk interest.

The genuine founders would always prefer to approach the VSH who is lending them with the least risk interest. Therefore the corrupt VSH would automatically not find any proposals for venture startups.

Therefore in the presence of genuine VSH a corrupt VSH would fail to survive.

Case of genuine VSH fails to detect fraud and dubious proposers

Further even if the VSH is genuine but sometimes he might not be able to detect the intentions of fraud and cheating from the dubious proposers.

But we need to know that it is the responsibility of the VSH to actively engage with the venture startup and keep the proper accounting of the money spent and ensure that there is no case of fraud and cheating and dubious proposals.

If the VSH fails to play his responsibility it indicates that VSH is not being able to do his job properly.

Such a VSH would make more losses compared to VSH who is able to do its job properly and hence would have to lend the loan at higher risk interest compared to VSH who is able to do his job properly.

Founders of genuine venture startup proposals would always prefer to approach the VSH which is providing the least risk interest. Therefore in the presence of genuine VSH a bad performing VSH would not survive.

Lessons to learn

The presence of genuine VSH who are able to do their job properly would ensure that corrupt VSH does not survive in the economy.

When the economy consists of enough number of genuine VSH who do their job properly would automatically result into an ecosystem where the corrupt VSH cannot survive.

Lending to a Nonprofit organization

People might have a question in their minds is it safe to lend the banks money to the organizations?

Let us see,

Lending to a nonprofit service oriented organization is not same as lending to a profit based organization.

In a nonprofit service based organization the organization is not making any profits and even the employees are not taking any salaries, employees are working free of cost.

You would establish or expand a “nonprofit service oriented organization” only when you see a genuine or reasonable opportunity/need/requirement in the economy while a person would propose a profit based organization even when you do not see a genuine requirement in the economy.

Therefore a nonprofit service oriented venture/organization has much lower likelihood/probability of failure when you compare that to likelihood/probability of failure of a profit based venture.

The risks involved in lending to a “nonprofit service oriented organization” are much lower than the risks involved in lending to a profit based organization.

Conclusion: Lending to a “nonprofit service oriented organization” is safer so there is no harm in lending the banks money to the “nonprofit service oriented organizations”.

Lending to organizations after starting up

Organizations need money in order to start its operations but sometimes the organizations would also need to borrow money after they have started their operations.

They would need to borrow for reasons like

- Increase the production capacity

- Major infrastructure upgrades

By the way the organizations are supposed to keep the surpluses in their accounts so that they could meet such anticipated expenses. But sometimes due to competitive nature of market they might not be able to keep the surpluses in their accounts as they cannot increase the cost of their services above certain limit.

The cases where the organizations would need to borrow the money would be fewer because most of the organizations would be able to arrange for the anticipated expenses by themselves.

Lending to the organizations which are already setup is safer than lending to the “venture startups”. If the organization fails to return the loan amount it would have to return the loan amount by selling its assets. So when you are lending to the organization you wouldn't suffer much losses.

Further because the organization is already setup we can observe the background of the organization. We can see what kind of reputation the organization has in the society. What is the history of the organization? It helps us to evaluate and eliminate the possibility of fraud and cheating that might occur in the case of borrowing.

Total valuation of the organization

= Total capital in organization's account + Valuation of the assets

In the Nonprofit Economy,

Since there is no artificial demand effect there would not be any change in the valuation of assets like building and land if the organization owns any of those assets.

So the total valuation of the organization is a reliable figure which tells us how much we can safely lend to the organization.

We would not lend the organizations more than its total valuation.

In a nonprofit economy money is something that represents the value of resources and resources are owned by the “citizens of the state” so whenever the currency or money is generated it needs to be distributed to the “citizens of the state”.

Issue: Central Banks

It puts a question mark on the concept of “Central Banks”.

I am not yet sure about it but I am hoping we cannot have “Central Banks” in the “Nonprofit economy” because it goes against the ethics of the Nonprofit Economy.

I will comment more on that in the future versions of this book.

Even if the state implements the mechanisms of Nonprofit Economy but if the people do not live with nonprofit ethics the Resource earnings will fade away some day and the society will be back to its conventional ways.

What does that really show?

Lessons to learn

We think that people are not able to live better life because they lack solutions and facilities. While the pattern that we get here is telling us the another story it is telling us that even if we provide people better facilities and solutions, they will still not be able to use those solutions and they will in fact reject those solutions and get back to their old ways.

What are we missing here? Unless people do not have good ethics they cannot use solutions and they cannot even utilize the better solutions if we provide them those solutions.

It shows us that solutions and facilities are secondary while ethics of the people are primary. Teaching people good ethics come first and providing them solutions come after that.

Unless people do not have the desire to live with good ethics, they will not be able to utilize the solutions and they will not be able to live a better life also.

If we provide the people all sophisticated and better solutions but if we fail to provide them good ethics we cannot help them live better while if we start with teaching them good ethics they will automatically demand for better solutions. And when people demand for solutions the solutions will automatically come.

Resource Distribution Mechanism is just a mechanism or a solution, but in order to use that solution first thing that we need to teach people is good ethics.

If you are focused on finding solutions but neglecting the task of teaching people good ethics you are wasting your energy and efforts. To have a better society the first thing that we need to start with is teaching people good ethics and after that we need to look into providing them solutions and facilities which they will automatically demand when they start living with good ethics.

But there is one more thing when we are teaching people good ethics only those people will accept and adopt good ethics who desire to live with good ethics while other people who have no such desire will not accept good ethics even if they are taught good ethics.

Speaking about the people, if the people have the desire to live with good ethics then only they can have a healthy society which is free from evils live poverty and inequality. If people in the society do not

have any such desire we cannot really help them. Unless people do not develop the desire to live with good ethics there is nothing we can do for them to get them out of their suffering.

There is one interesting observation that we can make when it comes to recycling the resources in the Nonprofit Economy.

Commodity cost = Resource cost + Value Addition Cost + Human Services cost

We can see that in the Nonprofit Economy human services cost is reduced due to ethical limit. The commodity cost remains the same and the resource cost is increased. This will increase the percentage of recovery from the recycling for a given commodity. Due to increased resource cost you would recover more money when you are recycling the commodity in the Nonprofit Economy compared to what you would recover in the conventional economy when you are recycling the same commodity.

Recycling

For example if you are recovering 30% of cost of the commodity when you recycle that commodity in the conventional economy you might recover 50% cost for recycling the same commodity in the nonprofit economy.

Percentage of recovery = (Cost recovered from recycling) / Total cost

Cost recovered from recycling is the cost that you get when you sell the commodity to the recycler. Percentage recovery is the percentage of the total cost that you recover when you sell the commodity to the recycler. We can see that in the nonprofit economy since human services cost is reduced the percentage of recovery from recycling would increase. It is because the percentage of resource cost in the total cost has increased.

This would encourage people to recycle more. They will take more interest and more initiatives to recycle the commodities.

In a Nonprofit economy since people work with lower compensation therefore monetary incentives are not something that motivates people to do their jobs further due to resource earnings they have a financial security. Due to these factors people are not compelled to take up the jobs that they do not like to do. In this situation there would be many jobs for which we would not find any takers. There could be some manual uninteresting jobs which nobody would want to do. If nobody would do those jobs wouldn't that result into problem?

We can categorize all the jobs into two categories

Automation

Boring/ manual jobs

These are the jobs that people would find uninteresting and nobody would want to take up those jobs in a nonprofit economy.

Interesting jobs

These are the jobs that people would enjoy and love to do so there wouldn't is any problem to find people to do those jobs.

Boring and manual jobs are those jobs which can be programmed with the help of computers and hence it can be automated with the help of computers and machines. All the boring jobs can be automated. If someone is really interested to take up the manual jobs we doesn't require automating them but if we fail to find people to do those jobs we can just program and automate those jobs. Engineers can always automate these jobs but in most of the cases we are currently not automating these jobs is because we find people to do those jobs at a cost lower than it takes to automate these jobs. People are compelled to take up the manual jobs at meager incomes even if they don't like it due situations of poverty. In the nonprofit economy since people are not compelled to do those jobs we will not find people to take up these jobs and therefore we will not have any other option but to automate the manual jobs.

Interesting jobs are the jobs that consist of set of sequences which cannot be programmed. Therefore it is not possible to program and automate these jobs. We will always require human beings to do these jobs and we will easily find the people do those jobs.

Automating the boring and manual jobs is actually good because we will save the people from the Burdon of doing the manual jobs. People do not actually want to do those jobs but they end up taking up those jobs due to poverty or the obligations of financial security. So people would always be happy when they are released from the burden of doing these jobs.

Different kinds of Automation

We can observe that when we are running our heart starts to beat faster in order to cater to the increased requirement of oxygen. We can see that the regulation of the heart rate is automated by the nature. If instead consider that our body was a manual device and nature had provided a switch to manually regulate the heart rate. Now consider that we start running and we forget to increase the heart rate then in that situation we would get tired easily and we will need to take a break before we could run further. Now consider that you are being chased by a tiger and you have to run for your life. If you forget to increase your heart rate the tiger would easily get you and enjoy you for his meal.

We can see that nature has automated a lot of functions in our body. If human body was not an automated device there would be hundreds of switches and regulators in our body and we would have to waste our 50% of the time just to operate these switches and regulators. If we spend so much time in operating the switches and regulators then we would not have enough time to spend for doing other things that we actually enjoy doing.

Nature has made our life easier by automating the various functions in the human body. The automation which makes our life easier can be termed as Essential automation. Essential automation exists in the nature also. And nature has made a heavy usage of essential automation to make our life easier.

Now there is one another kind of automation also.

Human beings have a tendency to automate the jobs in order to cut the human labor or reduce the human labor in order to save costs. And when we are doing that sometimes we also end up actually automating the jobs which human beings love to do and enjoy doing. Due to automation of such jobs people do not find anything interesting to do and they become lazy and dumb.

In the conventional economy human services and human labor have a considerable cost and due to this there is always a natural tendency and natural urge present in the organizations to reduce or eliminate the human labor involved with the help of automation in order to reduce or save the human services cost.

We would call such automation a Non-Essential Automation.

In the Nonprofit Economy Human services cost is considerably lower compared to human services costs in the Conventional Economy. Therefore the Non-Essential Automation is much lower in the Nonprofit Economy compared to the Conventional Economy.

We can see that conventional economy suffers from two problems regarding the automation.

Problem 1: Lack of Essential Automation

In the conventional economy there is a huge economic inequality in the society and due to inequalities there is poverty. Due to poverty people are compelled to take up the jobs which otherwise they would not do if they were not poor. In many poor countries the jobs like garbage cleaning and garbage disposal, cleaning of public toilets are not automated because it is easier to find people to do these jobs at very low costs. The people are compelled to take up these jobs even at meager salaries due to poverty.

The cost of hiring a poor person to do these jobs is much lower than what it takes to automate these jobs. Therefore speaking in terms of numbers it is more feasible to hire a poor person to do these jobs instead of automating these jobs.

If these people were not poor they would not do the job of garbage cleaning at such lower salaries and in that case the cost of hiring a person in order to do these jobs would be much higher compared to the cost of automating these jobs. So in the Nonprofit Economy because people have resource earnings they have financial security therefore they are not compelled to take up such jobs at such meager salaries. So in the Nonprofit Economy automating the jobs like garbage cleaning, toilet cleaning and garbage disposal is more feasible instead of hiring a person to do these jobs.

In the conventional economy due to poverty people are compelled to pick up bogus manual jobs the kind of jobs which nobody would want to do if they were not compelled to do these jobs due to poverty.

We can see that there is a lack of essential automation in the Conventional Economy.

Problem 2: Presence of Non-Essential Automation

In the Conventional economy because human services have a cost automation exist on various levels in order to reduce or eliminate the human services cost.

When we are automating the tasks in order to cut human services cost by reducing or eliminating the human labor such a kind of automation results into a phenomenon of bulk and centralized manufacturing.

Human beings are social animals and we like to socialize and interact with each other. Doing our jobs in the economy is the primary way people socialize in the society. So when we are automating the jobs that people actually love to do, enjoy doing and like to do. People do not find anything interesting to do and therefore people become lazy and dumb.

When we are automating most of the jobs that people love to do this result into a culture where people Instead of living and spending their time outside of their homes and interacting offline with people in real world we instead become glued to our computer screens and live a lazy lifestyle.

We will discuss more on this in the next topic Patterns in manufacturing.

In the Conventional economy because human services have a cost therefore automation exist on various levels in order to reduce or eliminate the human services cost.

When we are automating the tasks in order to cut human services cost by reducing or eliminating the human labor such a kind of automation results into a phenomenon of bulk manufacturing. Bulk manufacturing is highly centralized therefore we can also call it bulk and centralized manufacturing.

Patterns in Manufacturing

Consider the case how manufacturing is done in nature.

Consider the case of a development of a tree. A tree is manufactured at its place of usage. From the perspective of Nature a tree is manufactured exactly at a time of requirement. We call such manufacturing On-Demand Manufacturing.

If Nature were to manufacture the trees in a way human beings manufacture things. There would be a one big centralized factory for manufacturing the different kinds of trees. Trees would be manufactured in this big centralized factory and shipped to its location of usage where it would be planted by drilling holes into the earth.

We can see that way the Nature manufactures things and the way human beings manufacture things are entirely different. If we study the differences we would notice a clear pattern.

In the Nature everything is manufactured On-Demand and in a Decentralized way. Things are manufactured exactly when they are required and customized according to the requirements and they are manufactured near to the location of requirement. While in human society human beings tend to manufacture the things in Bulk and in a centralized way. Manufacturing in Nature is On-demand and Decentralized manufacturing while human manufacturing is Bulk and Centralized manufacturing.

When the manufacturing is decentralized the commodity is manufactured near the place of its usage. When the manufacturing is centralized the commodity can be manufactured relatively far away from the place of its usage.

Every tree develops and grows in a different way suiting to the different needs of different location. A tree is developed using the raw resources present at the place where it grows. If the tree were to be manufactured in big centralized factory it would involve the transportation of raw materials to the factory and then the transportation of the manufactured units to the respective places of usage.

We can see that manufacturing in the On-Demand and De-centralized way involves a lot less transportation compared to manufacturing in the bulk and centralized way. We can see that Nature's manufacturing is more efficient and simple.

The question arises. Why do human beings have a tendency and affinity towards bulk manufacturing?

The answer is simple - Manufacturing in bulk saves cost.

But why do manufacturing in bulk saves cost?

If we look deeper and study this situation we would find out that manufacturing in bulk saves cost because it reduces the human labor, human time, it saves the human labor and thereby it cuts or reduces the human services cost.

In the Nonprofit Economy the cost of human services is considerably lower compared to the human services cost in the Conventional Economy. Therefore in the Nonprofit Economy the On-Demand and Decentralized manufacturing would become feasible and people would be more inclined and have affinity towards Natural way of manufacturing.

Lessons to Learn

We can see that when we are living with the truthful ethics human behavior is getting closer the behavior of Nature. Behavior of Nature is a reference which tells us what the truthful behavior really is.

Let us try to under this topic with the help of various real world scenarios

Food

Natural way of cooking food is the way our mother's and mom's cook the food in her kitchen. The food is fresh and good for our health.

Now consider what happens when we try to bulk manufacture the food we eat in order to save the human services cost. It results into the culture of processed food and the fast food. The processed food and the fast food is designed such that it can be produced at a faster rate, it cuts human time and therefore in the conventional economy it costs much cheaper compared to the food that is cooked in the natural way.

In the conventional Economy because bulk manufactured food is available at a cheaper cost compared to the fresh and naturally prepared food therefore in the conventional economy people develop an affinity towards the bulk manufactured food and often end up jeopardizing their health.

The processed food has to survive the longer shelf life therefore they are not fresh. In order to preserve them for longer time they might contain many preservatives which may not be good for our health.

Cooking food is something that people love. It is something that people enjoy doing. It is one of the many ways people socialize and collaborate with each other. We invite our friends to our homes and cook for them. It is one of the many ways people socialize and spread their warmth to other people. We cook together and it is one of the many ways we love spending our time. People love cooking food for other people and feeding the hunger of other people. We can see that bulk manufacturing the food sucks the joy out of the job of cooking food.

In the Nonprofit Economy there are no taxes on your incomes and because human services cost is much lower compared to the human services cost in the conventional economy. Therefore in the Nonprofit Economy the food which is freshly prepared and good for our health would cost nearly the same or even lower compared to the bulk manufactured food.

Therefore the freshly prepared food would be easily available at affordable costs and people would develop a natural affinity for eating fresh food compared to the bulk manufactured food.

In the Nonprofit Economy we get to eat the fresh food and in the conventional economy we get to eat bulk manufactured stale food.

So we can see that the ethics that we are living with has a huge effect on our lives which we can measure even with the numbers.

Pitfalls of the centralized and bulk manufacturing

Wastage of raw resources

When we are bulk manufacturing the commodities we might exceed the actual requirement. This might result into wastage of resources, time and money. Consider the case of manufacturing books. If we are manufacturing a book for example consider we are manufacturing 1000 books at once in order to reduce the per unit cost of the book.

We can see that when we are bulk manufacturing we are often not aware of the requirement of the commodity in the economy. If we later realize that economy only requires 500 copies of the given book instead of the 1000 copies which was printed in that case the 500 copies would be wasted.

Now consider the case of On-Demand Printing. People can download the books and print them at their homes exactly when they want to read it. In this scenario there is no chance of wastage of resources because commodities are manufactured exactly at a quantity which is required by the people.

Jeopardize the safety of workers

The more the centralization involved and higher will be the capacity of the factory and the level of Non-essential automation in the factory. Due to this the size of the machinery becomes larger and complicated. When human beings are working with large and really really big machineries there is much higher risk of safety compared to the case when the size and scale of the tools and machineries involved is much smaller. So in this situation you jeopardize the safety of the people who work in these factories.

People become lazy and dumb

Manufacturing in bulk and centralized way involves lot of automation therefore it requires the people to get involved into manual jobs. It induces a culture of laziness and people become dumb.

Higher the levels of Non-Essential Automation that exist in that society the lazier and dumber the people become in that society.

Conclusion:

In the Nonprofit Economy the human services cost is lower therefore the on-demand and decentralized manufacturing would cost nearly the same or even lower than bulk and centralized manufacturing. Therefore lower human services cost encourages a tendency towards on-demand and decentralized manufacturing the way the manufacturing is done in Nature. In the Nonprofit Economy we will see a slow transformation from Bulk and centralized manufacturing towards on-demand and decentralized manufacturing.

In a society where people do not work for profits and organizations do not work for profits the measures like patents and copyrights would not have any meaning.

If profits are not what people are really working for why would people really want to hide their knowledge and solutions? Instead you would want to do the opposite. You would want that maximum number of people could benefit from your knowledge and your solutions.

Issue: Patents and copyrights

This is possible only when,

People have free and open access to all the knowledge and solutions without any restrictions due to measures like patents and copyrights.

In a society where people live with nonprofit ethics the measures like patents and copyrights would become unnecessary and can just be phased out.

Further we will see that there are lot of benefits which can only be obtained when people and organizations have free and open access of all the knowledge and solutions. So it is in the benefit of the society if we phase out the concept of patents and copyrights and all such protectionist measures.

Let us consider an example. I have a friend of a friend, who I do not really know well. My friend tells me that his friend is going to buy an XYZ book. I incidentally discover that I already have an XYZ book and I have finished reading the XYZ book. There is a possibility that I could just lend my book to the friend of my friend and save him from the burden of buying a new book of XYZ title. It would not make any difference to me because I have already finished reading my book and my book is staying idle in my home. But I have a question in my mind. Am I getting anything in return for that?

Economics of love

He is not even my friend and I don't really know that guy. There is nothing I would get in return by helping this guy. It wouldn't really make any difference to me if I give my book to this guy. But still should I really give my book to this guy? My mind says since I am not getting anything in return so I would not give my XYZ book to this guy. Let the guy waste his own money and buy the book for himself by his own hard earned money. I am not going to give this guy an opportunity to read the book free of cost.

Okay the story is over now.

Let us try to see what would have really happened if I have given my XYZ book to the other guy for reading and help him save the burden of buying a new book.

I could have helped save the paper. There would be reduction in the consumption of paper which is a scarce resource. If many people try to save the paper it would help to reduce the cost of paper.

I could have generated an extra benefit in the society. Because my book is staying idle in my home it is giving no benefit to anybody. But If I give this book to someone to read the book would generate more benefit. So by not giving my book to the other guy I have wasted an opportunity to generate more benefit from the resources that are available in the economy. It's wastage of the utility of a resource.

What do we really learn?

Rather than focusing on the personal gains if we instead focus on everyone's benefits where we help other people without any expectation of something in return. We would end up generating more benefit in the economy and ultimately all of this benefit would come down to each of us.

If we are always expecting something in return, we would waste many opportunities where we could help other people. We would fail to utilize full potential of the economy.

What we really need to learn is to help other people without any expectation of something in return. We are currently willing to help people but only when we are getting something in return. We need to leave that tendency.

It we are able to do it we will see that there would be no requirement of patents and copyrights and other such measures in the society.

Lessons to Learn:

The sole purpose of the knowledge and solutions is to help other people. And in order to accomplish that purpose the knowledge and the solutions needs to be in free and open access so that maximum number of people can benefit from it.

There are many people who are poor and underprivileged who cannot afford to pay for the knowledge and solutions but they can still benefit from the knowledge and the solutions. Due to restrictions like patents and copyrights the poor and underprivileged people are denied the access of the knowledge and solutions because they are not capable of paying for these solutions. These people can still benefit from this knowledge and solutions even if they cannot afford to pay for these solutions.

Therefore it is the moral responsibility of the intellectuals not to restrict the access of the knowledge and solutions by the means like patents and copyrights so that maximum number of people can benefit from it particularly the poor and underprivileged people who need it the most.

Intellectuals need to find alternative means of recovering the cost of solutions instead of relying on the conventional ways that require them to restrict the access of solutions and knowledge using copyrights and patents.

Restricting the access of the knowledge and solutions using the means like copyrights and patents is bad ethics and such kind of behavior is not suitable for the Nonprofit Economy.

In the Nonprofit Economy we need to relax the patents and copyright laws in order to encourage open sharing and collaboration. And slowly and gradually we need to phase out the patents and copyrights completely from the Nonprofit Economy because they do not fit in the culture and ethics of the Nonprofit Economy.

We can see that we can obtain maximum benefit if we keep the services open for all without any limitations.

How can we do it?

The concept of open source in the software industry is a very good example of that.

But why just software why not other things?

Open designs

Like books, documentaries, vehicle designs, electronic hardware designs almost every solution that is available on the Earth can be distributed, adapted and used freely by the people.

Because now we don't have the concept of patents and copyrights almost every solution can be available openly to the people.

Where people and organizations can (Free and open access of services)

- Adapt, modify or update a solution/ Mechanism

- Reuse or build upon a solution/ mechanism

- Any service provider can use the solution

- Any end user can use the solution

Services like software, books, documentaries, solutions and knowledge are not a scarce commodity. If we sell the vehicle free of cost in the market there will be looting in the market. Because a vehicle is scarce commodity and there is a limitation of how much vehicles we can manufacture and sell to the people.

But what about services like software and books?

If we offer the services like software and books free of cost there will be no looting in the economy. Because people can generate unlimited copies of the software and books and there will be no scarcity of the software and books.

So when we are selling the services like software and books and solutions like the way we sell scarce commodities we are wasting the productive potential of the economy.

The demand supply constraint does not apply to the services like software, books, solutions and designs and knowledge. Let us call such services open services. We will call the service provider who provides open services in the economy as an “open service provider”.

Open Services: The services like software, books, solutions and designs the kind of services to which the demand supply constraints do not apply.

Open Service provider: A service provider who provide open services in the economy.

We can see that in order to develop the software and the solutions we need some money, and therefore open service providers also need to recover the operating costs and the money they spend for providing the open services.

For example let us consider a design of a vehicle as an open service. In order to design the vehicle the organization will have to generate a prototype of a vehicle.

It will have to test the vehicle.

In order to test the safety of the design it will have to do the accidental testing of the vehicle prototype and in order to do the accidental testing the organization will have to break and damage many vehicles. So we can see that an open services organization also has to spend lot of money in order to provide the services. To be able to provide those services an open service provider will have to recover those costs from somewhere.

So how the open service providers can recover the costs they spend in providing those services?

We need to have some alternatives. The conventional way in which we sell the people open services like we sell scarce commodities is inefficient because it will reduce the number of people who can benefit from those services. So we need to look for some alternatives.

The alternatives could be

State funding

Donations from the end users / Open Exchange Donations Mechanism

Many open services organizations also use advertizing as an alternative way to recover the operating costs. It is a good thing because it allows the organizations to offer their services free of cost to the people. But the concept of paid advertisements will not work in every case.

State funding

A state would be comfortable to fund a nonprofit organization which is working for the benefit of the society. If a nonprofit open service provider is working on developing a solution which is in the benefit of the people of the state. A nonprofit service provider should not find it difficult to obtain state funding in order to recover the costs it would spend in providing the service.

Section 2:

Educational Setup

Nonprofit Economy is based on different set of ethics and values which are different from the ethics of conventional economy. Due to differences in the ethics there is a change in the culture and therefore we can expect to have some fundamental changes in the educational setup. The educational setup that exists in the Conventional economy would not work in the Nonprofit Economy. In this section we will study another kind of educational setup that would be suitable for the Nonprofit Economy.

In a society where people do not work for profits and incentives there will be no obligation to get a job as a means of financial security. So there will be no obligation for the people to educate as a means to have a financial security and get a job.

In such a scenario in order to attract people to educate our

Education needs to be interest based

Education needs to be flexible

Education in Nonprofit Economy

What will happen if the education is not interest based and flexible? Children and students will run away from you. They will not want to educate and learn. Not just children and students even the teachers and professors would not want to teach if the students are not taking initiatives to learn. It is very painful to teach someone something that they do not want to learn.

Therefore the conventional education cannot work in such a society. Conventional educational practices will fail to find students and children and will fail to find teachers and professors also. Nobody will want to come in the institute.

So we need to do something about our education. If we want to have a society where people live with nonprofit ethics we need do so something about our education also because our society cannot function if the people would not want to educate.

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Issue: Grading and tests

Just like incentives do not motivate people to work and do their job similarly grades do not motivate children and students to learn and educate. What will happen if we make our children and students learn for grades? It will produce inferior results. The quality of education will drop and degrade.

If grades do not motivate students then what really motivates people to learn and educate? It is the desire to utilize your knowledge to help other people, finding solutions to the problems and needs of people and society. This is what really motivates the students to learn and educate. Therefore we need to deemphasize the grades and other factors which can distract the students from the original purpose of education. First thing we as educators can do for students is to not distract them with the other factors like grades so that they are focused on the original purpose of education.

The purpose of tests is just to help the students to evaluate themselves to see whether they have understood the given subject or not. It helps the student to know whether he can move forward and study other subjects which require the understanding of this subject. The purpose of tests is not to compare students, and evaluate them and judge them and compare their abilities with each other. Tests are only for self evaluation not for the evaluation of other people's abilities.

The desire and capability is the same thing. If a person has passed the subject it shows that the person has genuine desire to understand the subject. We do not need to nitpick and judge the students on the small differences in grades because small differences in the grades do not show and mean anything it could be due to situations and factors also. It doesn't say anything about the desire and the interest of the student in the subject and the capabilities of the student.

What we really need to testing is someone's desire not their capability. The genuine desire and the capability is the same thing. The tests need to be simple which evaluates the basic understanding of the students.

The concept of grades encourages, secrecy and competition among the students and hampers collaboration and sharing of ideas among the peers and students. Rather than collaborating with each other to work together on the projects which can be such a wonderful life experience, the students waste their time competing with each other to see who gets to score better and obtain better grades/marks. They miss out on the fun they could otherwise have in the process of learning. When students are not competing with each other and instead collaborating with each other and working on projects with each other would make education an interesting activity for them.

In a Nonprofit Economy in order to attract and retain the students we need to keep the education simple. There needs to be only one kind of a test result either pass or fail. The grading is unnecessary. The tests need to be simple. If a student have studied the subject and have understood basic ideas of the subject he should be able to pass it.

Educational Pathway

The sequence of subjects that the students take as a part of his education is the educational pathway. Each student has different set of interests which requires different set of understanding and capabilities. Each student would have a different educational pathway.

Before taking each subject the student needs to ensure that he fulfills the prerequisites for that subject. This is the only restriction that the student needs to have in picking up the subjects.

Two or more students can have similar patterns in their educational pathway but the final educational pathway and the final role they take in the society will be different.

Ethics of Evaluation

Each person has a unique role to play in the society. You cannot play the role of other person and other person cannot play your role.

It implies that

We cannot evaluate the capabilities of other person

Each role requires its own different and unique set of capabilities. When we cannot play the role of the other person how we can evaluate the capabilities of the other person.

We cannot compare/grade the capabilities of different students/people

Each student / person will have different set of interests and capabilities. We cannot take the capability of one student/ person as a reference and compare the capabilities of other students with that reference.

Even if we are doing that it tells nothing we are just a wasting our time.

We cannot define the educational pathway for other person / people

Each person has unique role to play and would have different set of capabilities and hence would also have different set of educational pathway. The educational pathway that a person take is a function of / depends upon the role that person desires to play in the society. When we cannot play the role of other person how we can tell the other person the educational pathway the person is suppose to take.

Trusting Issues

Okay we cannot evaluate the capabilities of the other person so how can we trust the other person on the job and in general.

The ethics and values of a person, the maturity levels of a person tell a lot about the person. If a person is mature and have a sense of ethics it means that we can trust and depend on that person for everything. If the person is immature and does not have a sense of ethics then it is difficult to trust and depend on that person irrespective of how much qualifications the person has gained.

Issues of Predefined Educational Pathways

Predefined pathway is a practice of defining the educational pathway for other people/students.

Qualification programs, degree programs and grade school programs are all the examples of predefined pathway.

In the Nonprofit Economy we cannot have the predefined educational pathways because it will result into student's loss of interest in education. Due to lack of freedom to study the subjects that interest them the students will not find the education interesting and will drop out of the education. This will result into a failure of conventional education in the Nonprofit Economy.

Therefore the conventional educational practices cannot survive in the Nonprofit Economy it will fail to attract the students. Hence we need to get rid of concept of predefined Educational Pathways from education.

We need to note that even when the students are picking up for themselves the subjects that they desire to study and are defining their own educational pathway they still need to ensure that they fulfill the prerequisites for the subject that they desire to study. This condition ensures that students attain the maturity level that is required before studying the given subject.

Issue: Approval for setting up an institute

If an institute is a nonprofit organization it is our common sense understanding that people who want to setup a nonprofit institute would not want to waste their time, efforts and resources in order to setup an institute which does not provide good education. Even if an institute manages to provide bad education people have the freedom to ditch such an institute therefore it doesn't make any sense for educators needing to get an approval to setup an institute. Setting up an institute is a harmless activity if an institute does not provide good education people have the freedom to just not educate in such an institute.

In a free society an individual or an organization do not need an approval to form relationships in the society. Therefore governments cannot deny people to setup institutes unless people in large report any objection to the institute. An institute is a relationship between the educators and students therefore governments and other organizations cannot intervene between the right of students and right of educators to form relationship in the society. According to the codes of free society people should not require an approval to setup the institute. There should not be any agency in order to regulate the standards of the institute or grant approval to setup the institute. Existence of such an agency is redundant and unnecessary in a Nonprofit Economy.

Further we need to have scope of freedom and creativity where educators can explore and experiment with different education models, our education needs to constantly adapt to the changing needs of the society and regulating the standards of education kills this freedom it reduces the pace of improvement of education. Therefore for the sake of health of our education we should not intervene in the freedom of people to explore and experiment with different models of education. The educators should not need any approval to setup the institute.

Course

A course is a compilation of ideas that fall in the same or similar context of the real world.

Prerequisite Courses/Subjects

To understand the content and the ideas given in the subject might involve and require you an understanding of another courses/subjects. Therefore each course might have a set of prerequisite subjects. A prerequisite could be another set of courses or a simple description of ideas whose understanding is required in order to understand and study the course. If a student have not studied the prerequisite subjects he will not be able to understand the course therefore before taking a course the student needs to make sure that he have studied the prerequisite subjects.

Minimum interaction time

Whenever you are learning a course you will want to spend some time offline interacting with your teacher and peers. The offline interactions with your professors and peers enhance your learning experience and makes learning an interesting activity. Each course needs to have a prescribed amount of minimum interaction time. It is an estimate of minimum time that the students and teachers are expected to spend with each other in a class in order to make sure that you have learned the subject effectively.

Class size

In order to make sure that learning in an offline setting is an interesting activity there needs to be a minimum number of students in a class. Class size is a minimum and maximum recommended number of students in the class.

Books and Documentaries

All the ideas which are the part of the course can be compiled into a book or a documentary. So each course would have a book or a documentary which consist of the entire content of the course.

Course developer

The course developer is the one who develops the courses which can be taught in educational institutes. Let us see what he can do in order to develop the courses.

Prerequisite courses

The course developer needs to mention the prerequisites that the student must fulfill in order to understand the course.

Books and documentaries for students

The course developer would compile the ideas into a form of a book or a documentary or any other representation medium. This book can be used by students to study the course when they are going through the course.

Teacher's manual

The course developer would prepare a manual for the teacher or the professor who will be teaching the course. The manual would mention and consist of instructions and guidelines for the teachers and professors which would guide them and help them with the teaching of the course.

Test generator manual

The course developer would also prepare a manual that would contain the instructions and guidelines that would help the professors and teachers to design the tests to evaluate the students understanding of the course after they finish the study of the course.

Test evaluators manual

This manual will consist of the instructions and guidelines to help the test evaluators evaluate the tests and generate the results.

Publishing the course

After developing the course the developer would publish the course so that every institute can have access to the course. The course developer would be an open service provider therefore collecting donations from the people is the most recommended way to recover the cost of developing the courses if there are any costs in the development of the course.

Guidelines for designing the test

There are two aspects that you can evaluate about the understanding of the student. First the understanding of the subject and second the ability to utilize the knowledge of the subject to do something useful with it.

The ability of the student to utilize the knowledge to do something useful can be tested in the projects that the students are doing it doesn't need to be tested in the subject tests. The test needs to be simple and evaluate only the basic understanding of concepts and ideas given in the subject.

Passing a test is not a proper motivation for a student to do something useful with his knowledge so the ability of the student to do something useful with his knowledge can be tested only in the projects or real world setting. When we are making the tests complicated we are putting extra burden on the students which is not at all required.

The student can learn the details and facts when he is actually working on a project so we generally need to avoid asking for details in the test unless it is really required for the original purpose of the test. The details like dates, names of the inventors, scientists, who invented the theory or a solution are not at all required. These things don't need to be asked. The value of constants and parameters doesn't need to be asked also.

If a student possesses the basic understanding of the subject he should be able to pass the test. There should not be any grading in the test and the results need to be declared only as pass or fail.

Responsibilities of teachers and professors

A single teacher/professor can teach one or more courses. Besides teaching the subject they need take few more responsibilities.

Register the students for the course

The teachers would invite the interested students to register for the course. It is the responsibility of the teacher to check whether the student have studied the prerequisite subjects to take the given subject or not. If the teacher feels student have not studied the prerequisite subjects the teacher would recommend the student the prerequisite subjects he needs to study first in order to take up the course.

Scheduling and the duration of the course

After the registration process is over and when enough students have gathered to study the course the teacher would sit with the students and discuss the scheduling of the course. The hours they would be spending together each day. The scheduling needs to be done according to the mutual agreements among the teacher and students.

Helping the students to evaluate themselves

After the completion of course the teacher would approve the students for the test. Teacher can disapprove the student for the test if the student has low attendance. The test is likely to be prepared by the teacher itself. The teacher would evaluate the test and declare the results. There should not be any grading in the test. The results should be either pass or fail.

The test helps the student to evaluate himself whether he has understood the subject or not. Passing the subject tells the student that he has gained the understanding of the subject and he can proceed to study other subjects which require the understanding of this subject as a prerequisite.

Responsibilities of Students

If the students do not want to study and instead play with their friends they should tell that to their parents and teachers that they do not want to study and let them play with their friends.

If their parents and teachers do not allow them to play and spend time with their friends, they should not hesitate to lie to their parents and teachers and manipulate them to find ways to get rid of studies and play with their friends. If students do not know how to lie to their parents and teachers do not worry I will write a book on that also.

If the students want to study and learn let us see what their responsibilities are.

Each person has his own unique role to play in the society because each person has its own unique personality and things that make each person unique. The uniqueness of the student needs to be reflected in his profile. We need our education to be flexible where personality of each student can mature up and take up its own unique form.

As the student is growing up it is the responsibility of the student to find out what makes him unique and what role he is playing in the society.

Students need to pick up the courses that they want to learn. They need to explore what subjects interest them and pick up the subjects accordingly. They can take the guidance of their teachers and professors in order to identify their interests when they are not sure about their interests.

When the student is young he is going to be exploring and when he is exploring he is picking up the subjects according to his interests or under the guidance of their educators. But as the student is growing up he will come to understand what role he desires to play in the society what job he desires to take up in the society.

Every person has a unique role to play in the society and people can off course choose for themselves what role they want to play in the society but the uniqueness of their role is preserved. You cannot play the role of other people and other people cannot play your role so it is the responsibility of the student to find out for himself what role he wants to play in the society.

Other people cannot make choices for you neither the educational institutes can make choices for you they can only help you. As the student is growing up it is the responsibility of the student to figure out for himself what makes him unique and what job he is going to pick up in the society. He needs to take up the courses according to that and prepare himself for his job.

Education profile of a student

The education profile of the students will consist of

Courses and institutes

The profile mentions the courses the student has studied and institutes from where the student has studied those courses. Because we do not have the concept of grades or marks there is no mentioning of the marks or grades of the student in his profile. The profile only lists the courses student has completed.

Projects done

The student can do many academic or non – academic projects while he is educating. He can mention those projects in his profile.

Extracurricular activities

He can mention all the extracurricular activities in his profile.

We can see that the education profile of a student provides a pretty good idea of the education the student has obtained. The organizations can use this profile to hire students. So there is no requirement of marks, grades and the concept of qualifications and degrees.

Student admissions

If an institute is a nonprofit institute it is in the interest of the institute to admit the students without any discrimination. Therefore in such a scenario it doesn't make any sense for the government and other agencies to intervene in the admission process of the institute.

The institute needs to have the freedom to admit the students based on its own criteria and procedure adopted by the institute. Other organizations and agencies would not intervene in the student admissions of the institute.

Institute profile

An institute can have many courses. The educators can choose what courses they want to teach in their institute. They can include new courses and phase out the unnecessary courses with the passing of time. The students can pick up the institutes according to their interests and the courses that they want to study.

An institute can be of different kinds according to the ages and interests of people. Primary schools and middle schools for children who want to explore, graduate schools for students who have a good idea about the role they want to play and want prepare themselves for that role.

Phases of Maturity in Education

Every person has a unique role to play in the society and other people cannot play his role. But before a person settles down on a role the nature has provided every person the freedom to choose what role they want to play in the society. Having a desire to play a certain role and developing the capabilities to play that role is basically the same thing. But you need to prepare yourself to play your role effectively in the society. Education is something that helps the individuals to explore and prepare themselves to play their role in the society. The job they have chosen for themselves.

Your job and your role in the society basically defines what relationship you are forming with other people in the society therefore your job and your role is as intimate to you and close to your heart as much as the people you love the most. Education forms an essential part of an individual's life.

Education starts with the beginning of your life. Education starts with a general exploration of different fields and subjects until the individual develops an idea of what field interests the individual more which is followed by a phase of deeper exploration into his field of interest and preparation for his job. When you would have an answer to the question "what exactly you want to do with your life" your education is complete.

Primary schooling (Education of the Basics)

To get started every person needs to have certain basic understanding of things to cope up with pressures of life. The foundation of a person consists of his ethics. Before you start to teach anything to a person most essential thing you need to teach them is good ethics, good social behavior. Teaching of good ethics continues throughout your life but it is something that that is supposed to be taught first.

Primary schools are there to give basic education to the children.

Good manners, good behavior, good ethics and basic language skills, basic math skills, social skills are the forms of basic education given in primary schools. Teaching children good ethics with the help of real life stories and situations is one of the best ways to help them appreciate the significance of good ethics. So a primary focus on the primary school is to teach those good manners, good ethics and good

social behavior and some basic language skills and math skills to get through. The way you behave with the children is the most important education they get when they are kids, so the educators need to pay close attention to their behavior with the children.

Educators need to understand that they need to allow the children do the mistakes. Never punish children and never scold them irrespective of whatever mistakes they do. When you are scolding them you are giving them a wrong message. You are giving them the message that “doing mistake is not acceptable”. If children do not do mistakes how would they really learn? The only way you can help children learn is through the language of love and empathy scolding them, punishing them does not work.

Children at this phase of life are sensitive to the way we are behaving with them. Issues that could be of negligible value to adults may be taken very seriously by the children and those issues can form a big part of their lives. So educators need to be careful with their behavior with the children and provide them lot of support, empathy and love. Never let any child feel neglected and be impartial to every child. It is very important for adults to be impartial to children at this age as they do not possess the understanding to cope up with the neglect and the socially unjustified behavior of other people. Feelings of neglect at this age can be carried with them when they grow up.

General Exploration

Whenever you want to educate first thing that you do is to explore all the available fields of studies. Children has basic desire of exploration, they want to explore each and every field before they could figure out what interest them more. The exploration phase does take its own time. A general exploration is the study of all the knowledge and fields humanity has. In this phase subjects are provided to children in a broader context just to have an overview of the available fields.

Exploration is something that is driven by individuals own interests so we need to provide children the freedom to explore and study the subjects they want to learn. The only thing that you need to check is whether they have studied the prerequisite subjects or not for taking a given subject. And let them explore and be driven by their own interests. People show more initiative when they are doing something that interests them. If you make them do something that does not interest them their initiative will die and they will not be able to do a good job. When we are allowing the children to take the subjects that interest them they will show more initiative. So it is very important to let the children and individuals be driven by their own interests. Therefore we need to allow the children to pick the subjects according to their interest right from the lower middle school after they get out of primary school. Primary school is just about basics so the education in primary school would be same for every child but after they leave the primary school they tend to develop their individualities and their own interests.

Further if the children do not want to study and play instead the better thing to do is just let them play there is no point in teaching them and making them study if they want to play or do something else. After they have done with their playing and want to learn and study they will take their own initiatives and do it at a faster rate. So if a child is not showing interest in the studies we should better just let the

child do what he wants to do. In a Nonprofit Economy there is no obligation to get a job and earn the money. So the time is not running by, the clock is not ticking, whatever time when that feel you want to learn is the right time to learn and study.

Education needs to be interest based not age based. I understand that it sounds very unconventional and forward thinking if we consider it from the perspective of conventional economy because in the conventional economy, the clock is ticking, you have the obligation to get a job and start earning the money. Now when there is no such obligation to get a job and start earning the money in Nonprofit Economy, we can flex and let the children do the stuff that they really want to. In a Nonprofit Economy people do their jobs because they love to not because they are obligated to. So if someone really wants to do a job he will take his own initiative to complete their education and start doing his job. So in a Nonprofit Economy there is no requirement to push children and people to educate.

If we let the children play or do something else when according to us they are suppose to be studying. What will happen? Consider they might spend 2 years of their time entirely playing with each other and doing no studies. Now we will be worried that they are lagging behind how they would complete their education on time. The point that we are missing is when we are making children learn when they want to do something else like play with their friends instead they are learning at a slower pace because they would not take initiative. Now if we just let them do what they really want to do and study only when they really want to study. They will learn and finish their studies at much faster rate. The learning would be more effective because they will do it by their own initiative.

So if you do the math and calculation when you are allowing the children to do what they really want to do and study only when they really want to study they would still finish up their education exactly the same time or even before you want them to finish their education.

Now another question that arises in our mind is if we let them skip the subjects they would just not study many of the subjects. So how we could make them study those subjects.

If there is a subject which is a prerequisite for another subject that they want to study they would have to take it up and they will take it up by their own initiatives. Now if there is a subject which children do not want to study and it is neither the prerequisite for other subjects that they want to study. The children simply don't need to study that subject. You can off course advise them to study a subject but if still they are not taking interest in that and do not want to study that subject in that situation the better thing would be to just let them not study and skip that subject. There is no point in making children study the subjects that they do not want to learn.

Further if you are designing a subject that none of the children/students want to learn it is our problem not the problem with the children. It is our responsibility to make education interesting and simple. If children are not taking interest in studying a certain subject it is showing flaws in our education. It is showing the flaws in the structure of the subject itself. Maybe you need to do more research to simplify it.

Further what would happen if we teach children the subject that does not interest them? They will study the subject just for the sake of passing the exam. They will do the rote learning and will not take initiative. And they will forget the entire subject after the exams. And even the educators know what children really do when we make them study the subjects that do not want to learn. If they are forgetting the subjects after the exams what is the benefit that we are getting out of that. We are only wasting our energy and our resources in teaching them those subjects. Further it is also painful for the teachers to make children study the subjects that they do not want to learn. What I am trying to say is there is no point in teaching the children and students the subjects that they are not interested to learn, even if we are doing it we are just wasting our energy and our resources which we can put somewhere else and do something useful with it.

So we should not teach those subjects to the children/ students that they do not want to study. And we should just let them skip those subjects.

Right from the lower middle school we need to provide the children the freedom to choose and study the subjects that interest them given that they have studied the prerequisite subjects. If a child is confused and not being able to come up with the subjects he want to study the parents and teachers can help, but in most of the situations such a situation would not arrive. Children are smarter than we think. They have better idea about what they want.

In more exact terms what do I mean? It means we need to do away with the concept of grades and classes the concept of first grade, second grade up to twelfth grade and so on. The education needs to be interest based not age based right after the primary school. There needs to be no concept of grade school and classes so that children can take and pick up whatever subject that they want to learn.

The classes need to be according to the courses/subjects not according to the grades and their ages. As children will move forward with their studies they will gradually increase their understanding and they can take up subjects that require higher understanding. Children will have different interests and they would go to different pathways according to their interests. We should not expect all the children to follow a similar pathway. Every child can pursue a different pathway which will be of their own. If after studying a subject a child wants to take a break from education and instead spend time with his family and friends and enjoying holidays. He can just take a break whenever he wants to and up to whatever time he wants to because there is no clock that is ticking. The child is not expected to complete any milestones by a given time by the educators.

General exploration consists of overview of the subjects. Each lower middle school will pretty much have the same set of subjects.

In the lower middle school the students can choose to study the subjects like science, history, math, economics, civics, geography, arts, dancing, singing, culinary, painting and every other possible thing.

The subjects like math and science can be further classified into different levels, like grade one math, grade two math and so on. The grade one math would be prerequisite for grade two math and so on. If a child wants to study the math or study a subject that needs an understanding of math he will take up

the math or have to take up the math. But if a child does not want to study a subject that requires the understanding of math, he can simply not take up the math. For example if a child is showing an artistic orientation and wants to become an artist and doesn't want to study the math at all, in that case the child would not study the math at all. The educators and parents do not need to worry about that the child will be alright without the math. The child would be able to survive well and will be able to live his life without studying the math.

Deeper exploration

After the children have studied the subjects they would get an idea of what direction they want to go and explore further. If a student is interested in studying math and science he will go to a school of nerds where subjects like math and science are taught. Just like a trunk of a tree splits into different branches similarly after the exploration phase the education will split into different branches. One branch may go to math, science computers and electronics another branch may go to economics and commerce which might require math but of lower level. We can also have a school of artists where people can learn acting, dancing and drama. We can have a school of culinary, gardening. There could be a school of sports where children would go if they want to make their career in sports. There could be many different schools.

The education at this phase also needs to be interest based where students can pick up the subjects that interest them the only thing that they need to make sure is that they have studied the prerequisite subjects.

After completing the education up to this phase the students will have a pretty good idea about what role they want to play in the society.

Preparing for your Job

After exploring your field of interest more deeply people and students would have pretty much good idea about the role they want to take up in the society. It is now time to get your hands on and prepare yourself for your job in the society. Graduate schools prepare the students with the knowledge after which the students can actually start to play a productive role in the society. A graduate school might itself involve doing a lot of real world projects where students would get hands on experience on what it is like to work on real world projects. After this phase of education the students would have a clear answer to the question "what they want to do with their life". Their education is now complete.

After leaving the graduate school students may have some projects of their own that they want to work on. Some would get into a research. Some would start their own ventures. Some would join and take up the jobs in the already existing organizations.

School of Engineering, medicine, economics, geology, environment can be the different examples of graduate schools. There can be many different examples of graduate schools.

Expected Education from the individuals

Each and every person makes our society complete. Even if the one person is missing our society would be incomplete. We need to understand that individuals are different and everybody would not be the same.

Expecting everyone to get their education and educate up to the graduate school is undemocratic and defies the codes of free society. There would be people who would be satisfied with their education just after learning two or three courses. They would not want to graduate. We should learn to respect their wishes for themselves and not judge them according to their education.

In a Nonprofit Economy there is no obligation to educate. We will see that there will be only few people in the society who will reach the graduate school and attain a graduate level education. We will see that there is nothing abnormal about that our society will function just fine.

Benefits and changes

By allowing the students to take the courses according to their interest the students have the freedom to skip the courses that does not interest them and take only the courses that interest them. Skipping the subjects that does not interest the children will help the children educate at a faster rate. Further when you are studying the subject that interests you, you tend to finish and learn at a faster rate. So when people are learning at a faster rate and skipping the courses that doesn't interest them this will help them to complete their education at a much faster rate.

There will be a collapse in the hiring gates and admission gates. Because people are working free of cost. Wanting to join an organization show the genuine desire of the people to do the job and would be a reason enough to get a job in that organization. Desire to get an admission in a good institute would be a reason enough to get the admission into that institute.

Ethics are something that is not supposed to be enforced by legislation. People are free to choose for themselves what ethics they want to live with. These ethics are only for those people who find them useful and those who desire to live with these ethics.

These ethics are applicable only for the “Nonprofit Economy”.

In the Nonprofit Economy we need to have some sense of ethics in the Education to ensure that education is interesting for the students and children and students do not run away from the educators.

Ethics of student and educator relationship

Ethics

On scolding and punishment

The educators are not supposed to scold the students or punish the students irrespective of whatever mistakes they have done. By scolding the students and children or punishing them you are giving them the wrong message you are giving them the message that “doing mistakes are not acceptable”.

People learn from their mistakes and if they do not allow themselves to do the mistake how would they really learn. So when you are punishing someone you are telling them it is not acceptable to do the mistake. You are not really helping them.

There is no such thing as an unacceptable mistake, every mistake is acceptable.

So scolding students, punishing them is bad ethics.

Whenever the student has done a mistake or something that is not good for them the only thing that the educators need to do is to tell them the right thing.

Further there are two kinds of people, people who have the desire to grow and learn from mistakes and there are people who would not have any desire to grow or they would have lower desire to grow and learn from their mistakes. If the student does not seem to have any desire to learn and grow you just need to let them go. Someday they would understand why they are suppose to be living with good ethics and why they need to know the right thing and that time would be the right time to tell them what is the right thing and the mistakes that they have done. But to allow that to happen you need to let them go and let them learn from their own life experiences.

In any situation irrespective of whatever person or student you are dealing with it is never a reasonable thing to punish and scold a student.

On understanding students

Educators are the service providers who provide the service of education in the society so in order to provide a good service the service provider requires to understand the needs of their end users. The job of the educators requires them to understand their students and the needs of their students. It is essential for the educators to be able to understand their students.

Educators are not supposed to judge the students according to their capabilities. The capabilities of a person only tell half of the story of a person it doesn't really tell much about that person the only way you could really understand a person is by understanding where their heart lies. To understand the student only thing that educators need to see is the desire of their students the capabilities of the students are secondary.

The job of the educators is to help the students to gain the capability. The only thing that is really required from the student is the genuine desire. When the desire is there the capability would automatically come.

When you are judging your students or people by their capabilities you are not looking into the heart of your students. You are not being able to understand them and when you are failing to understand them how would you really educate them?

Section 3:

Mechanisms for Social Administration

Differences in the ethics and change in the culture provides us a scope to simplify the social administration in the Nonprofit Economy. We will study some mechanisms in order to simplify the social administration which can bring more transparency, flexibility and accountability in the social administration.

In the society people group together on similar interests and people come into different relationships as part of a group or an individual.

Say for an example a person could be a student of a class, a friend or a son. The person is in the relationship with the teacher as part of a group “the class”, the person is in relationship with the friends as an individual, and the person is in relationship with his parents as an individual.

Grouping in the society

People can be many in different relationship in the society as an individual or as a part of a group.

So a person could simultaneously belong to many different groups in the society.

A relationship could be between

A group and an another group

Example: A relationship between a car manufacturers and car designers, there could be team of car designers who build a prototype of a car and there could be another group or team of people who manufacturers that car. So there are two groups who are in a relationship, the group of car designers and the car manufacturers.

A group and an individual

Example: A relationship between a teacher and a class

An individual and an another individual

Example:

A relationship between a doctor and a patient

We will see that every relationship has a purpose and a set of mutually agreed protocols.

In a democratic society, an individual or a group can choose what relationships they want to form in a society. A person would choose for himself whether he wants be in a given relationship or not.

But in order to form a relationship with a group we need to take the approval/disapproval from the people of the group. The entire process of suggesting the people different relationships and taking their approvals/ disapprovals can be termed as governance of a group.

An individual could be in many different groups, and hence would come into many different relationships in the society as an individual or as a part of different groups.

The groups are formed on the basis of what relationships people want to form in the society. Say for an example, to study a subject people form a group of students, the same students could be regrouped into different groups when they are playing a game like cricket or soccer.

So we can see that the groups are formed on the basis of what relationship the people are interested to form in the society.

Governance of a group generally involves

Proposing a group

Suggesting the relationships the group will form in the society

Collecting the approval/disapproval of the people

The commonly observed groups in the society in which we are particularly interested are

Service provider group

End user group

When people are interested to offer services in the society they group together to form a service provider group say for an example, a group of doctors who run the hospital and treat the patients, a group of building constructors who work together to construct a building.

A service provider group would require some assets in order to offer services to people. Doctors need a building and equipments which they could use to treat the patients in a hospital.

A service provider group would also need some investments and lending in order to buy those assets. When a group is owning the asset there are issues, how the group is suppose to be owning the asset , what will happen if someone leaves a group and what will happen if someone joins a group.

So we can see that there are some common issues for a service provider group.

We also have an end user group. Say a community who wants to build a park. Building the park will cost some money, people in the community would need to contribute and fund the construction of the park. There needs to be a common consensus on facilities of the park, the budget of the park and other such issues.

We can see that the issues in the end user group and the service provider group would be different.

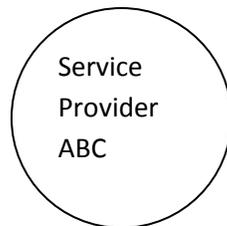
We will study in detail what are the common issues faced by the different kinds of groups.

We need some kind of a way to represent the various kinds of relationships between groups and individuals in the economy. Relationship diagrams represent the different kinds of relationships between groups and individuals can form in the economy.

Relationship Diagrams

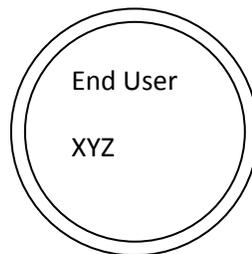
Conventions

Service Provider



The service provider is represented by a circle and the name of the service provider is written inside the circle.

End User / End user Group



The End User is represented with a double circle. It is done so that it is easier to identify the end user in a relationship diagram.

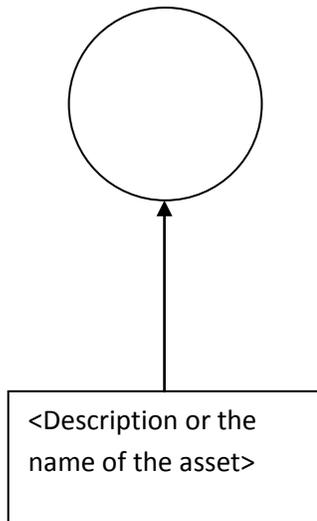
End User and Service provider relationship



The end user and service provider is represented by a single arrow.

Asset ownership

Any group whether a service provider group or an end user group can own an asset. This can be represented as



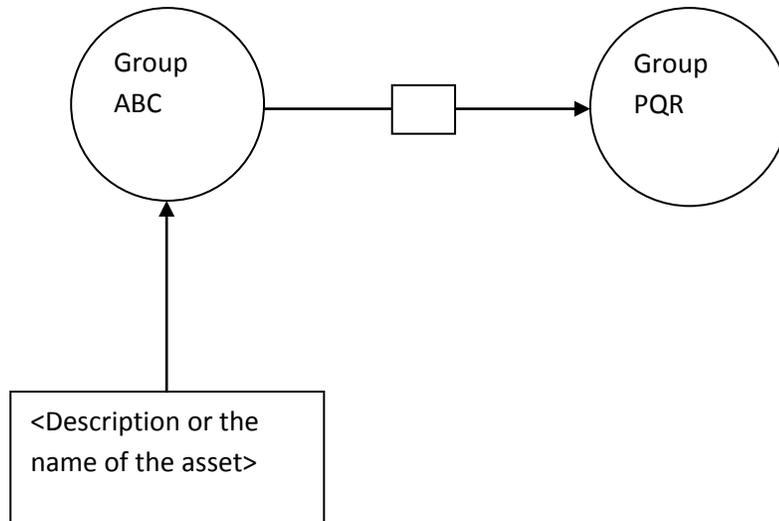
The asset is represented by the rectangle and the arrow pointing from the asset to the group represents the group owns the given asset. The name of the asset is written inside the triangle.

Asset provider relationship

Sometimes the group may not be playing the role of an end user or a service provider but still providing the asset it owns to the another group. This would be the role of an asset provider. This can be represented by a single arrow with a square in between the arrow.



Example:



Resource origin provider relationship

Resource Origin is not an Asset but a source or origin of the raw resources. The group which owns a resource origin would be the resource origin provider and its relationship with another group is represented as



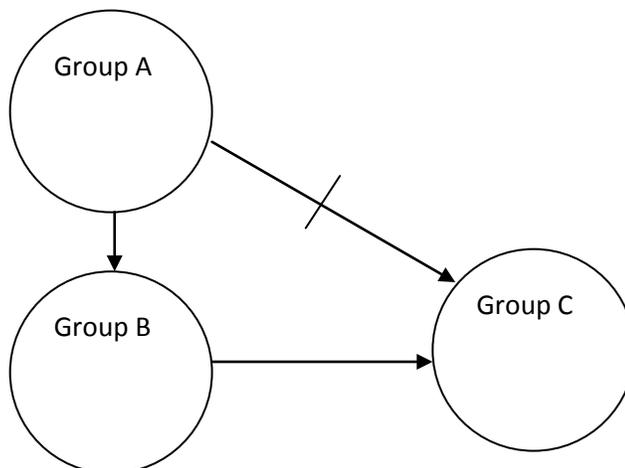
Its representation is similar to the asset provider relationship but there is an extra 'RO' written in the box in the middle.

Open Service provider relationship



If a service provider is an open service provider. An open service provider is a service provider who recovers the service cost by receiving donations. The relationship between such a service provider and another group is represented by the dashed arrow.

Automation of approval



Let us consider a situation

Normally group B is suppose to approve/ disapprove the relationship between group B and Group C. But sometimes group B can take the help of another group say a group A to approve / disapprove a relationship between group B and group C.

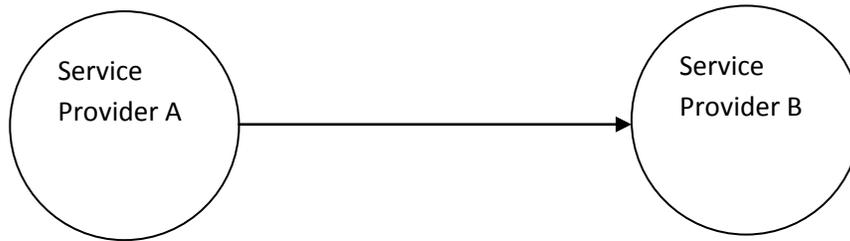
In this situation we say that Group B has automated the process of approval / disapproval and it is just forwarding the approvals / disapprovals given by the group A in order to form the relationship between groups C and group B.

In this situation group C would need to approach group A in order to ask for approval to form a relationship with group B. This is represented by the following symbol



Image: Symbol for automation of approval.

Relationship between a service provider and another service provider

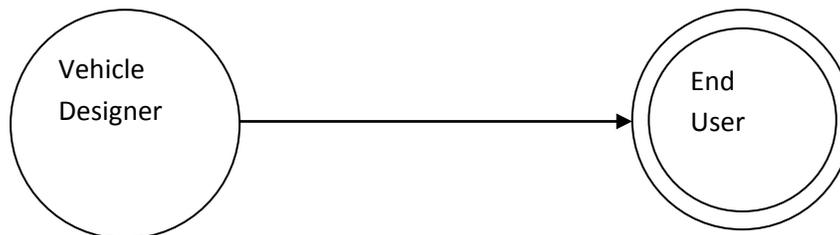


The relationship between the two service providers is represented by a single arrow. In the above diagram the Service provider B receives the service from the service provider A. Service provider B lies closer to the end user than Service Provider A in the ecosystem of relationships.

When they are in a relationship it is the responsibility of service provider B to make sure that Service provider A is doing his job properly and meeting its purpose/objective.

A and B both need to collaborate with each other talk to each other and give feedbacks to do their job in order to meet the final purpose which is to satisfy the needs of the end user.

Relationship Between a service provider and an End User



In the relationship between the end user and the service provider it is the responsibility of service provider to understand the needs of the end user and provide the services according to that.

The end user has needs but the end user does not understand its needs therefore the service provider to understand the needs of the end user and design solutions according to that. The satisfaction of the end user from the service indicates the efficiency of the service.

Examples of Relationship diagrams

As we proceed further in this text we will see the usage of the relationship diagrams in various examples. So currently if you do not understand how to use the relationship diagrams that is okay.

Nature provides people various kinds of freedom. Let us see what those freedoms are.

An entity could be a group or an individual. End user group and the service provider group are the examples of the different kinds of groups in the economy.

Free Society

Freedom to be in a relationship

Two entities who want to be in a relationship do not need the permission or the approval of another entity to be in a relationship with each other.

Freedom to not be in a relationship

An entity which does not want to be in a relationship with another entity has the freedom to not be in the relationship with that entity.

Dictatorial regimes are the violation of freedom to not be in a relationship. Citizens do not want to be in a relationship with the dictatorial regime still they remain in a relationship with such a regime.

Freedom to break up the relationship

In a free society if an individual or a group is no longer interested to continue in a given relationship with another individual or a group they have the freedom to break up the relationship without having any need to provide any justification or explanation of any kind.

In a free society people stay in a relationship because they love to not because they are obligated to.

Contracts and bonds are the violation of the freedom to break up the relationship.

We can see that in a Nonprofit Economy because people are financially secure they do not have any obligation to sign contracts or bonds in order to get a job or remain on a job.

If we see we will observe that in the conventional Economy there is a partial or more or less violation of all the kinds of above listed freedoms.

Consider an example:

In the Conventional Economy the objective of the organizations is to maximize incomes and profits therefore they have the tendency to compete with each other, monopolize the markets in order to maximize their incomes and earnings.

Now due to the tendency to monopolize the markets the organizations tend to manipulate the situations in the way that an individual becomes dependent on that organization and people lose the freedom to break up the relationship with corrupt organization even if they do not like to maintain the relationship with that organization as a customer.

In the Conventional Economy there is a lack of open standards and the organizations develop their proprietary standards. Due to existence of proprietary standards and lack of open standards the people become dependent on a particular organization and they lack the freedom to switch to another organization in certain cases.

Nonprofit Organizations in the Nonprofit Economy are likely to not have a tendency to compete and monopolize because maximizing incomes is not their objective. There is nothing a nonprofit would gain by trying to monopolizing the markets. A nonprofit is likely to have no interest in developing proprietary standards and using such practices in order to monopolize the markets.

In the nonprofit Organization people work on lower compensation and they are not under any obligation to do their job for the financial security reasons. Therefore a nonprofit would have no interest in making their employees sign contracts and bonds.

We can clearly see how the ethics that we are living with affect the freedom we have in our lives.

Lessons to learn

When the ethics of the individual fall down the individual falls into restrictions and loses its freedom.

When the ethics of the society falls down the entire society falls into restrictions and loses its freedom.

There is a direct relationship between the freedom that we have and the ethics we are living with.

So we can clearly see that our untruthful ethics are eating into our freedom. The freedom that we have in the society is directly proportional to the ethics that we are living with.

In the society the end user group forms many relationships. Let us study how we can simplify/facilitate the process of approving/disapproving the relationships for end user group.

An end user is the ultimate receiver of the service in the service provider chain in the economy. A group of people which is playing a role of an end user is termed as an end user group. An end user group can also act as an owner of the assets and infrastructure. We will discuss and study later the different kinds of situations in which the end user group can be the owner of the assets.

End User Relationships in Society

Common End User Groups in Society

There could be many possible end user groups based on the needs of different situations. But let us see that commonly observed end user groups.

Community

City

State

Country

Some issues which would be common to the interests of the people of the community. Some issues would be common to the interest of the people of the city. Other issues would be common to the people of the state or even the people of the entire country.

For example building national highways would be a service common to the interest of the people of the entire country. Building state highways would be a service common to the interest of the people of the state. Building the metro rail service would be common to the interest of the people of the city. And construction of a small park would be common to the interest of the people of the community.

We can see that based on the needs of different situations we can figure out the end user group that is involved.

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Examples of End User Relationships

We will study different kinds of relationships end user group forms in the society later in this text but to get started let us see few examples.

Examples of End User and service provider relationship

Highways construction

Airport

Metro Rail

Water distribution Service

Registration of a relationship proposal

Whenever an end user wishes to receive a service or a service provider wishes to offer a service to the end user a relationship between the end user and the service provider is formed.

When the relationship with an end user group is required to be formed there needs to be proposal for the relationship. And getting proposal properly registered helps in record keeping. So in order to put a proposal we will first need to register that relationship proposal.

Let us see what kind of details we will need to provide in order to register the proposal

Formal description of the relationship

In order to approve the relationship we need to first define or describe the relationship. This description would be referred in the legal matters therefore the description needs to be comprehensive and accurate according to the various requirements.

If the proposal is for the construction of the highway the formal description would include the specification of the highway, the plan of the building and such.

The ethics of the relationship can also be the part of the formal description.

Break up protocol

In a free society two entities could not under an obligation to stay or continue in a relationship. Sometimes a relationship could break up prematurely.

In such a situation disputes may arise at the time of break up. Therefore in order to prevent those disputes from arising we also need to provide a breakup protocol. If no break up protocol is provided in that case the state legislation would define how the break up is supposed to be performed.

Relationship ID

The end user group can be in many relationships simultaneously. So in order to identify the various relationships we need to each relationship an ID. The ID will be generated by the mechanism automatically whenever a proposal is registered. The relationship ID helps to identify the relationship.

Estimated Bill of services

When a relationship is with a service provider and the service involves some costs. In that situation the service provider needs to provide an estimated bill of services which mentions the estimated costs involved in the service. The end user needs to have an idea about the various costs involved in the service.

Further it is difficult to provide the exact cost of the service at the time of proposal because the cost could change with the real world situations. Therefore the bill of services provided at the time of proposal is an estimated bill of services. And the final bill of services needs to be provided after completion of the project.

Final Bill of services

The bill of services mentions the specifications of the services and the exact cost of the service.

The end user can also use the final bill of services to verify that the costs are appropriate and to ensure that there is no case of corruption.

Entity

A relationship is between the two entities. An entity could be a group or an individual. A group could be an end user group or a service provider group.

Whenever a proposal is being registered we also need to tell the entity with which the relationship is being proposed.

For example



In the above example a state needs a highway so a relationship is proposed with an ABC highway developer. A state might be willing to approve the relationship with the ABC highway developer because maybe the ABC highway developer is a trusted highway developer while the state might not be willing to approve the same relationship with another highway developer say PQR highway developer.

So we can see that in a relationship proposal we also need to provide the exact entity with which the relationship is being proposed.

Further based on whether the exact entity is provided or not provided at the time of relationship proposal the relationship could be of two types a predefined relationship or a conventional relationship.

Predefined Relationship - There could be many situations when it is not feasible to provide the exact entity at the time of relationship proposal. Let us consider an example

In a Nonprofit Economy getting a loan from a state protected bank needs an approval of the end user group - the state. In the case of granting an approval for an education loan there could be hundreds of applications for the education loan. It is not feasible to get the approval of the entire state for each and every application of an education loan. We can instead simplify this with the help of predefined relationship.

In a predefined relationship we do not need to tell the exact entity with which the relationship is proposed. Instead we only provide certain criteria for that entity. Any entity which fulfills the given criteria automatically has the approval of the end user group for that relationship.

For example in the above case for obtaining the education loan we can define the criteria as. Any person who has no pending dues, is a citizen of given state can obtain the education loan up to the limit of 10000 bucks. So now any person who fulfills these criteria when applies for the education loan automatically has the approval of the state.

So we can see there could be many situations where it is more feasible to provide the criteria for the entity rather than telling the exact entity.

Conventional Relationship - In the conventional relationship the exact entity is provided. The relationship is approved for the exact particular entity that is provided with the relationship proposal.

Common consensus of the End User Group

In order to form a relationship with an individual first you need to seek their approval / disapproval for the given relationship. Similarly in order to establish a relationship with an end user group we need to seek the approval / disapproval of the end user group.

The Common consensus of an end user group is the common agreement among the people of the end user group. If the common consensus approves the relationship we say that the end user group approves the given relationship. If the common consensus disapproves the relationship proposal we say that the end user group disapproves the given relationship.

Let us see how we can technically define the common consensus of the end user group

Each person can provide an approval or disapproval for a proposal. Or a person can choose to simply not participate.

Percentage of participation

It is the total number of people who has provided their approval or disapproval for a proposal.

Percentage of participation = $100 \times (\text{Number of people participated} / \text{Total number of people in the state})$

Percentage of approval

Total percentage of people out of the “total participation” who approve the proposal

Percentage of rejection

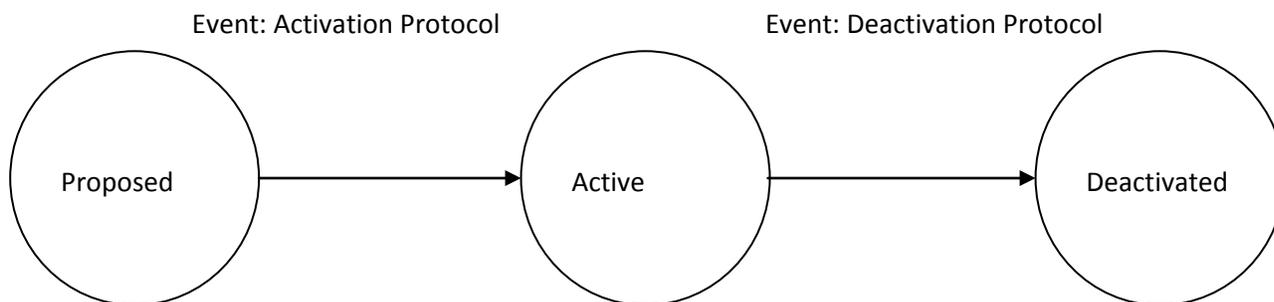
$100 - \text{Percentage of approval}$

If a person has approved a proposal, a person can change his approval to disapproval anytime in future.

If a person has disapproved a proposal a person can change his disapproval to an approval anytime in future.

Therefore the percentage of approval for a relationship can change anytime in future. While the percentage of participation would not decrease, it can only increase in future.

Relationship State diagram



Relationship States

A single relationship could be in many states a proposed state, Active state, deactivated state .

Proposed State

Whenever someone wants to form a relationship with a state they need to put a proposal for the relationship. A relationship would stay in the “Proposed” state until it is still under proposal.

Active State

If a proposal for a relationship gets approved. The relationship can now be established with the state. After the proposal for the relationship gets an approval of the state it would go into “Active” State.

Deactivated State

Either when there is a breakup or if the relationship has completed its natural course of time the relationship would be deactivated. After the execution of the deactivation condition the relationship would go to the deactivated state.

Activation protocol

An activation protocol is a criteria or a condition which activates a relationship when this criteria is satisfied a relationship goes from “proposed state” to the “activated state”.

Current State = Proposed state

Condition -> Activation Condition

An example of an activation condition

A minimum participation of 10% with the approval percentage above 90% would activate the relationship.

People can also use another activation condition as per their different needs.

When the relationship is in the proposed state and the activation condition is satisfied the relationship would go in the Active State.

Final State = Active state

Deactivation protocol

A deactivation protocol is a criterion which deactivates a relationship. When this criterion is satisfied a relationship would go from “active state” to the “deactivated state”.

Current State = Active State

Condition -> Deactivation Condition

An example of a deactivation condition

A minimum participation of 10% with the approval percentage below 70% can be considered as the breakup of the relationship and would result into deactivation of the relationship.

People can also use another deactivation condition as per their different needs.

When the relationship is in the active state and the deactivation condition is satisfied the relationship would go in the Deactivated State.

Final State = Deactivated State

Collection of the common consensus of the end user group

There could be many different ways or means by which we could collect the approval / disapproval of the people of the end user group.

I would provide a short description of one of the various means. In the one that we would discuss here there would be an offline signature based registration of a person. A signature could be a thumbprint, an iris scan, a face of a person or any biometric identification of a person. A signature is something that uniquely identifies a person in the society. After a signature based registration each person is assigned a public ID. A public ID is something that identifies a person on a given network. Each person would have a private ID. A private ID is secret that is shared between a services collaborator network and the person. We will study later the concept of services collaborator. With the help of public ID and private ID each person can be identified legitimately with the shared secret identification method and he/she can

provide his approval/ disapproval in a legitimate manner. This is only a short description of this process we will discuss more on this in the topic “Services collaborator”.

Personal Computer Network

After the person has completed his offline signature based registration. The person can now provide his approval or disapproval legitimately over a personal computer network. Internet is an example of such a personal computer network.

Ability to provide approval/ disapproval over a personal computer would add lot to the convenience of the citizens because personal computers can be easily accessed by the people at the comfort of their homes and offices.

These are just few examples and there could be many other means by which we can collect the approval/disapproval of the people.

Services collaborator Network

If we want to have advanced security features. We can use another facility the “service collaborator network” specifically designed for capturing the people’s approval / disapproval. There could be a network of secure identification kiosk’s specially designed for capturing people’s approval / disapproval. If we can withdraw huge amount of money securely with the help of machines we can also design them to securely capture people’s approval. We will discuss that in the topic “Services Collaborator”.

End User Group Relationship portal

A governance portal is an interface where people can study different proposals and relationships and provide their approval and disapproval for a proposal. People can also gather the information and carry their research about all the relationships that involves the state by searching and browsing the relationships.

Relationship browser

A relationship browser is a facility by which people can browse all the relationship with the help of different categories under which they are placed.

There could be categories like Roads and bridges, banks, education. People can browse the relationships based on different categories.

Relationship search Engine

It is a facility where you could search all the relationships based on various criteria for example “the state of the relationship”, the formal description of a relationship. If you want to see all the approvals given for highway construction project you would type the search query as “highway construction” and you would get all the relationships that involve “highway construction”.

Proposed relationships list

People would want to see all the proposals in one place. A proposed relationships list is a list which consists of all the proposed relationships sorted in a given manner.

Sorting order

There could be many sorting orders in which a proposed relationship list could be sorted. People can sort the list as per the individual preferences. For example the list could be sorted in the order of total participation or the order of submission.

Total participation - This is the most preferred sorting order for proposed relationships list. People would be more eager to see the proposals which have received the largest participation. So this can be used as default sorting order which the people would see.

Order of submission - Order of submission is the order in which the proposals are submitted. It is one of the many ways to sort the list.

Active relationships list

People would want to see all the active relationships listed in a given order. An active relationships list consists of relationships which are active.

Sorting order

An active relationships list can be sorted in many different orders for example it could be sorted in the order of “date of activation” and there could be many other ways in which the list could be sorted.

Discussion forum

There could be a discussion forum for each proposal where people can discuss the flaws and benefits of that proposal. A discussion forum would help the people to actively participate in the governance of the state.

Recommendations and reviews

Each proposal can have many recommendations. If someone likes a proposal they can recommend that proposal to their friends and other people they know. This will make the governance a collaborative experience.

People particularly intellectuals can evaluate a proposal and publish their reviews about the proposal. These reviews will help the people to make better choices and choose better proposal even if they do not have the underlying knowledge or understanding of the proposal.

Request for Service

When the members of the end user group need a particular service they can invite the service provider to offer the given service by generating the request for a service.

A request for a service could contain a description of the given needs of the end user, ethics of the relationship and the description of the relationship. When a service provider is interested in offering a requested service he can register a relationship proposal which people can study and approve / or disapprove.

There could be a discussion forum where the members of the end user group can discuss together their needs and thereby help each other in generating the request for the service.

The members can also advertize and make other members aware of the service request and invite them to participate in the approval / disapproval of the relationship proposal for the given service request.

Proposal for a service

A proposal can also come from a service provider when a service provider feels that he has interesting service proposal that members of the end user group can find interesting. In this situation the service provider can register a relationship proposal and invite the members of the end user group to look into the proposal.

Emergency situations and the End User representative

Each Community can have its own representative who can approve / disapprove a relationship on behalf of the members of the community.

The representative of the end user group would approve / disapprove and speaks on behalf of the end user group in the situations where it is not feasible to collect the approval / disapproval. The example of such a situation would be an emergency situation. An emergency situation is a situation where the end user group needs to provide a quick approval/ disapproval and it is not feasible to wait for the collection of the approval / disapproval directly from the members of the end user group.

The members of the end user group can off-course overrule the approval / disapproval of the group representative after some time. In the case there is a conflict between the approval / disapproval provided by the group representative and the approval/ disapproval obtained directly from the members of the end user group. The approval / disapproval obtained directly from the members of the end user group would overrule the approval / disapproval of the end user representative.

The same can be applied for the end user groups - the city and the state and the country.

The city could have a city representative, a state could have a state representative and the country could have a country representative. The representative of the end user group would be elected by the members of the respective end user group.

Joining and leaving the end user group

In a service provider group since the service provider is recovering the cost of its assets from the end user therefore whenever a member of a service provider group leaves he does not claim any share in the cost of the asset. But in the end user group, since the end user is the one who is paying for the assets costs so the member of end user can ask for his share of asset cost when leaving the group, this would change the protocols of leaving and joining the group for an end user group.

Asset ownership costs

For example if there are 100 people in an end user group who want to build and own an asset which costs 10,000 bucks each person would need to contribute 100 bucks in order to build the asset.

Cost of ownership of an end user asset for a single person is the total cost of the asset divided by the number of people.

Individual end user asset ownership cost = (Asset cost) / (Total number of people)

We need to understand that the cost of the asset would not remain the same because the cost of the asset depreciates with the time.

For example if you purchase a vehicle for 5000 bucks after two years of usage the cost of the vehicle may drop to 3000 bucks. So we can see that the cost of the asset can depreciate over time. The asset cost is the cost of the asset calculated after accounting for the depreciated value.

If the cost of an asset is depreciating at 10% per year and the initial cost of the asset is 10,000 bucks. After two years the cost of asset would be.

Asset cost = Initial cost – 2 x 10% of initial cost

= 10,000 – (2 x 1000)

= 8000 bucks

The pattern of depreciation of an asset can be different for different kind of assets so each asset can have its own equation which describes the asset cost after accounting for depreciation.

Total individual asset cost = (Summation of Asset cost of all the assets) / (total number of people)

Whenever I am talking about the asset cost I would mean the cost obtained after accounting for the depreciation of asset value.

Leaving the group

If a person from an end user group would want to leave the group he can ask for his share in the total cost of assets owned by the end user group.

But the assets have been planned according to the initial strength which includes the people who are leaving the group so the other members would not afford to pay for the asset ownership cost of members who are leaving the group. Therefore whenever someone is leaving the group he can receive his share of asset ownership cost only if the new person joins the group and takes his place. That is new person joins in lieu of the person leaving the group.

If you do not understand what that means just read the protocols below you would understand what I mean.

Protocols for leaving the group

Whenever someone wants to leave the end user group he is put on a waiting list. If a new person joins in new person would need to pay the current asset ownership cost calculated after accounting for depreciation. This asset ownership cost would go the first person on the waiting list. In this way the person on a waiting list who desires to leave the group would receive his share of asset ownership cost back to him.

Waiting list consists of the people who desire to leave the group and desire to get their share of asset cost back. The waitlist is sorted in the order the people are making the application for leaving the group.

Protocols for joining the group

If there are members on the waitlist for leaving the group the new person joining would join in lieu of a person leaving the group. If there is no body on the waitlist the new person would join as an extra member.

Joining in lieu of someone who wants to leave the group

When a new person is joining in lieu of the other person leaving the group, the new person would pay the current individual asset ownership cost to the person leaving the group.

Current individual asset ownership cost = (Total end user asset cost) / (Total number of people)

Asset ownership cost is calculated after accounting for the depreciation cost at the time of joining.

Joining as an extra member

In this case there will be the change in the total strength of the end user group. The individual asset ownership cost would be recalculated.

Individual asset ownership cost = (asset cost) / New strength

New strength = old strength + 1

The new member would pay the individual's asset ownership cost to the rest of the members.

This individual asset ownership cost would be distributed to the rest of the members of the end user group by dividing the "individual asset ownership cost" equally among the rest of the members.

Each member's share = (individual asset ownership cost paid by new member) / (old strength)

Benefits and Changes

Faster and responsive governance

There are many situations when the proposals remain pending in the assemblies of state representatives because state representatives are not able to cope up with the burden of the governance. Therefore it takes a lot of time to get the proposals approved and some proposals would remain pending for approval for a long time. When people can directly approve a proposal the governance would become faster and more responsive to the needs of the people.

Increased participation and transparency

Many times people are not even aware of the details of the proposals that are being approved by the state representatives because they are not directly involved with the governance of the state. When people are not directly involved in the governance they lack the awareness of how their state is being governed. When people spend their time and participate in the actual governance of the state they

would have more awareness how their state is being governed. Due to increased participation the transparency would improve.

Red tape

When representatives have the authority to give approvals they can misuse their authority to take bribes when they are giving their approvals. This give rise to corrupt governance, decisions would be made which are not in accordance with the people's interests.

When people do not depend on representatives and can give their approvals directly. Such a misuse of authority is not possible because if an approval given by a people's representative is not in accordance to the people's interest such an approval can be overruled by the "people of the state".

Governance would be interesting activity

Governance would be seen by the people as a means to socialize with each other where people could discuss the proposals with each other on discussion forums interact and socialize with each other. It would be something that is interesting to the people something that people would enjoy. It could be a way by which people would connect and socialize with each other.

Taxes

The concept of differential payments where different people pay different costs for the same service and the concept of payments where there is not direct relationship between the cost you are paying the services you are receiving doesn't make any sense in a society where people and organizations do not work for profits.

Issue: Taxes and Subsidies

For example in the import and export taxes there is no direct relationship between the service the organization is receiving and the taxes the organization needs to pay. Then you got a tax over organization's profits where different organizations would pay different costs for the same services they are getting from the government. We can see that there is no direct relationship between the services obtained and the payments made by the individuals and organizations. The taxes were designed to balance the inequalities in the society. But in the "Nonprofit Economy" since people and organizations do not work for profits there are already no inequalities in the economy. In such a situation the taxes would just be an unnecessary concept which is creating unfairness in the economy. Unfairness is always unhealthy for the economy and has an adverse effect on the health of the economy. Therefore we need to phase out the concept of taxes completely from the "Nonprofit Economy" where people work with nonprofit ethics.

Taxes can be replaced by direct payments where organizations and individuals can pay directly for the services that they get just like you pay to the seller in the market for the services you get. You are not going to pay for the services that you do not get and you are not going to pay more than the market cost of the service that you are receiving in the economy.

Subsidies

Besides providing a proper way to distribute the scarce commodities the cost of commodities also play another important role in the economy the role of telling people the truth about the real world situations. If a certain resource is highly scarce people need to know that they need to take measures in order to cut down the consumption. When people know the truth they search for alternatives cut down the wastage. They take precautions and measures in order to reduce the consumption.

Now if I am subsidizing that resource I am hiding the truth from the people. People would not know the real cost of the resource. I am keeping the people under the delusion over the availability of the resource.

For example because we are heavily subsidizing the costs of conventional non-renewable fuels like petrol/gasoline. People would not understand the importance of searching for alternatives. The demand for alternatives would be lower therefore the initiatives for alternatives would also be lower. For example if the petrol/gasoline costs 100 bucks per unit and I am subsidizing the petrol/gasoline and making it cost 60 bucks per unit. People would not go for the alternatives which costs 70 bucks because they will think it is costlier than petrol/gasoline which is not true.

Even if the truth is painful you need to tell the people the truth. Because when people know the truth they are better prepared to face the truth. There could be many ways people could prepare themselves to face the truth. They could change their habits of usage by cutting down on wastage of petrol or gasoline. If someone using his vehicle for 10 kilometers a day he could cut down the unnecessary trips and reduce it down to 7 kilometers per day and he would also look for more fuel efficient vehicles. But if I am not telling the people the real cost of petrol/gasoline people would not have any reason to reduce the wastage and take measures to cut down on usage. If people know the real cost of petrol/gasoline they would be more interested to go for the alternatives cut down the wastage and look for more fuel efficient vehicles. When people are taking more interest in the alternatives there would be more research in that area and better solutions will come. If people do not take interest in alternatives the solutions would also not come. So when I am hiding the truth I am keeping the people under delusion and people are not able to prepare themselves to face the truth. People are not aware of the problem and they are not seeking the solutions. You cannot hide the truth forever it will have to come in front of the people someday. But at that time people will be caught unprepared.

Subsidies hide the truth and create distortion of the truth. Therefore it will result into improper decision making by the people and the organizations both. And this would end up causing adverse effect on the health of the economy in the long run. So we need to phase out the concept of subsidies.

Section 4:

Ecosystems and Relationship Diagrams

Inefficiencies in the ecosystems results into inflexibility, wastage of manpower and resources. We will study that ethics of the conventional economy is something that are acting as a bottleneck to improve the efficiency of the ecosystems that exist in the conventional economy. In the Nonprofit Economy these bottlenecks are removed. We will see some examples where we will discuss how we can improve the efficiency of existing ecosystems and how it could benefit the economy and people.

When many service provider organizations collaborate together on a single purpose and provide services to the end users what we get is an ecosystem. The economy/society constitutes of many functional ecosystems.

Our society is like a tree where ecosystems are like the branches of that tree. There would be many leaves on a single branch. A leaf is like a service provider organization. Just like each leaf is contributing to the tree similarly each organization is contributing to the economy/society. Some day old leaves will shed away and new leaves will take its place. The overall health of a tree depends on the health of the leaves and how they collaborate and contribute towards the health of a tree.

Efficiency of an ecosystem

Ecosystems automatically fall into place in the economy but sometimes the structure of the ecosystem in the present state is not efficient. And there is a scope to improve the efficiency of the ecosystem. What we have to do is find out the ways (if there are any) to make the ecosystem more efficient. And when we find out a better way we have to go the people and tell them “hey look you are doing it this way but there is a better way”, if you do the things in a better way you will be more productive and get the more output in the given input.

So what we really going to do here is study a given ecosystem see whether the ecosystem is functioning at its full efficiency. If we feel that the ecosystem is not efficient we will need to find ways by which we can improve the efficiency of an ecosystem.

What is the efficiency?

Efficiency is the output that we get in a given input. Efficiency is calculated in percentage. 100 percent efficiency is the maximum output that you can get in the given input. Efficiency cannot be more than 100 percent. But sometimes the efficiency can fall below 100 percent.

What are the inputs to an ecosystem in the economy?

Manpower

Resources

Let us see an example.

If we do away with the concept of patents and copyrights and we allow people to openly use/modify adapt and distribute the solutions.

This will improve the reusability of the solutions. Rather than working on many similar proprietary solutions people will work on few standard solutions.

This will decrease the manpower requirement if there are ten people who are engaged in developing two different proprietary solutions. We will require like 6 or 7 people to develop one standard solution.

Now 3 – 4 people can work on some another project.

There will be less number of offices and buildings. So with the help of Open designs we are saving the manpower and resources. Now the resources and manpower we are saving can be utilized to do some another productive work in the economy. So what we are doing is we are increasing the output that we are getting in the given inputs. We are improving the efficiency of the ecosystem.

Ethics and the efficiency

We will also see another pattern. The ethics people work with have a huge effect of the efficiency of an ecosystem. When people work with good ethics the ecosystem will be efficient. And when people work with bad ethics there will be wastage and improper utilization of the manpower and resources the efficiency of an ecosystem will fall down.

We can see that ethics is something which is generally considered of no functional value. You can in fact measure the value of the ethics in numbers and statistics.

Ethics do have an effect on your life, your society and your economy. They in fact have a huge effect not just a small effect.

An ecosystem consists of a web of relationships between various service provider groups and end user groups in order to accomplish a given purpose.

When the efficiency of the ecosystem falls down there is wastage of manpower and resources. Further lack of satisfaction in the services is also observed.

Ecosystems Design

Therefore in order to help people overcome these problems we need to observe and find out the inefficiencies of the existing ecosystems and try to design better ecosystems which people can utilize for their needs.

Designing an ecosystem involves

1. Assigning the responsibilities to various service provider groups and end user groups.

You might not be able to understand what that means at this point. Do not worry we will discuss that when we study the different relationship diagrams.

2. The proper distribution of the ownership of the assets needs to be done in order to ensure that the freedom in the relationships is preserved.

We will study what the distribution of ownership of assets in the following paragraphs.

Let us consider various scenarios in order to understand the second point

Consider the case of an airport service in the city. Consider that this city has only one airport. An airport is an asset which includes the entire infrastructure that is contained in the airport.

Case 1:

Consider that an airport is an asset that is owned by a service provider organization. The owner of an asset have the privileges to use that asset the way he wants to and privileges to decide when to sell that asset and to whom he wants to sell that asset.

Consider a scenario that the city suffers from a bad service at the airport and the citizens of that city are not satisfied with the service that they are receiving. Citizens try to put complaints to the airport service

provider but the service provider fails to improve the bad service. Further the current service provider refuse to sell the airport and transfer the airport to another better service provider.

Now what citizens can do in order to get the better service?

Because there is only one airport in that city the citizens are stuck up in the relationship with the bad service provider at that airport. The citizens cannot break up the relationship with the bad service provider even when they desire to break up that relationship. because the airport infrastructure is an asset which is owned by the airport service provider.

We can see that the freedom to break up the relationship is crippled in this case.

So how can we resolve that?

Case 2:

Instead of letting the airport infrastructure to be owned by an xyz airport operator the better option would be to let the citizens of the city own the airport infrastructure by themselves.

In this case the end user group 'citizens of the city' decides to own the asset 'airport infrastructure'.

Now in this situation if an airport operator provides a bad service and citizens of the city are not satisfied with that service they can break up the relationship with the airport operator. The current airport operator would have to leave the airport and stop handling the airport so that another airport operator can be given the responsibility to run the airport.

We can see that by having a better distribution of ownership of assets can help us preserve the freedom in the relationship.

The purpose of proper distribution of ownership of assets is to ensure that the freedom in the relationships is preserved.

We will try to understand more about this point when we study the different relationship diagrams.

An Example: Resource Ownership Distribution Chart

Asset	Owner Group
Resource Origin	State/ Country
City Roads	City
Community Roads	Community
State Highways	State
Airport Infrastructure	City
Metro Rail Infrastructure	City
Community Park	Community
City Park	City
Electricity Transmission Grid	State
Electricity Distribution Grid	City
Railway Infrastructure	State/ Country
Local Area Network	Community
City Wide Network	City
Water Distribution Infrastructure	City

Other factors to Consider for Distribution of the ownership of assets

The assets which are required by the service provider in order to offer the services can be considered as service provider assets. All other assets in the economy will be the end user assets.

The service provider recovers the cost of its assets by the end users. The end users bear the cost of the assets they own by themselves. The end users do not recover the cost of their assets from other people and groups/organizations.

The “roads and bridges” is not a service provider asset. A service provider will need construction equipments in order to construct the roads and bridges but it has no legitimate purpose to own the “roads and bridges”.

Similarly electricity grids are also not the service provider asset they are the end user asset. The service provider will need construction equipments to construct the electricity grids so the construction equipments can be owned by a service provider and can be considered as a service provider asset. But there is no legitimate purpose for a service provider to own the asset which is not required by the service provider in order to offer services to the people. Therefore the electricity grid will not be a service provider asset. Electricity grid can be owned by a state or a city but not by a service provider organization.

Examples of End user assets

Stadiums

Electricity grids

Roads and bridges

Metro Rails

Airports

Homes

Examples of Service provider assets

Factories/ Manufacturing facilities

Offices

Construction equipments

Building construction equipments

Grid construction equipments

Institute building

In this way whenever we have a question who is going to own a given asset? We can check what kind of asset it is. If the asset is not a service provider asset and then it must be an end user asset. If it is an end user asset we will need to identify the given end user or an end user group who will own the asset.

The service provider recovers the cost of the assets it owns from the end users. The service provider does not bear the cost of the assets by itself. This is the reason why when a person from a service provider group leaves the person would not get any share/return of the cost of the assets. And when a service provider organization dissolves all the assets owned by the service provider group will go to the State.

The end user does not recover the cost of the assets. The end user bears the costs of the assets it owns by itself. When a person leaves an end user group and the other person joins in, in such a case the person who is leaving would get his share of the cost of the assets. We had seen how exactly we can do it in the topic "Governance of an End User group".

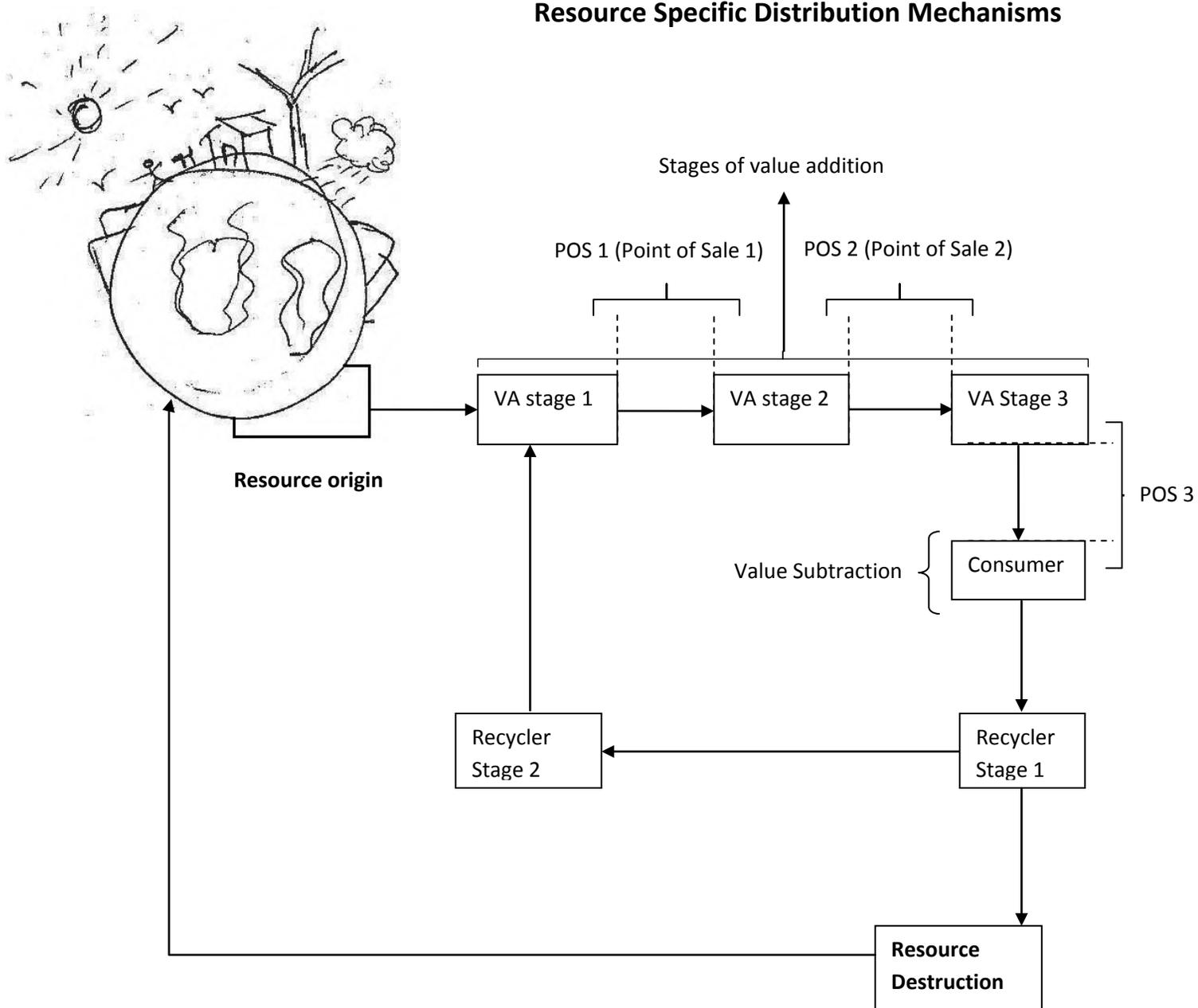
Service Provider at Resource Origin (SPRO)

Let us observe the image of the resource lifecycle again. We can see that the raw resource originate from their origin and then they go to the first stage of value addition.

The service provider which carries out/ situated at the first stage of value addition is the Service Provider at Resource Origin (SPRO).

The service provider which is directly extracting the raw resources from the resource origin is termed as Service Provider at Resource Origin (SPRO).

Resource Specific Distribution Mechanisms



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Department of Resource Origin

The resource origins available in the given country are owned by the end user group 'citizens of the country'. Technically speaking the usage of the Resource Origin needs an approval of the end user group 'citizens of the country'. But as we can see that there could be large number of resource origin's available in the given country so it is technically not feasible to collect the approval/ disapproval for each of the resource origin from the end user group 'citizens of the country'. Therefore the end user group 'citizens of the country' assigns this responsibility to a service provider. We would call it Department of Resource Origin (DRO).

It is the responsibility of the DRO to provide approval/ disapproval for the usage of the resource origin in the interests of the end user group 'citizens of the country'. What if the DRO does not work in the interest of the 'citizens of the country' in that case the end user group 'citizens of the country' can break up the relationship with the corrupt DRO and look for another genuine service provider for the role of DRO.

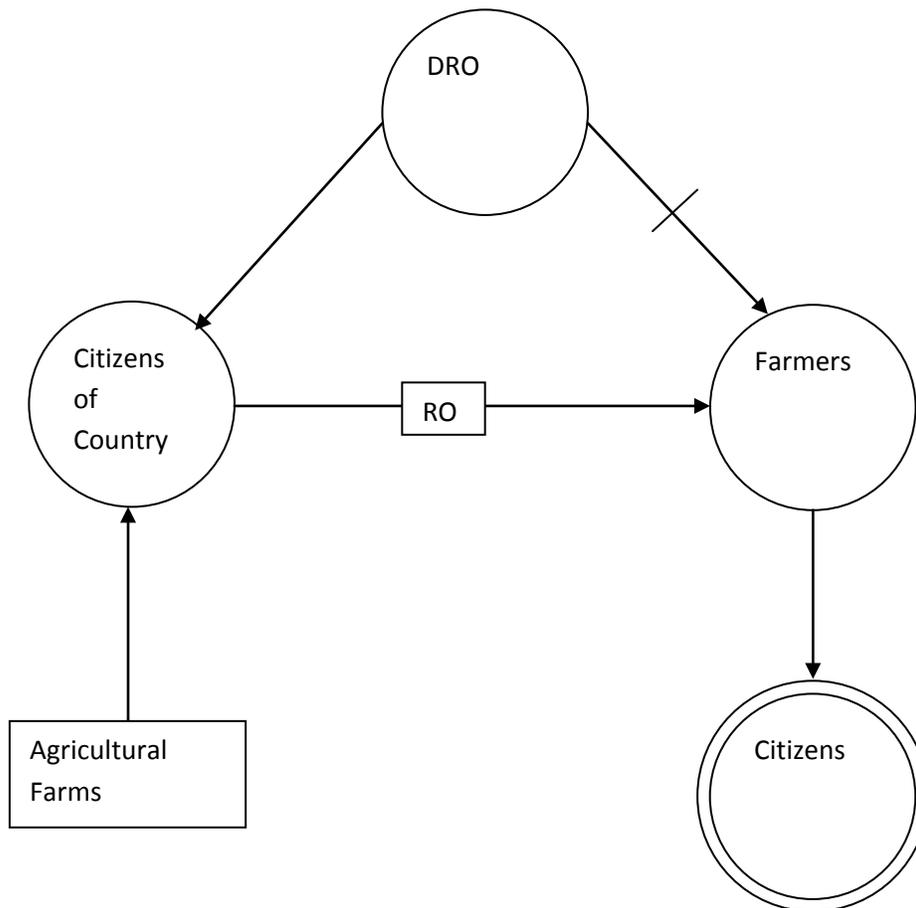
Responsibilities of the DRO

Ensure that there is a proper accounting of the Resource Earnings and all the details are released in the general public so that citizens can investigate the process.

Ensure that there is no corruption at the Resource Origin and whenever there seems to be a report of the corruption take the appropriate actions. Which include breaking up the relationship with the corrupt SPRO (Service Provider at Resource Origin) .

Grant approval / disapproval for the role of SPRO for various resource origins. There could be many interested service providers who would be interested to play the role of SPRO. The DRO would make sure that the approval is granted to the service provider which is genuine.

Agricultural Farms



The group 'citizens of the country' is the owner of the resource origin 'agricultural farms'.

The farmer is an SPRO (Service provider at resource Origin).

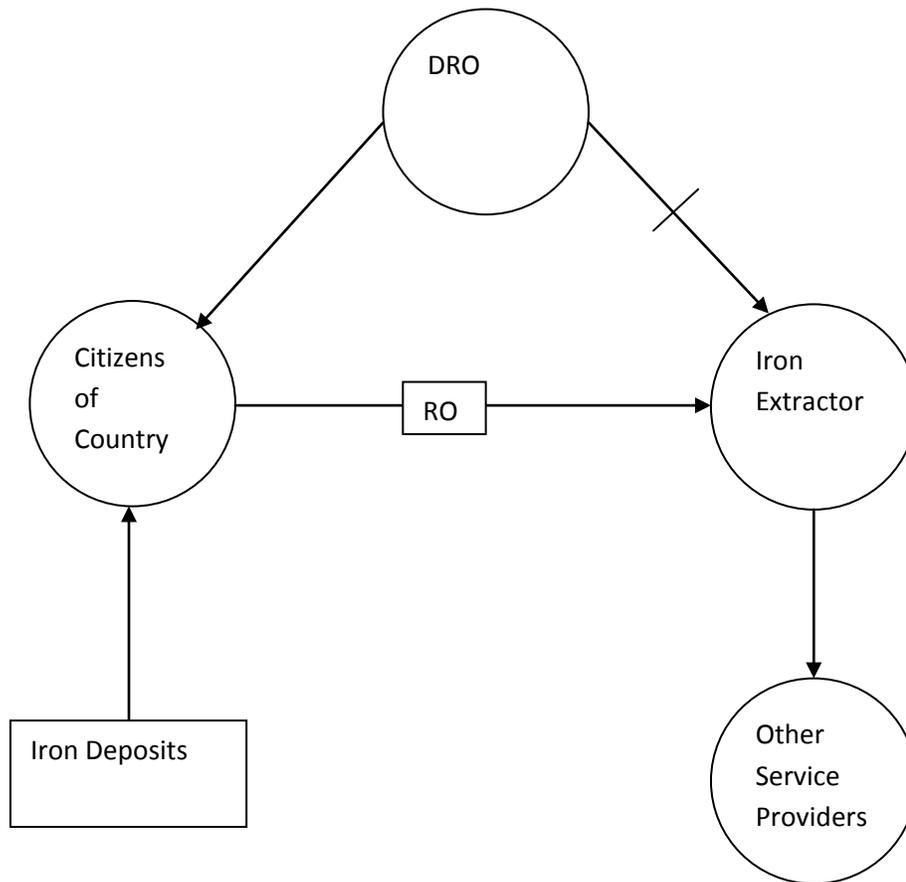
The Farmer needs an approval of the owner of the resource origin for the usage of the resource origin.

There is an automation of the approval process here. The approval given by the DRO is considered as the approval given by the group 'citizens of the country'. For the approval of the usage of the resource origin- agricultural farms the farmers would approach the DRO (Department of Resource Origin).

The farmers are a Nonprofit Organization which provides the agricultural produce to the citizens which are the end users in the above relationship diagram. After cutting the operating costs in the incomes and keeping some safety margin whatever that is left is forwarded to the citizens of the country as the resource Earnings. The farmers need to keep a legitimate and transparent accounting of all the incomes generated and spent by the farmer organization and as a part of the responsibility of the SPRO this

accounting information needs to be released in general public so that people are aware of the accounting and can ensure that there is no case of corruption at the resource origin.

Metal Extraction



I am providing only the relationship diagram in this case because the relationships are pretty much the same in the case of agricultural farms described above.

Corruption at resource Origin

Since resource origins are owned by the citizens therefore citizens have the right to investigate and ensure that there is no corruption at the resource origin. The investigation agencies can also make sure that there are proper mechanisms in place such that resource distribution process is transparent and if there is corruption at resource origins it doesn't go undetected.

Service provider at the resource origin (SPRO) needs to cooperate with the citizens to make sure that there is a proper and transparent accounting of the resource earnings and all the available details are made available in the general public.

It is in the interest of the citizens that the service provider at the resource origin (SPRO) is not corrupt. Because the corrupt service provider at resource origin (SPRO) would result into a loss in people's resource earnings. So it is the responsibility of the citizens to ensure that there is no corruption at the resource origin.

Case of Dissatisfaction from the SPRO

Even though the citizens do not have any evidence of corruption done by the SPRO but they no longer trust the SPRO. They can still break up the relationship with the SPRO.

We have read previously that in a free society you can break up the relationship with another group or an individual without providing any explanation or justification.

So lack of trust or even dissatisfaction from the relationship is a good enough reason for the citizens to break up the relationship with the SPRO.

Types of Resources

In the Nonprofit Economy all the resources can be categorized in two categories

Normal Resources

Normal resources are the resources which do not go through the changes in their costs throughout their lifecycle and even if there is a change in their costs the magnitude of change is not enough to give rise to artificial demand effect.

In short normal resources are those resources which do not suffer from artificial demand effect.

Alive state Resources

The resources which go through changes in their costs throughout their lifecycle to an extent that it gives rise to the artificial demand effect.

In short the resources which suffer from the artificial demand effect and distributed through alive state resource distribution mechanism is termed as alive state Resources.

Distribution of Non-Scarce Resources

Do we pay for the air we breathe? Why we do not pay for the air we breathe? It is because the air we breathe is not a scarce resource and available in abundance.

We do not any special mechanisms for the distribution of Non-scarce mechanisms.

If there is a resource which is not scarce such a resource can be distributed at zero cost in the Nonprofit Economy.

Initializing the Economy

Let us assume that we pick some hundred thousand people from the Earth and drop them on the Earth Like planet and we will make sure that the economists do not include in those hundred thousand people.

Now these hundred thousand people have all the resources to survive and enjoy their life on the new planet. But they don't have any economic setup. Let us try to help them setup the economy.

The question that comes now is how can we initialize and setup the economy. When no such thing already exists?

Elementary Steps of Initializing the Economy

Step 1:

The "People of the state" claim the ownership of the resources

Step 2:

The "people of the state" setup the resource distribution mechanisms and DRO (Department of resource Origins) and assigns it the responsibility to sell the resources in the economy and distribute the profits generated by selling the resources to the "people of the state".

Step 3: Generation of currency

The economy does not have any currency yet. So we will have to generate the currency. In this phase the state generates the currency for the first time in the economy.

In the Nonprofit Economy the currency is nothing but the number which represents the value of resources and since the resources belong to the “people of the state” so the currency will also belong to the “people of the state”.

Step 4: Distribution of currency

The currency belongs to the “people of the state” so the DRO (Department of Resource Origin) will distribute the currency to the “people of the state” by dividing it equally among them.

Step 5

The DRO (Department of Resource Origin) sells the resources in the economy and generates the profits.

Step 6

The DRO (Department of Resource Origin) distributes the profits generated by selling the resources to the “people of the state”.

After the economy has been initialized the cycle would repeat from step 5.

Generation and distribution of Currency

In the Nonprofit Economy services are offered at zero cost. Only the resources have a cost. Therefore the currency represents the value of the resources available in the economy. In the Nonprofit Economy the resources are owned by the group ‘citizens of the country’. Therefore whenever the new currency is generated such a currency belongs to the citizens of the country.

So in the Nonprofit Economy whenever the new currency is generated it needs to be distributed to the ‘citizens of the country’ by dividing it equally among them.

Since generation of the currency can cause inflation which can be damaging to the economy. We need to be careful and not to generate the new currency unless there is an appropriate requirement.

We require generating currency for different reasons. The conditions when it is appropriate to generate the new currency are already discussed in the topic ‘Rates, Cash, Prices and Inflation’.

Exchange rates

In this topic we will discuss the logic that should be used to adjust the exchange rate for the trade between two nonprofit economies.

I am deferring the discussion of this topic to the future versions of this book.

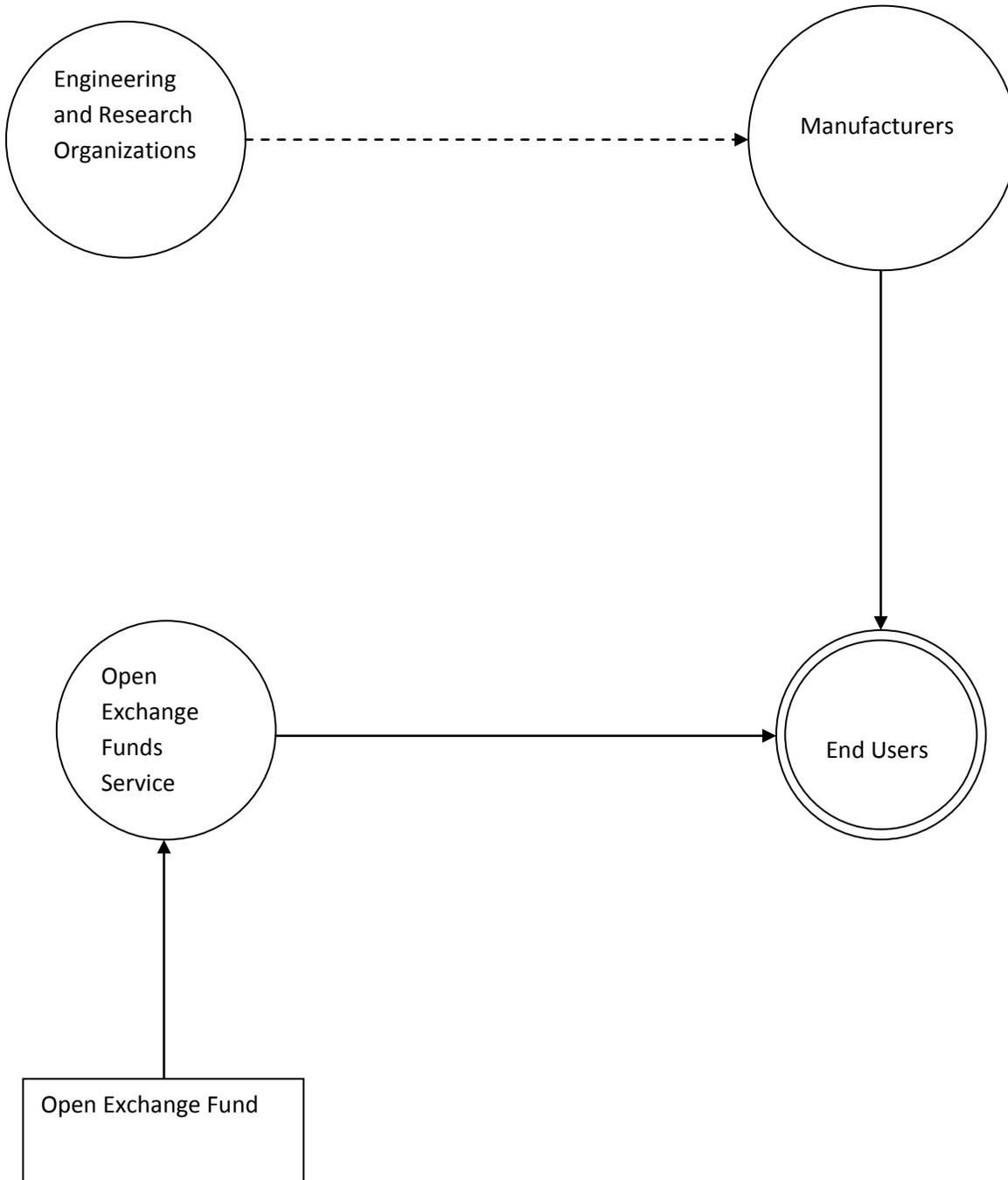


Image: Ecosystem of Open Manufacturing

Ecosystem of Open Manufacturing

In the Economy the solutions like vehicle designs, computer hardware can be generated by separate open service provider organizations that specializes in generating those solutions.

These solutions can be released by the open service providers for the general public so that any manufacturer who is interesting in manufacturing a particular solution can manufacture that solution.

The open service providers recover their input costs from the donations so they can offer and release their solutions free of cost to the manufacturers in the open access without any restrictive measures like patents and copyrights.

Open Manufacturing

Due to absence of restrictive measures like patents and copyrights the open service providers can openly collaborate and share with each other which can help in faster and cheaper development of the solutions. The solutions would be more efficient and suited to the needs of the end users.

The open exchange funds help in distributing the donations to the deserving open service providers in the appropriate proportions.

Let us study the different kinds of organizations involved in this ecosystem.

Open Service Providers

Open Service Providers are those service providers who do not directly collect the cost of services from the service receiver. They offer the open services like solutions which are not scarce therefore can be offered free of cost.

But generation of open services can also involve the input costs.

Therefore to offer the services the open service provider recovers the input costs with the help of donations.

Examples of open services

Engineering and Research Organizations, documentary film producers, texts, solutions, Vehicle designers

Responsibilities of Open Service Provider

Generate the prototype of the solution. For example consider the case of vehicle designers. The vehicle designers would generate the prototype of the given vehicle design. This would help them to demonstrate their solution/ vehicle to the general public and interested manufacturers.

Provide and release the complete documentation of the solution which can be used to reproduce/manufacture the solution.

Cooperate with the manufacturers to help them setup the manufacturing of the solutions. For example the vehicle designers would cooperate with the vehicle manufacturers to ensure that the manufacturer is able to implement the manufacturing setup to manufacture the given vehicle.

Manufacturers

The role of the manufacturer is to manufacture the solutions as per their interests and is required by the end users.

The manufacturers do not have to pay anything to the open service providers because the open service providers receive the cost of service from the donations.

This will help the manufacturer to offer their products to the end users at the cost of manufacturing.

Open Exchange Funds

For the end user it is very tedious to track down each and every open service provider and donate to that service provider. It would be simpler if they could simply submit their donations to one agency which distributes their donations to the appropriate open service providers in the appropriate proportions.

An open exchange fund is a service provider consisting of a group of people who receive the donations from the end users and distribute the donations to the appropriate open service providers.

The open exchange funds would distribute the donations in appropriate proportions to the deserving open service providers. For example the vehicle design which is largely accepted by the general public in the economy the designer of such a vehicle would have more priority to receive and fund their projects compared to other designers who have not provided useful solutions.

Examples of open Exchange Funds

Funds for Vehicle Designers / Engineers

There could be an open exchange fund which particularly specializes in distributing the donations to the vehicle prototype designers.

Funds for Computer Hardware Engineering organizations

There could be an open exchange fund which particularly specializes in distributing the donations to the computer hardware designers in the appropriate and deserving proportions.

Funds for Computer Software engineering organizations

Similarly further we could also have an open exchange fund which specializes in distributing the donations to the open software engineering organizations to help them recover the input cost of development of software.

Open Exchange Culture

People in the Nonprofit Economy need to be educated about the benefits of donating to the open service providers.

Benefits

Donating to the open service providers helps the open service providers to keep the solutions and knowledge in the public access without any restrictive measures like copyrights and patents.

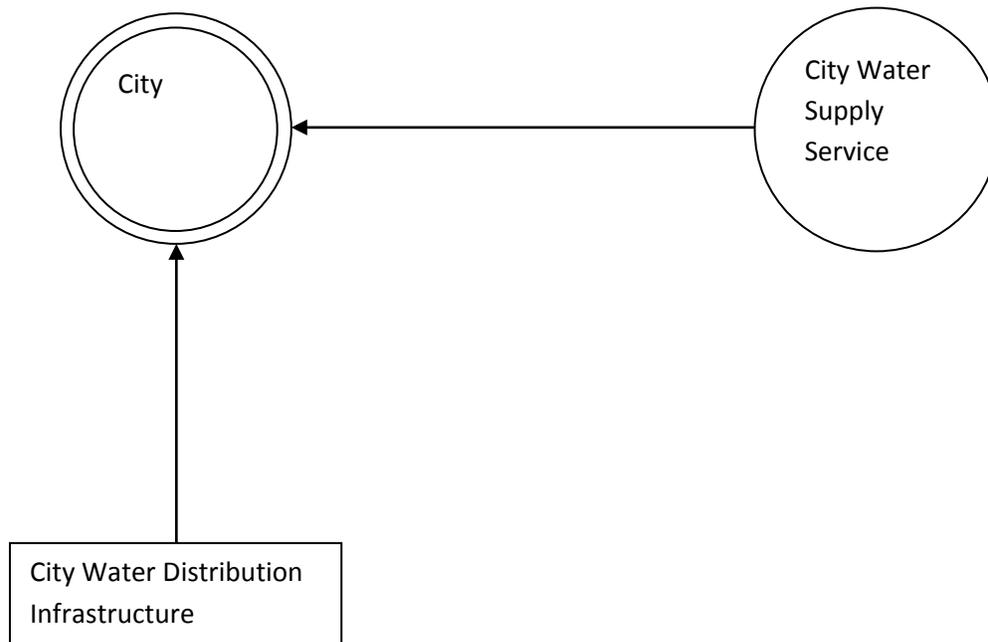
Such an environment which is free from the restrictive measures like copyrights and patents would foster open sharing and collaboration among the engineering and research organizations which has many benefits of its own.

This helps in the faster development of solutions. The solutions would be more efficient and better able to satisfy the needs of the end users.

Lack of cooperation between the organizations and competition between the organizations results into lack of interoperability between the solutions which results into hassles, higher costs for the end users and also the wastage of resources.

In simple terms you can expect the devices, solutions and facilities like vehicles and computers to be available at cheaper cost and function better.

The environment of open sharing of knowledge and solutions is required for the healthy society and would help us in creating a healthy society.



Distribution of Water

The end user group 'the city' has the need of water. Therefore it will assign a service provider for taking care of its need of water supply. We can call it the 'city water Supply service'.

City Water Distribution Infrastructure is a non-movable asset therefore to preserve the freedom in the relationship the 'city water distribution infrastructure' needs to be owned by the end user group 'the city'.

Responsibilities of 'City Water Supply Service Provider'

Define the specifications of the water distribution infrastructure.

Construction of the water distribution infrastructure according to the needs of the city. The service provider can delegate the task of construction of the infrastructure to another service provider.

Carry out the proper maintenance and repair of the infrastructure whenever required.

Ensure that the water is purified and meet the cleanliness standards according to the needs of the city.

These are just the few examples of the responsibilities of 'city water supply service provider'. There could be many more responsibilities.

I do not know the technical details of water distribution in the city. What I actually intend to show is how we can divide the responsibilities in the relationships and how we can design the structure of relationships in the Nonprofit Economy for the relationships which involve the end user group.

In this topic what we are trying here is to gain the basic understanding of the end user group relationships in the Nonprofit Economy.

Bill of Services

The Service provider issues the bill of services if the services incur any costs.

Bill of services mentions the specifications of the services and the cost of the Services.

The End user can use the bill of services to verify whether there was any case of cheating, fraud or corruption.

The citizens of the end user group can use the bill of services to verify and ensure that there is no case of corruption.

If the cheating, fraud or corruption is detected the end user group can break up the relationship from the corrupt service provider and invite another hopefully non-corrupt service provider to do the job of the service provider.

Therefore the presence of the non-corrupt service provider in the economy ensures that the needs of the end user are fulfilled.

Case of Dissatisfaction from the Service Provider

In the case of dissatisfaction from the service provider the end user group 'the city' can break up the relationship from the current service provider and invite other service provider to do the job of water supply service provider.

Railway is a service of national importance therefore the railway infrastructure needs to be owned by the end user group 'the country'.

Railways

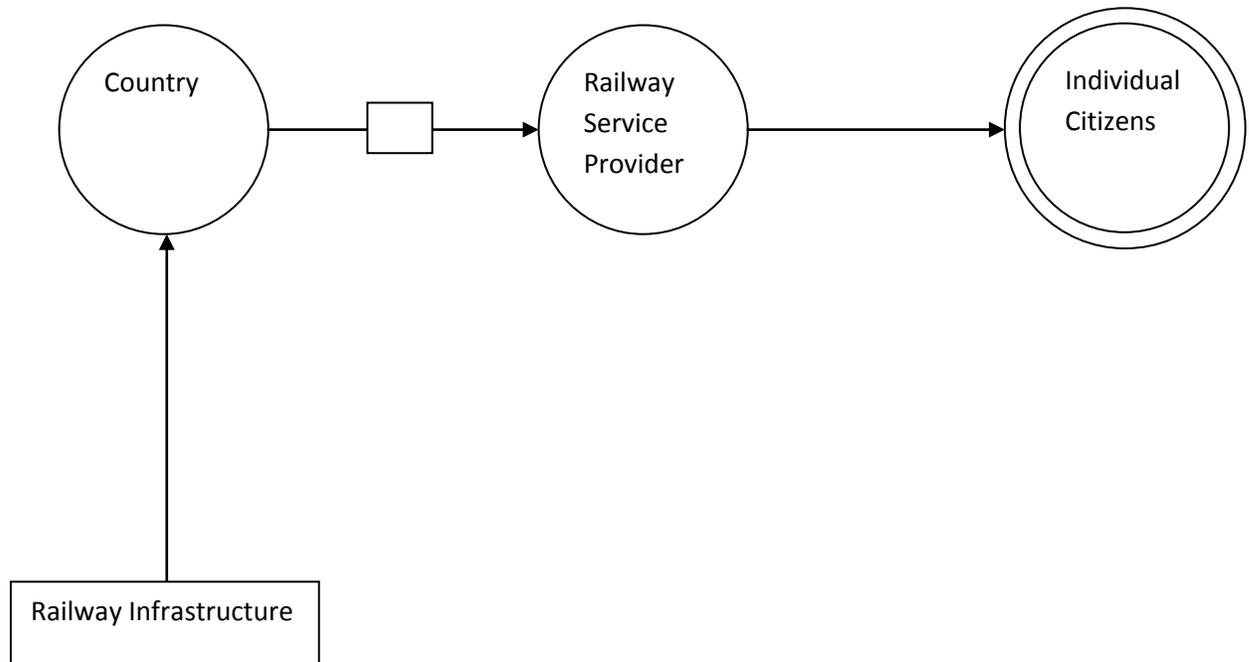


Image: Railway Service relationship diagram

We can observe that there is a relationship of asset provider and asset receiver between the end user group 'the country' and the service provider group 'the Railway Service Provider'.

In the Nonprofit Economy the relationship between the asset provider and the asset receiver is based on certain set of ethics. These ethics are described in the next topic named as 'Ethics of Asset Provider and Asset Receiver relationship'.

Railway Infrastructure

Railway Infrastructure can consist of the following facilities

Railway tracks

Signaling Infrastructure

Coach Manufacturing Infrastructure

Repair and Maintenance Facilities

Buildings

Other infrastructure

Responsibilities of Railway Service provider

Construction of Railway Infrastructure - Railway Service Provider is the one who will carry out the construction of the railway infrastructure. It can define the specifications for the railway infrastructure and give the contract for the construction of the railway infrastructure to another service provider.

Routine Maintenance and Repair

Operation of the Railway Service

In short to sum up the railway service provider is the one who carries out the complete administration of the railway service.

The railway service provider can fulfill its responsibilities by delegating its various tasks to the other service providers and ensuring that they are providing proper services and meeting their objectives/ purpose.

Ethics are something that is not supposed to be enforced by legislation. People are free to choose for themselves what ethics they want to live with. These ethics are only for those people who find them useful and those who desire to live with these ethics.

These ethics are applicable only for the “Nonprofit Economy”.

Ethics of Asset provider and Asset User Relationship

Ethics

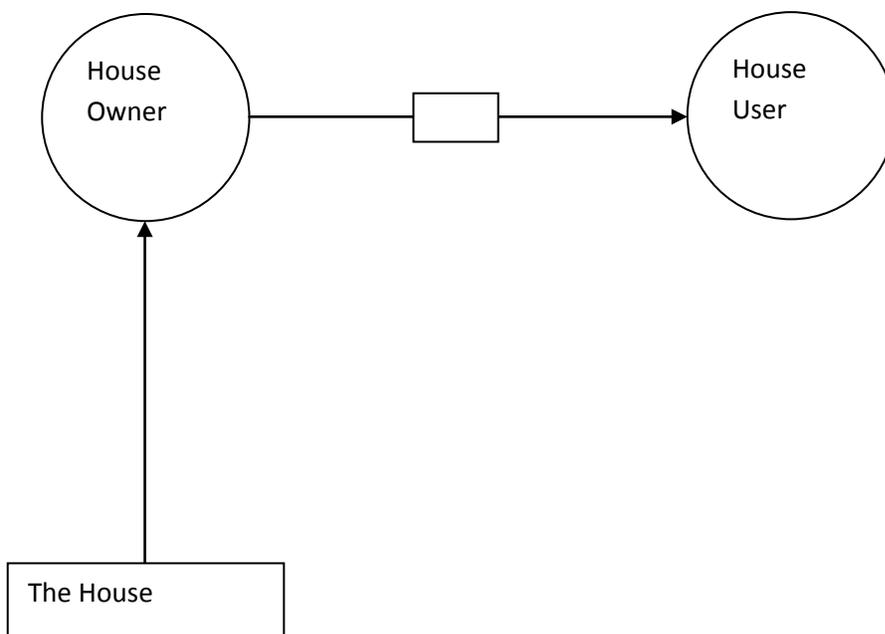
The asset provider would not recover more than the asset usage cost from the asset receiver.

Asset Usage Cost = Asset Depreciation cost + Maintenance cost (If any)

Cost of Depreciation = (Asset cost) / (Life of asset)

Maintenance cost can include the cost of maintenance and repair of the asset carried out in the duration of the asset usage by the asset receiver.

Example of house Renting



Cost of house = cost of land + cost of building

In the Nonprofit Economy the cost of land is not depreciating therefore we do not need to consider the cost of land in order to calculate the depreciation cost.

Consider that the cost of building is 10000 bucks. And the building has a life of 10 years. In this case

Cost of Depreciation = (Asset cost) / (Life of asset)

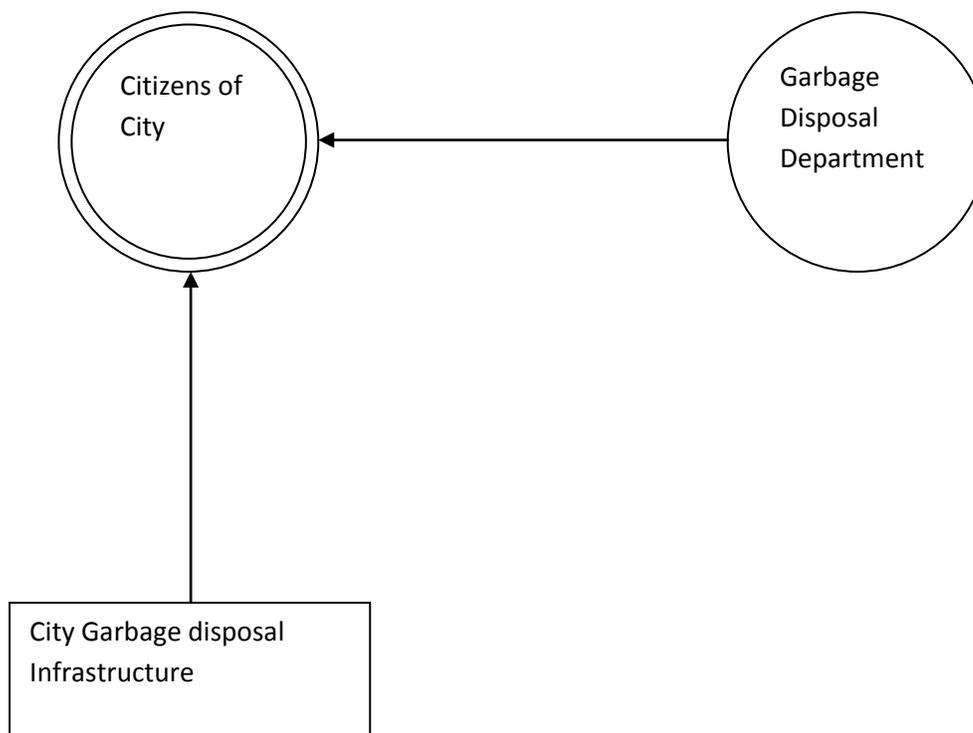
Cost of Depreciation for building = $10000 / 10 = 1000$ bucks/year.

If the house user lives for one year he would pay 1000 bucks to the House owner. In other case if the house owner lives for two years he would pay $1000 \times 2 = 2000$ bucks to the House owner as the rent of the house.

In order to keep the city clean we need some kind of service to dispose the garbage generated in the city. Let us call it the garbage disposal service.

City garbage disposal infrastructure is designed specifically according to the needs of the city therefore it is a non-movable asset and therefore the ownership of the asset needs to be assigned to the end user group 'citizens of city' in order to preserve the freedom in the relationship.

Garbage Disposal Service



Garbage disposal service is a common need of the entire city not associated with the requirements of the individual therefore the end user group 'citizens of the city' is the owner and the receiver of the service both.

Garbage Disposal department is responsible for taking care of the complete needs of the garbage disposal which might involve the construction of the garbage disposal infrastructure and many other responsibilities. It can delegate these tasks to the other service providers. Garbage Disposal department is more like an administrator which looks after the complete needs of garbage disposal for the city.

There is an interesting issue here. In the Nonprofit Economy people do not have any obligation to pick up a job due to financial security reasons and therefore they would tend to avoid the jobs that they do not like. In this situation we may not be able to find anyone interested to pick up the job of garbage disposal. What can we do about that?

The automation engineers can help us in this situation. They need to automate the tasks involved in the garbage disposal services the kind of tasks for which we are not finding any takers.

Even if the automation engineers fail to help us in that case it is the moral responsibility of the citizens to divide such tasks among themselves so that the city can function better.

Distribution of ownership of assets

The electricity grid is a non-movable asset therefore In order to preserve the freedom in the relationship ownership of the electricity grid by the end user is preferred way to own the asset instead of the ownership of the asset by the service provider.

Electricity Grids

Electricity grids are of two types

Transmission Grid

Distribution Grid

Transmission grid is an asset of National importance therefore the ownership of the transmission grid needs to be assigned to the either the end user group ‘citizens of country’ or the end user group ‘citizens of state’.

Distribution grid is an asset of city level importance therefore the ownership of the Distribution grid needs to be assigned to the end user group ‘citizens of the city’.

Structure of Relationships

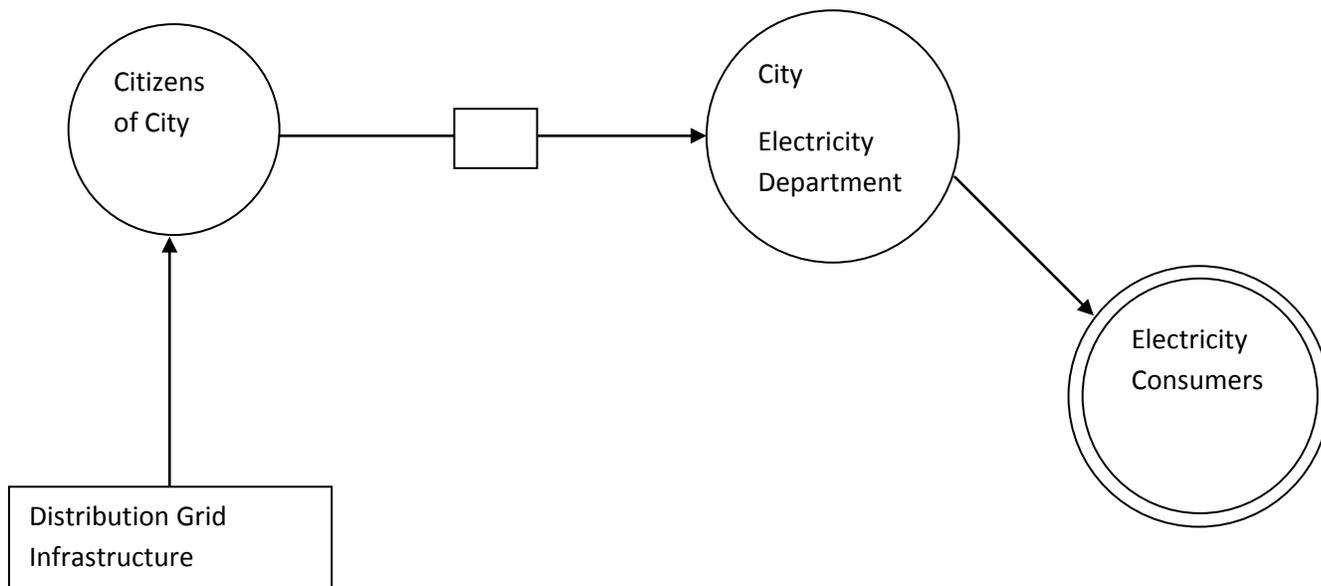


Image: Relationship Diagram representing the ownership of electricity grid.

Electricity grid owned by the 'citizens of the city' but usage cost of the electricity grid is recovered by the individual end users.

There is a relationship of asset provider and asset user between the end user group 'citizens of city' and the city electricity department. The asset provider recovers the asset usage cost by the city electricity department which in turn recovers it from the individual end users.

The end user group 'citizens of the city' is not suppose to recover more than the asset usage cost as per defined in the 'Ethics of asset user and asset provider relationship'. But still the asset provider can choose to recover lower than the asset usage cost in order to reduce the Burdon on the individual end users. For example

Percentage of recovery = 50 % of Asset Usage Cost

The owner of asset which is playing the role of the asset provider can vary the percentage of recovery from anything from 0% to 100 % based on the needs of the different situations.

City Electricity Department

This department is a service provider which is responsible for taking care of the complete needs of electricity for the city which can involve the tasks like construction, maintenance, repair of the electricity grid and also taking care of the daily operation of the electricity grid. It is obvious that all these tasks cannot be done by one service provider therefore the electricity department can delegate these tasks to the other service providers and forward the bills to the end user group. The bill consists of the specifications of the services and the costs involved.

The members of the end user group which are the citizens of the city in this case can use the bill to verify that there is no case of corruption. In case of any dissatisfaction/ distrust from the electricity department the end user group 'citizens of the city' can break up the relationship with the electricity department without having to provide any justification or explanation of any kind.

Section 5:

Mechanisms and Services

If we study the current situation we will observe that the ethics of the conventional economy is currently acting as the bottleneck for the further development in the field of engineering, research and technology.

Consider a scenario and current situation in the software industry.

The progress in the software and technology is being stalled and bottlenecked due to the fundamental issues like lack of open standards, platform independence and the tendency to compete and monopolize the markets by the organizations. The initiatives like open source exist but the benefits of open source are not utilized to the full extent possible. The causes lie in the fundamental ethics and culture of the conventional economy. The ethics of the conventional economy is causing a bottleneck for the further progress in the field of engineering and technology.

The patents act as a huge hindrance and slow down the progress in the field of engineering and technology.

In the Nonprofit Economy due to change in ethics and culture as far as I can expect these issues would not exist. This gives us an interesting set of possibilities. It opens up an opportunity for new solutions and services and scope of improvements in the existing mechanisms and services.

For example: The data communication network in the conventional economy popularly referred to as Internet suffers from these issues.

Non-democratic domain naming system

Addressing issues- lack of address

Wastage of addresses

And some other issues

We will study how the change in the ethics, culture provides us an opportunity to improve the existing structure of the data communication networks so that these issues would not exist.

Efficiency of the economy is an indicator of the percentage of fulfillment of people's needs in the economy. If all the needs of the people are fulfilled we will say that the economy is operating at 100 percent efficiency. If only 70 percent of the people's needs are fulfilled we will say that economy is operating at 70 percent efficiency.

Let us see how we can improve the efficiency of the economy

Techniques of improvement of efficiency

Eliminating or Cutting down on wastage

Improving the efficiency of a commodity by research and engineering

Using low cost alternatives

Improving the utilization of commodity by sharing of resources

Increasing the percentage of Recycling of the resources

Increase the production of given resource

In a Nonprofit Economy everybody is middle class so every person is aware of the right cost of the resource. Every person would participate in the eliminating and cutting down on wastage. Cutting down on wastage improves the availability of scarce resources.

Improvement in fuel efficiency of vehicle, reduction of air conditioning costs by inventing more energy efficient air conditioners, proper insulation of home, planting trees are some of the simple example we can cut our costs. Proper engineering and research helps us to get more out of the available resources. This helps us in improving the standards of living of people. We can see that due to measures like patents the benefits of engineering and research are not reaching the people. In a Nonprofit Economy people will be able to utilize the full potential of research and engineering.

If you are building a home you can always reduce the cost of home by searching for the low cost alternative resources which satisfies the same purpose but cost lower due to higher availability. So we can always reduce the cost of commodities and services by searching for low cost alternatives. But again the benefits of low cost solutions are not reaching people due to poverty and bottlenecks of engineering and research. Building homes to the poor people at a low cost by finding low cost solutions is a kind of a venture that a profit based organization will not take any interest because it does not provide good profits. So rather than investing in such ventures a profit based organization will prefer to invest in other ventures which provide more profits. There are initiatives in this area but we are not still getting the full

potential benefits of low cost solutions. A nonprofit organization will be very happy to take initiatives to provide low cost solutions to the people like building low cost homes for poor people or those people who find it difficult to afford to buy a home because it is a great help to the people irrespective of whether it is a profitable venture or not.

When you are not sharing your resources the utilization of the resource is lower. The resource per unit time is also a useful resource. If we are not sharing your resource we are wasting the resource's time. By sharing of resources we can get more value out of the available resources. This will help us get more value out of the limited available scarce resources that we have.

We can always increase the availability of resources by increasing the percentage of recycling. We had studied previously that in a "Nonprofit Economy" people can recover higher percentage of commodity cost by recycling the resources and hence it would encourage them to take more interest in recycling the resources.

We can always try to increase the production rate of the scarce resource by trying to find and search for the more available reserves this is what we conventionally do but we should keep it as the last option.

We can go on discussing like this and we can see that there are hundreds of ways by which we can address the needs of the people in the economy even if the resources are scarce and limited. Still many people are poor and suffering and not being able to fulfill even their basic needs. It doesn't really make any sense. Does it make any sense?

Notes for the Reader

This topic is still under development. Some portions of this topic may still be incomplete. People can expect to see the refinements in this topic in the future versions of this text. Therefore do not bother if you fail to understand some part / parts of this topic.

Distribution of ownership of assets

Network Infrastructure is designed specifically according to the needs of the end users and it is also a physically non-movable asset. Therefore the ownership of such an asset needs to be assigned to the end user group in order to preserve the freedom in the relationship. I mean such an ownership is a preferred way to own the asset in the Nonprofit Economy but still people are free to choose whatever way they feel comfortable for assigning and distributing the ownership of the asset.

The ownership of the Network Infrastructure by the end user group would result into the change of both the physical structure and the relationship structure of the networks in the Nonprofit Economy.

Extendible Internetworks

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Network Basics

Rhythm

Rhythm is a sequence of states that represent any kind of change or transformation in Nature.

Sequence of states in the Nature can be represented with the help of sequence of bits. A bit sequence is the sequence of 1's and 0's.

Text, sound, voice, video, a mechanism, a program are all the examples of the rhythm.

Encoding and Decoding

A rhythm can be represented with the help of bit sequence. A bit sequence is a sequence of 1's and 0's.

Encoding is the process of converting the rhythm into a bit sequence.

Decoding is the process of converting the rhythm back into a bit sequence.

Port

A port is an interface which can send and receive the sequence of bits. In other words a port is an interface from which the rhythm's can be sent or received.

The port could be used in the following modes

Input Port – In the input mode the port is used as an interface to receive the rhythm.

Output Port – In the output mode the port is used as an interface for sending the rhythm.

Input / Output Port – The port can be used as both input and output port.

Network

A network is a setup or infrastructure which connects one or more neighboring ports or a set of user defined ports.

Internetwork

An internetwork is a network which connects more than one network.

In other words an internetwork is a setup or infrastructure which connects more than one network.

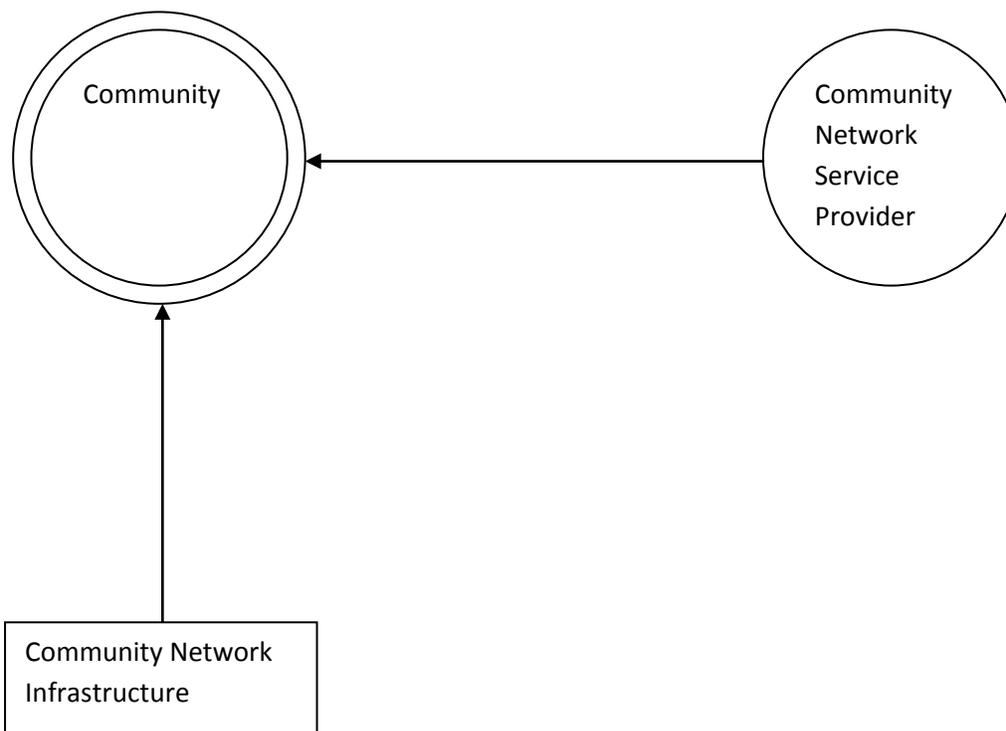
Network Infrastructure

Network infrastructure consists of routers, cables, wireless towers, transmitters and receivers, buildings and other facilities.

Community Network Relationship Structure

Let us try to understand the structure of network with the help of the example of the community network.

Option 1: The cost of service is recovered from the end user group 'community'



In this scenario the all the costs involved in offering the network service the costs like construction, maintenance, repair and the operating costs of the community network is recovered from the end user group 'the community' where each member of the end user group 'the community' contributes equally to pay for the service.

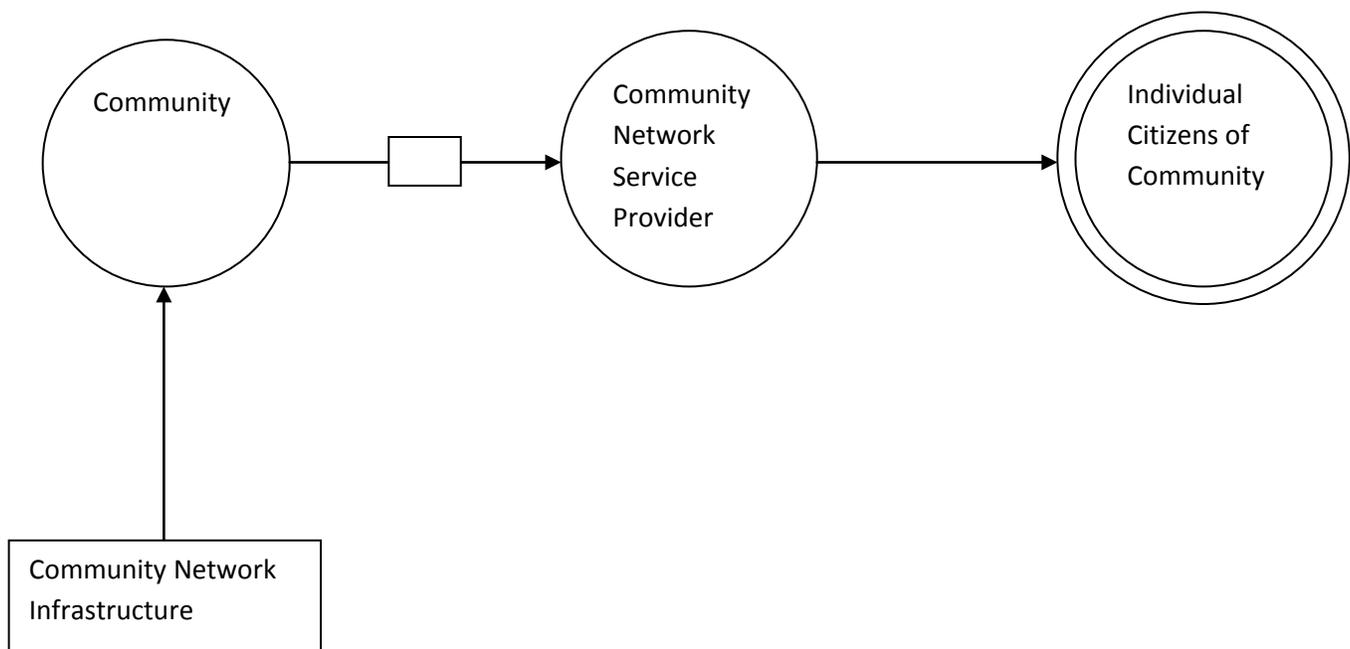
Each individual citizen of the community would receive the service free of cost.

Since the services are offered free of cost to the individual citizens every individual user which is currently logged on to the community network will have equal privilege access. Let us see what that mean.

Let us assume that the bandwidth of the community network is 100 Mbps. When 50 users are logged on to the network each user would receive the bandwidth of 2 Mbps. In other case if 100 users are logged on the network each user would receive the bandwidth of 1 Mbps.

We do not need to go into the technical details. In simple terms to sum up what I mean to say is each user currently logged over the network needs to have an equal privilege access for the network bandwidth.

Option 2: Cost of service is recovered from individual users



The end user group 'community' owns the community Network Infrastructure.

There is an asset provider and asset receiver relationship between the end user groups 'the community' and the 'community network service provider'. The ethics of asset provider and asset receiver relationship would apply to this relationship.

The community Network Service provider is a Nonprofit Organization which receives the cost of service from the individual citizens of the community. The cost can be proportional to the usage of the individual.

Responsibilities of the Community Network Service Provider (CNSS)

Construction of the Network Infrastructure

The Community network service provider (CNSS) would study the needs of the community and arrive at the specifications of the community network. The CNSS can give the contract of construction of the network infrastructure to other nonprofit service provider.

Look after the maintenance and repair of the Community Network

The community network would need repair and maintenance as a part of normal functioning of the network. It is the responsibility of the CNSS to carry out the repair and maintenance of the community Network.

Network Administration

Network administration involves the allocation of bandwidth and other such issues. The CNSS would carry out the network administration according the needs of the end users.

Case of Corruption or dissatisfaction from the Service Provider

There could be a case when the service provider fails to comply or violate the ethics of the relationship or in other case fails to do its job properly resulting into dissatisfaction from the end users.

In this situation the end user group 'the community' in the case of community network can break up the relationship from the 'community network service Provider' (CNSS). And invite another Service provider to play the role of CNSS.

We have already discussed how the above task can be done in the topic 'end user relationships in society'. It involves the collection of the common consensus from the members of the end user group. Or in other case the representative of the community can also do that on behalf of the end user group 'the community'.

Internetworks

City Internetwork

It is an internetwork which connects the more than one community networks of the communities present in the given city.

City internetwork infrastructure would be owned by the end user group 'the city'.

State Internetwork

It is an internetwork which connects more than one city internetwork of the respective cities present in the given state.

State internetwork infrastructure would be owned by the end user group 'the state'.

Country Internetwork

It is an internetwork which connects more than one state internetwork of the respective states present in the given country.

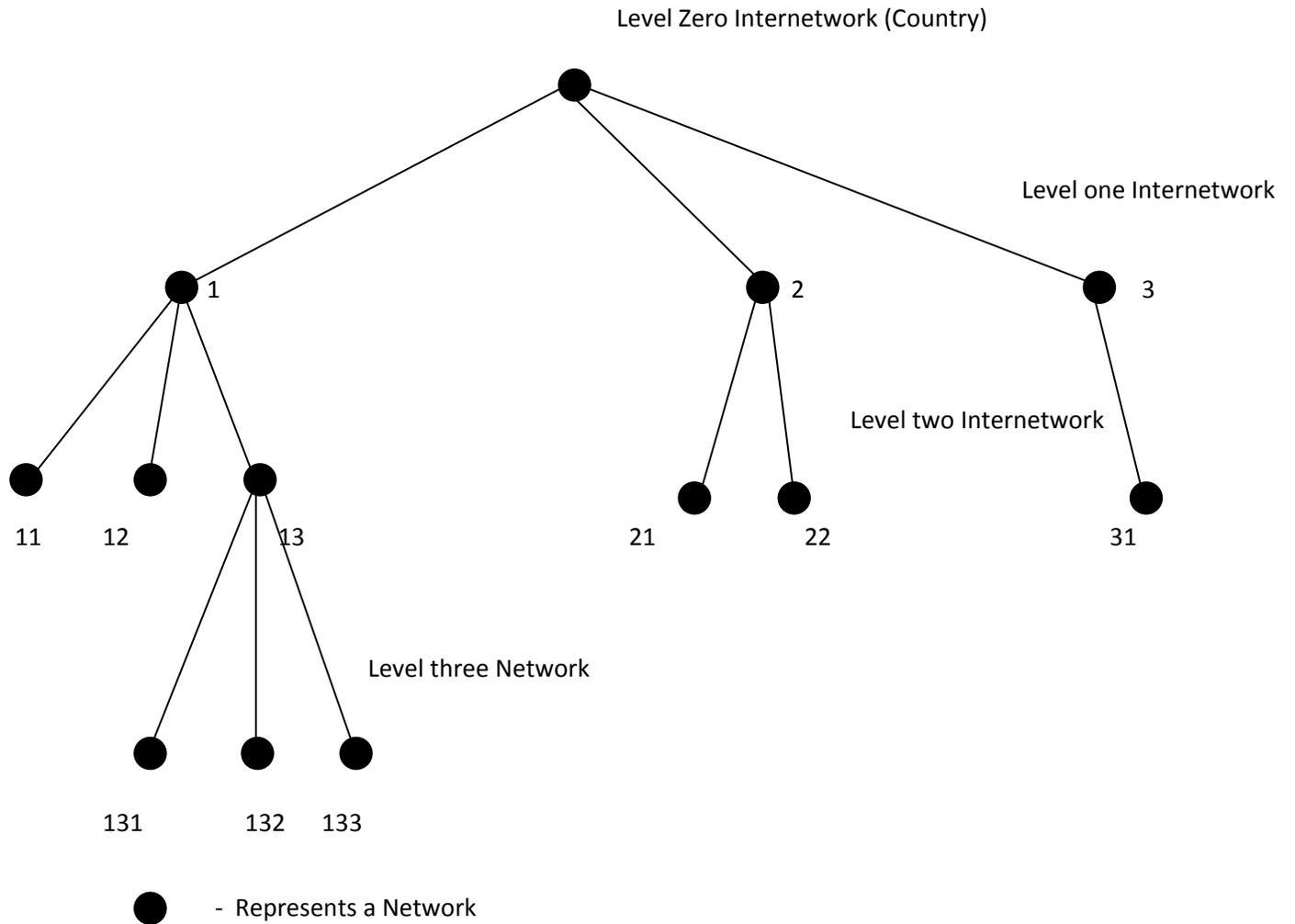
Country internetwork infrastructure would be owned by the end user group 'the country'.

Relationship Structure of various Internetworks

The relationship structure of the city internetwork, state internetwork and the country internetwork can be same as the relationship structure described for the community network.

Tree Representation of the Extendible Internetwork

Let us use the tree diagram to represent the structure of Extendible internetwork



In the above diagram each black dot represents a network. A network could be a simple community network which is connecting many homes or an internetwork. And each line denotes a link. The internetwork consists of four levels.

The community network lie at the lowest level. The city network is an internetwork which connects many community networks. The state network is an internetwork which connects many city networks. The country network is an internetwork which connects many state networks.

There are three internetworks involved in this case the city network, the state network and the country network. The country internetwork is the highest level internetwork therefore the country network is a root level network. We would call the network situated at the root level as a level zero network.

The state network would be a level one network.

The city network would be a level two network.

And the community network would be a level three network.

So now we can intuitively figure out how the levels of the networks are assigned.

Top Level Networks for a particular Network/ Router

This concept is a little difficult for me to describe in words but still bear with me.

For the given Router/ network the top level networks would consist of the networks which fall in the pathway drawn from the current network to the root level network in the tree diagram representation.

For example

For the community network 0133 which is situated at level three. The top level networks would be 013 at level two, 01 at level one, and 0 at the root level.

For the state network 021 which is situated at the level two the top level networks are 02 at level one and 0 at the root level.

The top level networks can be different for the different networks.

With the help of the examples I hope you might have understood the top level networks.

Types of Network Ports

Ports in the network could be of two types.

Network port – It is a port that is a part of the network.

Internetwork port – When the data packet needs to be transferred to another network it needs to be forwarded to the internetwork with the help of internetwork port.

Each network has many Network ports and one internetwork port

Internetwork port of level 3 network is connected to the network port of level two network.

Internetwork port of level 2 network is connected to the network port of level one network.

Network port address Format

Each network has many ports. In order to uniquely identify each port on the network it needs to assign an ID for each port. This format of this ID is the network port address format.

For example if there are 8 ports on a network. I will need to use minimum of 3 bits to uniquely identify 8 ports. Therefore I can define the format of network port ID for this network as consisting of 3 bits and some other specifications like ordering of bits and such.

Based on the requirement of my network which can vary with situation to situation I can define and also redefine the Network port address format.

General Internetwork port address format

Network port identifies the port only on the same given network. But it cannot identify a port on the entire internetwork. So in order to identify the port on the internetwork we need some general port addressing format.



Compilation of the addresses is a field which consist the all the top level adder

Concatenated Address

Compiled address for a port is the address formed by the concatenation of the addresses of top level networks for the given port.

Order of concatenation

The addresses are concatenated in this order. The level zero address is followed by the level one address and so on.

For example the level zero address of a port is 231 and level two address of the port is 7658 the concatenated address would be

231-7658

Level Indicator

The concatenated address doesn't necessarily always begin with the level zero address. It can also begin with level 2, level 3 and other levels. The level of the starting address in the concatenated address is indicated by the level bits.

It indicates the level of the network of the first network address in the concatenated address.

Level Zero Address / Root Address

Level Zero Address is the general internetwork address where the first address is the level zero address.

It can also be termed as Root Address.

Shortened address

It is the general internetwork address where the first address is not the level zero address. It can start from any other level.

We will see that for the intra-network communication we do not require the level zero address/ root address. In that case we can shorten the address and save the addressing bits.

Upstream Mode and Downstream Mode

In the internetwork data packet transfer when the data packet is moving towards the root level internetwork we say the data packet is moving in upstream mode.

In the Internetwork data packet transfer when the data packet is moving from the root level to the other levels we say that the data packet is moving in the downstream mode.

Routing Data Packets

The data transfer always takes place between two ports. The port from which the data is being sent is termed as sender's port and the port at which the data is to be sent is termed as receiver's port.

The data is transferred from the sender's port to the receiver's port.

Sender's port address

Receiver port address

Step 1: Get the Level Zero Address of the Receivers port

Generally the sender will have the root level address of the receiver's port

Step 2: Shortening of the address

Consider that the data transfer takes place between the two ports situated in the same state. In this situation we do not need the country level or say root level address of the ports. The state level address which is the level 1 address of the port would suffice.

Similarly in other case if the data transfer is between the two ports situated in the same city. In this case we do not need level zero address (Country Level address) and level one address (state level address) both. The city level address which is the level 3 address of the port would suffice.

Therefore we can see that we can shorten the address whenever there is an intra-network data transfer.

Step 3: Routing of data Packet

Upstream Mode

If (Level of current router > level indicator)

Forward to internetwork through internetwork port

Else if (Level of current router = level indicator)

Get the network address of the network port (First address of the concatenated address)

Forward the packet to the given network port.

Downstream Mode

Network level of current router = CurrentLevel

Get the CurrentLevel address by masking the appropriate bits in the general address.

Forward the data packet to the given network port.

Address Format awareness

For the purposes of shortening of the general address the router needs to be aware of the address format of all the top level networks.

Network based Services

Network based Services are the services which utilizes the internet network bandwidth in order to function.

Examples of Network Based Services

Let us see some of the examples of the few Network based Services. Some of these services are discussed in this text.

Community Book Sharing Service – Community Library

It is a service which helps in sharing the books among the members of the offline community. Speaking in informal terms an offline community is a group of people where people are living at a walking distance.

Automated regulation of Electricity Distribution

It helps in the dynamic regulation of the electricity consumption for the efficient usage of electrical energy and the eliminating the problems like rolling blackouts due to electricity demand supply mismatch. It involves the communication between the electricity grid and the homes.

Vehicle pooling service

Vehicle pooling service is service which helps in the sharing of vehicles among the people thereby reducing the vehicle ownership costs and vehicle usage costs.

Local services search

It helps the individuals search for the services situated near its location.

Ecosystem of Network Based Services

Mechanism and the Service

Consider a case of the transportation of goods with the help of a truck. The goods transporter owns a truck and provides the service of transportation of goods in the economy. In this case the mechanism would be the truck and the service would be the transportation of goods.

Now we can difference between the mechanism and the service.

Mechanism Developer – Mechanism developer is someone who develops the mechanism.

Service Provider – The Service provider provides the service with the help of mechanisms.

Similarly in the context of the Network based services the mechanism would be the Application and the service would be the real world implementation of the Network based service.

For example consider the case of watching videos on your computer. The media player application would be the mechanism and the video would be the service. You cannot watch a video without a media player application (the Mechanism) and there is no use of media player application when there is no body to produce and share the videos (the Service).

Media Player application would be the mechanism and Video would be the Service.

So now we can differentiate between the application and the service.

Application Developer/engineer

Application developer is the one who develops the applications.

Network Based Service Provider (NBSP)

Network based Service Provider is a service provider who offers the network based service.

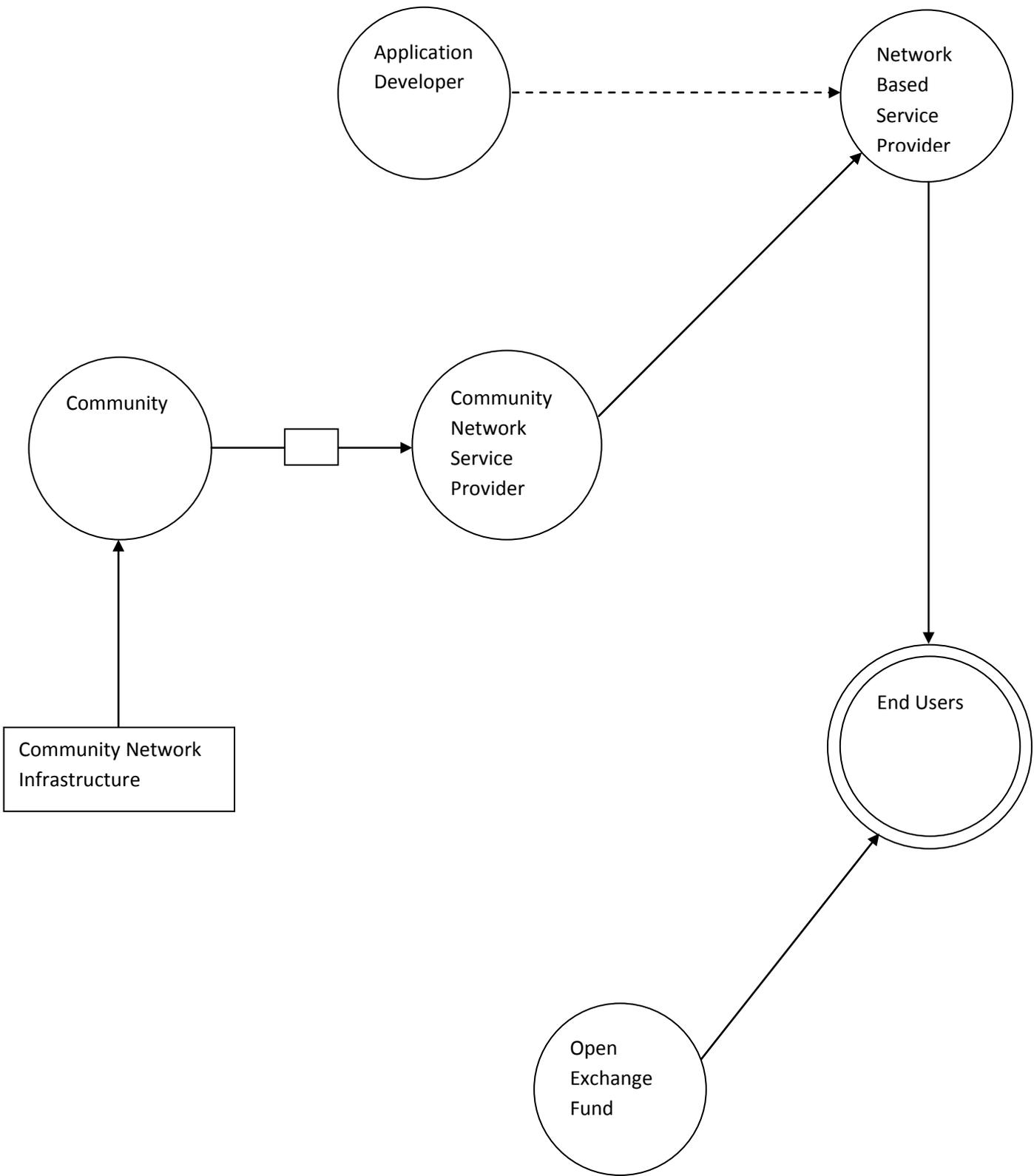


Image: Ecosystem of Network Based Services

The Network Based Service Provider (NBSP) uses the applications developed by the application developer in order to offer a network based Service just like a goods transporter uses the truck in order to offer its service.

In the Nonprofit Economy the Application's developer is a Open Service provider which recovers its input costs with the help of donations therefore the applications are available free of cost for the usage.

The NBSP (Network Based Service Provider) utilizes the community network bandwidth. If the bandwidth is available free of cost there is no need to pay for the bandwidth. If the bandwidth is not available free of cost the NBSP (Network Based Service Provider) would pay to the Community Network Service Provider.

The NBSP (Network Based Service Provider) is a nonprofit which recovers the input costs by the respective individual end users. It can also use advertizing in order to recover the input costs.

The end users need to donate to the application developers to help them recover their operating costs. For this purpose they will donate the appropriate amount to the open exchange fund which is specially created for donating to the applications developers.

The open Exchange fund would distribute the donations to the deserving applications developers in the appropriate proportions.

Architecture of the Network Based Services

Architecture 1: Mechanism / Application installed on the End User Device / Computer (Client Computer)

In this architecture the application is installed on the client computer and shared data for the service is stored on the central database installed on the central server.

Architecture 2: Mechanism / Application installed on the Service Provider Computer (Central Server)

In this architecture the application is installed on the central server and the Central Database which stores the shared data for the service is also installed on the Central Server.

Observations

We can see that the first architecture in which the applications are installed on the client computer (End User Device) is more efficient compared to the case of applications installed on the central Server because it will require less communication bandwidth for the communication.

The first architecture where the application is installed on the client computer would result in the lower usage of network bandwidth. You need to have a technical background to understand the reason behind that. This can help us to improve the performance of network based services and applications would be more responsive.

Applications installed on the client computer have more computing resources per user therefore it will be more responsive compared to the case of application installed on the central server.

The first architecture becomes unfeasible when there is no platform independence because the application developers would then have to develop several different applications for each different platform which is more tedious compared to developing a single application and installing it on the Central Server.

First architecture becomes feasible when there is a platform independence which can be achieved when their proper collaboration and open sharing between the various application and software developers.

In the conventional Economy the application developers and the software developers compete with each other therefore they lack proper collaboration and open sharing among themselves and hence fail to achieve the platform independence. Due to such a situation it is not feasible to implement the first architecture although it is more efficient and cheaper compared to second architecture.

Therefore we can see how the ethics that we live with have an effect on overall economy and our lives which can be measured even with the statistics and numbers.

Sharing of the books reduces the cost of book usage. It improves the utilization and saves the consumption of resources. So we can cut down the usage cost by sharing the resources.

We can design a simple facility to help the people in the community share the books with each other. We will call it the community library. We are talking about the sharing of physical books printed on physical paper not the books in electronic format.

Community Library – Community Book Sharing Service

If you are buying a book for personal usage you would read it and after you've finished reading it the book will stay idle and unutilized with you. So when each person is buying a book and keeping with him without sharing the book with other people the book as a resource is being wasted and underutilized. This is the wastage of the books time – the resource time for the resource 'book'. We can see that book per unit time is also a useful resource. So when the book is staying idle this resource is getting wasted.

The better thing will be to share the book with the other people. This can be done with the help of library. You can get the book to read from the library and return the book to the library after you have read the book so that other people can read the book.

The library is helping in the sharing of books. And by sharing the books it is reducing the usage cost of the books. But setting up a library will require you to invest in construction of the building where you would keep the books.

Is there a better option to share the books?

Let us see,

In the solution we are studying there is no actual physical library. Consider that there are people who live in the same community and they are living at the walking distance. These people want to share the books with each. They all have access to mobile computer devices and the personal computers which are networked with each other.

If all these people are aware of the books that are available with the other people living in the community they can reach out to each other and share those books with each other.

If I have a book of xyz title and I have finished reading the book and I want to let other people read the book so what can I do? I can broadcast a message to all the people living in the community that any person who wants to read the book of xyz title can take the book from me.

With the help of computers and devices connected over the network this is something that we can easily do.

So each person can broadcast the books available with them to the entire community and the people who want to read that book can take that book from them. In this way we can share the books.

The sophisticated way to do it is with the help of a software application that can be used on the mobile computer devices or the personal computers by all the people of the community.

Let us study that application.

Whenever a person wants to share some books with the other people he can add those books to the library application. We will call it the community library. After the books have been added to the community library, the books will appear in the library.

People can browse all the books that are available in the library. If a person wants to read a certain book he can click on that book and note the name and the contact of the person who is currently having that book. He can then contact that person go to the home of that person and get the book from him.

After the book has been transferred to other person the transfer would be notified to the library. In this way the library would keep an updated record of the availability of the books with the people.

If the person B wants to read a book that is currently available with person A. The person B will start with browsing the library and after browsing the library he will come to know that the book is currently available with the person A. He will then contact the person A and then he would go to the home of person A and take the book from person A. When the book is transferred to the person B the person A notifies and updates the library about the transfer. The person B will now be identified as the holder of the book. Any person who wants to read that book will now have to contact the person B.

In this way we can share the books among each other on the fly without any help of the physical library. People can directly go to the homes of other people reach out with each other and share the book among themselves.

People can browse all the books that are available in the library with the help of software application which can be accessed on their mobile computer device or a personal computer. Each book will have the name and the contact of the person who is currently holding that book.

If you want to read a certain book you will contact the person who is currently holding the book. You will then go to the home of that person and get the book from that person. And you would notify the transfer to the library.

In this way the book will travel from one person to another person within the people living in the community. And the people living in the community can share the books with each other.

Benefits

Improving the efficiency of sharing

In the physical library the reader needs to return the book to the library then only the other people would know about the book and they can take the book. Sometimes the reader would feel lazy to return the book on time. If the reader has read the book within 5 days he might go to return the book after 10 days. So in this situation the 5 days have been wasted in which someone else could have read and used that book.

In the community library application the availability of the book is always available with the people so there is no wastage of the resource the “book per unit time”.

The reader does not have to return the book to the library because the other people can take the book directly from him. This is good for the readers who are lazy and do not bother and care about returning the book to the physical library.

Socializing

Whenever you want to read a book you are actually going to the home of other person and getting the book from that person who has already read that book. In this process of sharing the book you will be meeting people who have same or similar taste of reading. You will be talking with them and you will be making new friends.

Sharing the books with each other is a nice way to socialize for the people living in the community.

Saving on costs

There is no need to setup the physical library so we are going to save the cost of building and constructing the library. This will further bring down the usage cost of the books.

We will see that the cost of setup for setting up a library is negligible.

Community library implementation

We can make sharing of books an interesting activity for the people in the community. People can write reviews of the book. A library can have a discussion forum where people can discuss about the books they have read and tell it to other people what they liked reading in the book. People can recommend the books to each other. And they can socialize with each other in the process of sharing the books.

I am listing the features of the community library which we will discuss in detail

Library access interfaces

Book profile

Adding the new book

Books browser

Transfer of the book

Registration of the member

Writing reviews

Book recommendations

Library Discussion forum

Book travelogue

Reader profiles

Book sharing Statistics

Library access interfaces

The mobile computers, mobile devices and the personal computers can be used as interfaces by which people can access the community library.

A community library could be an application hosted on a central server located in the community or somewhere else.

The community can have its own network setup like an Ethernet local area network (LAN) or a wireless LAN setup to access the application. The internet can also be used instead of LAN as a networking facility for the community library application.

Book profile

Each book will have a profile which consists of the details associated with the book.

Title

Each book would have a title which needs to be mentioned in its profile.

Current holder of the book

Each book would have a current holder. The current holder is the person who is currently holding the book. After the book is transferred to another person the current holder of the book would change.

Author

Each book has an author which would be mentioned in its profile.

Cover Picture

It will be easier for the people to identify the book with its picture. So each book needs to have a picture.

Library ID

Each book will have an ID which will help us to identify the book in the library.

Book Owner

It is the name of the person who has submitted the book for sharing.

Adding the new book

If I have finished reading a book and I want to share that book with the other people of the community, I will need to add the book to the library. Let us see how we can add the book to the library.

You will have to register the book with the library. In the registration process you would have to mention the book title, its author and other details. The person who is adding the book would be identified as the owner of the book by the library. The person who is adding the book would be automatically assigned as the current holder of the book.

After the book has been added the library will assign an ID to the book we will call it a book ID. A book ID will help us track and identify the book in the library.

Transfer of the book

If a person wants to read a book enlisted as available in the community library he will have to request the book from the current holder of the book. For that purpose he will need to contact the book holder and talk to him. If the current holder tells that he has finished reading then you can go to his home and take the book from him.



A book is always transferred between two people. Let us consider that the book is being transferred from person A to person B. Let us see how the transfer would take place.

Anyone among the person A or person B can initiate the transfer. Person A is the holder of the book and the person B is the person who is requesting the book.

Whenever you are initiating the transfer you would have to mention the book ID and the ID of the person to who is requesting the book. Only the person who is requesting the book and the holder of the book can initiate the transfer. Other people cannot initiate the transfer.

The transfer needs to have a mutual approval of the “holder of the book” and the “requester of the book”. In the case person “A” initiates the transfer the person B would approve of the transfer. If the person B initiates the transfer the person “A” would have to approve the transfer.

After the transfer is complete the current holder of the book would change. The person B would be identified as the new current holder of the book.

Books browser

The community library will have a book browser. The book browser helps the individuals to browse the books that are available for sharing and reading. After browsing the library if you want to read a particular book you can request the book from the current holder of the book.

Each book can be placed in various different categories. The example of the categories could be story books, fiction, economics, science, engineering and so on. People can browse the book from various different categories.

Registration of the member

Only the people who are living in the community can register in the library. Whenever you want register with the library you would have to provide the following details.

Name

You would have to tell your name so that people can know you.

Picture

If you provide your picture it will be displayed in your profile registered with the library.

Contact

You will need to mention your contacts so that the book requestor can contact you when he wants to get the book from you.

Home address

You will also have to mention your home address so that the book requestor can come to your home and take the book from you.

Member ID

The member ID will be automatically generated by the library and assigned to you. Member ID helps to identify the individual within the library. An ID could be just a number.

In order to request the book from other people in the library the member would need to submit at least one book in the library. This will make sure that there is no shortage of books in the library.

To ensure that the member actually lives in the community his registration will need to be approved by the person who is already registered with the library.

Writing reviews

People can write the reviews for the books they have read. This will help the new readers to browse and choose the books they want to read.

Book recommendations

You can recommend the books to your friends and someone you think would like to read the book.

Library Discussion forum

A library can have a discussion forum where people can discuss about the books they have read. And tell it to other people what they liked reading in the book.

The discussion forum is an interesting way where people living in the community can socialize and talk with each other about the books and other stuff.

Book travelogue

We will find it interesting to know how each book has travelled from one person to another person. For each book we can trace its entire history how the book has travelled from one person to another person.

Reader profiles

Each person can have a reader profile in which all the books read by the person would be mentioned. The reader can comment about the books and describe what he has learned from those books. It could be like a personal blog.

The books the person has read and what he has learned from those books tells the lot about that person. So a reader profile will help the other people to get to know the other people.

Book sharing Statistics

The community library can publish the statistics about the sharing of books in the library. The statistics like the total books. Reading habits of people.

This will help a researcher to study, analyze and draw patterns and help to study the reading habits of the people in the community.

Lessons to learn

Today we can easily read the books in the electronic formats on our computers. So in that situation book sharing facility like the community library would not make much difference in people's lives. So why did I really discussed the concept of community library in this book. My main purpose behind showing the people the concept of community library is to show them how we can bring down the resource usage cost by simplified sharing of resources.

Sharing of resources helps us to save the resources and thereby bring down the cost of usage. It will also bring down the consumption of the scarce resources in the economy which will help to reduce the cost of scarce resources. Sharing of the books will help us reduce the usage cost of the book and would also help us save the paper.

When people are sharing the books with the help of concepts like community library they can read about ten books or even more in the cost of buying one book. This is a tremendous difference. You are almost reducing the cost of reading the book by about 90%.

Consider that each book cost you around 100 bucks. With the help of sharing you can read about 10 books in the cost of one book which is only 100 bucks. It would have cost you 1000 bucks if were required to buy all those 10 books.

So we can see that we can bring down the resource usage cost by a huge amount with the help of sharing of resources. This is what I actually wanted to show with the help of the concept of community library.

Community library is a simple application which shows you the benefits of sharing of books and it also tells the benefits of sharing of resources in general.

Books are not the only resources or commodities we can share in this way. We can also benefit from sharing of other resources like vehicles.

Sharing of books can bring down the cost of usage by about 90 percent. Sharing of vehicles can also bring down the cost of vehicle usage by an extent. I don't currently have an idea about how much reduction we can achieve.

Vehicle Pooling Service

Conventional way to share the books is to setup a physical library. We made it simple with the help of simple networking software and the computers. Let us see what we can do for vehicles.

The conventional way to bring down the cost of vehicle usage by sharing of vehicles is to travel by bus. But when we are travelling by a bus we cannot use the bus as a personal vehicle. We will have to wait for the bus to arrive at your bus stop. The bus will have to stop at each and every location which will increase the travelling time. The bus may not leave you near your home. There are fixed timings at which the buses are available in the city and people cannot just use the bus anytime they want to like they use their personal vehicles. The bus has a fixed route and it cannot take a short cut.

We can see that the conventional way to reduce the cost of travelling and sharing of transportation resources is to travel by bus. But when we are travelling by bus we are losing our freedom. We cannot use the bus like we use our personal vehicle.

But keeping a personal vehicle is the wastage of the vehicle's time because we are not sharing our vehicle with other people and the vehicle will stay idle and unused most of its time.

Can we have a solution so that we can have both the advantages at the same time "the ability to share the vehicle with other people" and "the ability to use the vehicle as your personal vehicle"?

Let us see,

The city owned vehicles like cars and motorbikes can be kept in the parking lots. When they are parked in the parking lots they can be connected over the city based vehicle sharing computer network we will call it the UVPS (Urban Vehicle Pooling Service).

There could be parking lots over the entire city situated at various locations. We will call it the UVPS parking lots.

When someone wants to travel from location A to location B he will approach the vehicle parked in the parking lot near the location A. In order to take the vehicle from the parking lot he will have to identify himself to the UVPS network. Only the person who is registered at the UVPS network of the city can take the vehicle from the UVPS parking lot.

After the person has identified himself the vehicle will be assigned to that person. The person can now use the vehicle as a personal vehicle he can take the vehicle anywhere he wants to. Further instead of returning the vehicle to the location from where he had originally taken the vehicle he can actually drop that vehicle at any UVPS parking lot situated across the entire city. After the person drops the vehicle to the UVPS parking lot the vehicle is transferred to the city based UVPS. Now any other person can take that vehicle and use it as a personal vehicle.

In short you can pick a vehicle from any UVPS parking lot use that vehicle to travel anywhere you want to in the city and after you have finished your travelling you can drop or leave the vehicle to any other UVPS parking lot. After you have dropped the vehicle to the UVPS parking lot anybody can use that vehicle. In this way the sharing of vehicles can be accomplished.

The person will be charged according to the distance he has travelled and the time he has used the vehicle.

There is no need to have an extra person to drive the vehicle. You can actually use the vehicle as a personal vehicle and drive the vehicle yourself. We can see that it is even better than a personal vehicle because after you have completed your journey you can return that vehicle to any UVPS parking lot and after returning the vehicle you are relieved from the responsibility of taking care of that vehicle.

It is better than the vehicle renting service because when you are renting the vehicle you would have to return the vehicle to its original location. In the UVPS you can return or drop the vehicle at any location spread across the entire city.

Benefits

With the help of UVPS you can bring down the number of vehicles that are required by the people. If 100 families require 100 personal vehicles for their travelling needs. With the help of UVPS network they can have their needs met only with the help of 50 or 60 vehicles or even less.

So adoption of vehicle sharing services like UVPS will reduce the total number of vehicles required in our society. And hence save on our resources that go into manufacturing the vehicles.

It will bring down the cost of usage or the cost of vehicle ownership for the people. If you are spending 1000 bucks to buy a personal vehicle, with the help of UVPS you can get the same facility at around 500 bucks.

It is easier to maintain and service the vehicles in the UVPS.

It is easy to upgrade the vehicles in the UVPS service. It would be difficult for people to switch to new better technologies with the time because they will have to invest in buying a new vehicle. But in the UVPS service the cost of upgrading the service can be lower. People will be relieved from the burden of investing in new technologies. Let us discuss the implementation of the “Urban Vehicle Pooling Service”.

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Registration of the person for the city based UVPS

In order to use the UVPS facility a person needs to be registered with the UVPS. In order to register with the UVPS we could expect people to fulfill a certain criteria.

The person needs to be a “Citizen of the city”. He needs to have a “Driver’s license” and there could be another such criteria for a person which he requires to fulfill in order to register for the UVPS facility.

After the user has been registered he will receive an ID. He will receive a smart card or other such facility for the purpose of identification. He will also have a UVPS billing account from which the usage cost of the UVPS will be deducted.

UVPS vehicle upgrade

A normal vehicle cannot be used as a UVPS vehicle. In order to be use the vehicle for a UVPS a normal vehicle will need to be upgraded with some special sensors and other facilities.

Damage sensors

The vehicle needs to have damage sensors which can detect the magnitude of the damage done to the vehicle. If a user manages to damage the vehicle which could be due to careless driving or whatever reasons. The damage amount can be billed to the users billing account or the insurance company.

Maintenance and servicing sensors

The vehicle can have some sensors and some programs which would detect the health of the vehicle and notify the maintenance and the vehicle servicing organization to carry out the maintenance and the servicing of the vehicle.

Vehicle network interface

Each vehicle needs to have a network interface by which it would be connected to the UVPS network. The network interface could be a wireless adapter connected to a wireless router placed in the parking lot or any other location. Networking can be accomplished in many other ways.

User Identification mechanism

In order to use the UVPS vehicle a user will have to be identified. The identification of a person can be done with the help of a smart card or any other suitable identification procedure.

The user can insert the smart card in the user identification interface of the vehicle. The vehicle needs to be connected to the UVPS network for the identification of the user. The identification procedure can only be carried out when the vehicle is in the parking lot.

Billing mechanisms

Each user who is registered in the city based UVPS network will have a billing account. The vehicle will have a billing program which uses the data from the vehicle odometer. The billing program will generate the bill according to the time taken for travelling and the distance travelled. This amount will be billed in the users billing account registered at the UVPS.

UVPS Parking lots

UVPS vehicles can be picked up from the parking lots situated across the entire city. After the user has used the vehicle the user can leave the vehicle to any of the parking lot situated across the entire city.

Parking lot proximity sensor

Vehicle proximity sensor will detect whether the vehicle is inside the parking area or not. The user would not be allowed to return the vehicle unless the vehicle gets inside the parking area. Therefore we need to have some mechanism or sensor to detect whether the vehicle has got inside the parking area or not.

Vehicle fueling/charging facility

Each parking lot or there could be some other dedicated fueling stations especially for the fueling of the UVPS vehicles. The fueling mechanism requires making sure that other vehicles cannot be fueled from that facility.

Whenever the user wants to pick up a vehicle from the UVPS parking lot he will need to check whether the vehicle has enough fuel or not. If the vehicle does not have enough fuel in its tank the user would then refuel the vehicle from the fueling facility.

Vehicle pick up protocol

In order to pick up a UVPS vehicle from a UVPS parking lot the user will have to follow the vehicle pick up protocol.

In order to pick up the vehicle the user would have to identify him. After the identification of the user the vehicle will be assigned to the user. When the vehicle is assigned to the user the user will be responsible for taking care of the vehicle.

Vehicle return protocol

In order to return the vehicle to the UVPS network the user would have to follow a vehicle return protocol.

In order to be able to return the vehicle the vehicle should be connected to the UVPS network. Further it also needs to be inside the UVPS parking lot.

An indication like an LED or other type of indication inside the vehicle can tell the user when the UVPS vehicle gets inside the parking lot and whether it can be returned to the UVPS network or not. When this indicator will glow the user can transfer the vehicle to the UVPS network.

Vehicle profile

Vehicle ID

Each vehicle needs to have an ID in order to identify the vehicle over the UVPS network.

Location

Each vehicle can have location sensors which can be used for many interesting sensors.

Vehicle Status

A vehicle could be online or offline. When the vehicle is connected to the UVPS network it will have considered being online. And when the vehicle is disconnected from the UVPS network it will be considered to be offline.

UVPS network

All the UVPS based vehicles, UVPS parking lots, sensors and many other devices and computers will be connected with each other over a network. We can call it a UVPS network. The UVPS network can collect the data from various sensors like traffic sensors and location sensors. It can give rise to many interesting applications.

A UVPS network could be a city based network consisting of routers and switches to help the mobile devices and computers and sensors to connect with each other.

UVPS network applications

UVPS network can be spread across the city. And a UVPS vehicle can remain connected to the UVPS network when it is travelling through the city. It can give rise to many interesting applications.

Automated Detection of traffic rules violation

Whenever a vehicle is travelling in a wrong lane and breaking the traffic signals it can be detected with the help of UVPS network. Let us see how.

Traffic signals and the vehicle fitted with location sensors can communicate with each other over the UVPS network so with the help of this communication the vehicle would automatically become aware when it is breaking the traffic signal or any other traffic rules. If a driver manages to break the traffic signal the vehicle can detect it and communicate that over UVPS network to the appropriate agency.

So the person cannot hide himself when he is breaking the traffic rules. Whenever a person manages to break certain traffic rules the person can be fined automatically and the fines can be automatically billed to the user on his billing account.

Safely mechanisms

The city administration can implement some safely protocols in the UVPS vehicle for the safety of the passengers and the other people.

We can have a speed lock which limits the speed of the vehicle to the value assigned to the vehicle. This value can change with the location and the situation. With the help of proximity sensors placed at the appropriate location it is possible to detect whenever a vehicle is travelling near the hospital or a children's school. This can help us to implement the safety procedures in the vehicles.

For example

If a UVPS vehicle is travelling near the children's school. The vehicle sensors will detect that it is in the proximity of the school. So the vehicle's speed lock will be activated and the vehicle will have to slowdown to the speed limits of the school defined by the city administration.

Further if a UVPS vehicle comes in the proximity of another UVPS vehicle at the time of travelling the UVPS vehicle will have to slowdown in order to reduce the possibility of an accident and ensure the safety of the passengers.

These safety mechanisms can also be implemented in general by the state. It doesn't need to be UVPS only mechanisms.

Vehicle tracker service

If I have come to a remote location and I have no idea where I could find a UVPS parking lot and a UVPS vehicle. I will need to access a vehicle tracker service. I can access this service with the help of a mobile device like a phone or a handheld computer. When I access this service this service becomes aware of my location and it searches for the UVPS vehicles situated near my location. It then guides me to the UVPS vehicle located nearest to me.

Vehicle sharing service

People who want travel to the same destination from a same location would want to find each other before they pick up the vehicle. This will help them to share the vehicle and share the travelling costs.

When you want to go to the destination B you would tell your destination to the vehicle sharing service. All the other people who want to go to the destination B will also be doing the same. The vehicle sharing service automatically records the current location of the people. It then suggests all the people who are travelling to the same destination from the same location to gather at a particular place this place could be a UVPS parking lot. In this way these people can find each other and proceed to their destination together.

Call a vehicle service

A UVPS vehicle can have the capacity to accommodate four people. If you are single and nobody is with you and you have already picked up the vehicle and already started travelling to your destination. In that situation you would want to accommodate other three people in your vehicle who are going to the same destination you are going. This will help you reduce the cost of travelling because the other three people will share the travelling cost with you when you accommodate them in your vehicle.

So we need a facility so the other people who are travelling to the same destination can track your UVPS vehicle.

If you want to accommodate more people in your vehicle you would tell your vehicle your destination and the vacancy. The vehicle will then broadcast your current location, your destination and the vehicle's vacancy over the UVPS network with the help of call a vehicle service.

The people can access the "call a vehicle" service with their mobile devices which they can carry with themselves. If a person wants to travel to a destination B from a location A he will tell the same to the "call a vehicle" service. The "call a vehicle" service will then search for the vehicles which are travelling to the destination B and are currently near location A. It will then connect the person to a UVPS vehicle that is also travelling to the same destination B and currently located near the person's location.

After the person is connected to the UVPS vehicle he can talk to the driver of that vehicle and ask whether the driver can pick him up from his location. The person would also tell the driver his exact location.

In this way people can call the vehicles and accommodate themselves to fill up the vacancy of the vehicles.

This will increase or improve the utilization of the carrying capacity of the vehicle.

AVTGS (Automated Vehicle traffic guidance service)

Whenever people are travelling in the city they might have to face the problems of traffic congestion. Whenever you are travelling to a particular destination in the city there could be many possible routes

by which you can travel to your particular destination. If there is congestion on a particular route you can avoid that route by taking an alternative route to your destination.

This will help you to reduce or eliminate the wastage of your time due to the traffic congestion in the city. It can also help you to reach your destination at a faster speed this can be achieved by deliberately picking up the routes which has the faster vehicle traffic speed.

This can be achieved with the help of “automated vehicle traffic guidance service” abbreviated as AVTGS.

The main advantage of this service will be to quickly resolve or cool down the situations of traffic congestion in the city. Or even completely avoid the situation of traffic congestion to develop in the city.

Let us see how AVTGS would work

We will need to have traffic sensors situated across the city. These sensors would record the speed of the moving traffic across all the routes in the city. With the help of these traffic sensors we can detect the traffic congestion and the traffic situations in the city. Sensing the traffic speed is not a big deal I guess we already have such applications working in certain areas.

Now AVTGS service can utilize this data to guide the UVPS vehicles to alternate pathways in order to avoid the traffic congestion.

The UVPS vehicle driver will have access to AVTGS service when he is driving the vehicle. The AVTGS service will be continuously guiding the driver to the routes to help him reach his destination as soon as possible and avoid the traffic congestions.

Governance of Urban Vehicle Pooling Service (UVPS)

In this topic we will discuss how we can carry out the governance of the city based UVPS.

Groups involved

Let us see the groups involved who will form the relationship with each other in order to have a UVPS in the city.

Vehicle Manufacturers

Someone needs to manufacture the vehicles to be used for the UVPS. There could be some vehicle manufacturers who can manufacture the vehicles according to the needs of UVPS.

Construction of UVPS infrastructure

Social Life and Economics

We need a service provider who will carry out the complete construction of the UVPS infrastructure. It would include the tasks like upgrading the vehicles to be used for the UVPS, setting up the UVPS network facility, parking lots and such.

Maintenance and servicing of vehicles

We will require a service provider who will carry out the routine maintenance of the vehicles.

City

The city is an end user group who will own the UVPS of that city.

Asset ownership

UVPS infrastructure and the vehicles

All the UVPS infrastructure and the vehicles will be owned by the city which is the end user group consisting of the “people of the city”.

Funding and recovery

Cost of Construction of UVPS infrastructure

The cost of construction of the UVPS infrastructure and the cost of vehicles will be borne by the end user group the “people of the city”.

Maintenance and servicing of vehicles

The cost and the maintenance and the servicing of the vehicles will be recovered by the commuters. The cost of the maintenance of the UVPS Infrastructure will also be borne by the commuters.

Operating cost and the look after of the UVPS

The operating cost which includes the cost of the fuel and all the operating costs will be recovered from the commuters.

Approvals for relationship

The end user group “people of the city” will be forming relationships with various service provider groups. They will have to give the approval in order to form the relationships with those service providers. The city can select the service providers who are efficient and do their job properly and the

Social Life and Economics

city can avoid giving approval to the service providers who are not efficient and do not do their job in a proper way.

State based Vehicle pooling service

We have studied the vehicle pooling service for the city which people can use for travelling within the city. We can also have another service for travelling from one city to another city across the state.

We can call it a State Vehicle Pooling service (SVPS). If you want to travel to another city you can pick any SVPS vehicle from a SVPS parking lot. You can now use the SVPS vehicle to travel to any city across the state. And after you have completed your journey you can leave the vehicle to any SVPS parking lot which can be found in any city across the state.

The SVPS service will fall under the governance of the state.

Benefits

The cost of using the UVPS vehicle will be lower than the cost of using your personal vehicle so this will encourage and motivate people to stop buying and owning a personal vehicle because they can have the comfort of using a person vehicle without actually owning and investing in buying a personal vehicle.

Adoption of the UVPS and SVPS service as a standard service in the cities and states will help in the reduction of the number of vehicles that are required by the people in the state which is a good thing because it will help us save the resources which we can put somewhere else.

UVPS can improve the capacity utilization of the vehicles. The capacity utilization of a vehicle is the percentage of the people who accommodate in the vehicle at the time of travelling. If the capacity of vehicle is 4 people and two people are travelling in that vehicle we will say that we are using 50 percent of the vehicle's capacity while if 4 people are travelling in that vehicle we will say that we using 100 percent of the vehicles capacity.

Improvement in the capacity utilization of the vehicles will help us reduce our fuel consumption without affecting any of our needs.

It is easier to implement standard network based facilities like AVTGS and call a vehicle service in the UVPS based vehicles.

Another advantage of the UVPS service is the convenience for the people. People can just pick a vehicle from anywhere they want to and use it as a personal vehicle. In this situation there will be no requirement for the people to own a personal vehicle.

We get the improvement in the user convenience, saving of resources, saving of costs all at the same time. So we can see how sharing of resources can help solve our problems.

Notes for the reader

This topic discusses how we can eliminate the problems like load shedding and routine blackouts of electrical power with the solutions like dynamic pricing and automated regulation of electricity consumption. And we will also see how it can improve the utilization of electrical generation capacity which can help us to reduce our electricity bills.

This topic is highly technical in nature and many people would not want to go through it. They can safely skip this topic because that would not affect their ability to understanding the other portions of this book.

Distribution of electricity

The demand of the electricity varies and changes throughout the day and across the seasons. Therefore we will see that dynamic pricing of the electricity is the more efficient way to distribute the electricity.

So establish the dynamic pricing of electricity we bought smart meters which charge and bill the customer according to the varying prices. But we forgot one thing.

The demand of electricity can change instantly and with the variation in the demand of electricity the prices of electricity will also change. An average home user cannot give his attention to regulate his consumption according to the changing prices of electricity. For example if I have an air conditioner running in my home which generally has high power consumption. If the electricity prices go up I would want to switch off my air conditioner or lower its consumption. But how would I know about the prices of electricity. Even if you put an alarm which rings when the electricity prices go up, it is very tedious for an average home user to regulate his electricity consumption according to the changing prices of electricity.

In short dynamic pricing of electricity can work only if we have an automated regulation for electricity consumption.

Benefits

Dynamic pricing helps us to communicate the truth about the electricity supply to the people so that they could adjust their consumption habits accordingly. If the demand for electricity exceeds the supply people need to know that they need to reduce their consumption. While if the demand is much lower than the supply people need to know that they should increase their consumption to eliminate the wastage of supply. This could be achieved with the help of dynamic pricing.

But the problem we would face is it would be very tedious for the people to regulate their consumption according to the dynamic prices. So dynamic pricing of electricity cannot really work unless we have some other mechanisms for helping the people to regulate their consumption.

Dynamic pricing with the help of automated regulation will help us to get rid of the problems like load shedding and routine blackouts in the urban areas.

Due to shifting of the consumption from peak load hours to off peak hours the usage of electricity would become more efficient. This will help us eliminate or reduce the wastage of electrical energy that happens due to under utilization of electrical power in the off peak hours. The cost of electricity usage might also come down.

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Dynamic pricing

Regulation of the end user electricity prices according to the changing demand supply situations of the electricity is termed as dynamic pricing. If the demand for electricity consumption exceeds the supply in this situation the electricity prices would go up to bring down the demand and match it with the supply. And if the demand for electricity consumption is lower than the supply the prices would go down in order to bring up the demand and match it with the supply.

Dynamic pricing services

Electricity Price generation service (EPRS)

It regulates the prices of the electricity according to the changing demand and supply situations of the electricity. It connects with the smart meters and tells them the current prices of the electricity.

Electricity Price Prediction service (EPPS)

It is a service which studies the electricity prices patterns and predicts the prices of electricity. Predicting the prices of electricity helps the automated regulators to defer the consumption and bring down the electricity bill.

We call these services the dynamic pricing services.

Smart Meter

Smart Meter is the device which bills the end user according to the changing prices of the electricity.

Smart meter has power consumption sensor which tells the total current power consumption of the home. It is connected with the EPRS (Electricity Price Regulation Service) which tell the smart meter the current price of electricity. Smart meter calculates the electricity bill of the home according to the changing prices of the electricity.

Current billing rate = Price x Power Consumption

This is the rate at which you are being billed currently. Power consumption is in watts (joules/second) and Prices in Bucks per joule. Billing rate would be in Bucks per second.

$$\text{Electricity Bill} = \int_{t_1}^{t_2} (\text{price} \times \text{Power consumption}). dt$$

This will be your total electricity bill for the time range from t1 to t2. Price and consumption are given as a function of time. Where prices are in bucks per second and power consumption is in watts.

Automated regulation of electricity consumption

It would be very tedious for an average end user or a home user to regulate his consumption according to the variations in the electricity prices. So we need some automated device which will regulate the electricity consumption of the end user.

HECR (Home electricity consumption regulator)

We need to have a special device in the home that would regulate the power consumption of the home user. We would call it the HECR (Home electricity consumption regulator) Device.

Reduction of electricity bill

The electricity bill can be reduced by various ways

You can defer or shift the electricity consumption from the time when the prices are high to the time when the prices are low. We will call this technique “deferring/shifting of consumption”.

If the prices become too high you can bring down the consumption of electricity in order to prevent your bill from inflating. We call this technique “Immediate reduction of consumption”. We can restore the consumption to the previous levels after the prices come down to normal level. The restoration can be done in two ways the manual restoration and the automatic restoration.

In the manual restoration it is the responsibility of end user to restore the consumption to desired levels after the prices fall down. In the automatic restoration the regulator will automatically restore the consumption after the prices fall down to normal levels.

Manual restoration is preferred for non essential devices like fan’s and lights the devices which the user can remember to switch on later. The automatic restoration is preferred for essential devices like refrigerator. A refrigerator is a device which is supposed to be running continuously and the user might not remember to switch on the refrigerator after if it has been switched off to reduce the consumption by the consumption regulator.

Deferring/shifting of consumption

You defer the energy consumption to the time when the prices are lower.

Washing machine

Washing your clothes is generally not an emergency. If the current prices of electricity are too high you can defer the washing of clothes to a time in future when the prices of electricity is lower. This will help you to reduce your electricity bill. But it is very tedious for a home user to look into the price patterns and decide which will be the appropriate time to wash your clothes with your washing machine.

How can we help the home user to do it?

We have Home electricity Consumption Device (HECR) device which regulates the consumption of electricity in your home.

When the user pushes the start button on the washing machine, the washing machine will ask the user the time up to which the user wants to get his clothes washed. If you are in an emergency and want to get your clothes washed immediately you would tell the washing machine that you want your clothes to be washed immediately. And the washing machine would work accordingly and it will start to wash your clothes immediately.

But you are not in an emergency you would tell the washing machine the time you expect your clothes to be washed and be ready. Say for example if you want your clothes to be washed by 20 hours from now, you would tell the same to the washing machine.

In the case when it is not an emergency the washing machine asks the HECR device will it be better to start washing now or it is better to defer the washing of the clothes to save the electricity bill. The HECR device connects to the Electricity Pricing Prediction Service (EPPS) and asks it to predict the pricing of electricity. The EPPS tells the HECR device the future prices of the electricity. The Home Regulator (HECR) device studies the pricing pattern of the electricity. After studying the prices of electricity pattern the device would know what would be the better time to wash the clothes. For example if the prices are falling down after 5 hours from now and prices are going to be the lowest at that time the HECR device will then defer the washing of the clothes to 5 hours from now.

Deferring mechanism

Whenever a device has the opportunity to defer/shift the consumption and save the electricity bill. The device will initiate the communication with the HECR device. Let us study the communication between the device and the HECR device.

Total Energy needed to consume

The device would tell the total energy it is expected to consume.

Power consumption pattern (Stable/ Variable)

The device would tell the power consumption in watts and it would also need to tell whether the power consumption is stable or variable. In the case it is variable it would need to tell the power consumption as the function of time.

Time Limit

The device requires telling up to what time it is expected to consume the total energy.

Continuous/Interruptible

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The device needs to tell that the Power Consumption is continuous or the power consumption can be interrupted. Let us see what that means. In a washing machine if you start the washing it is not desirable to interrupt the washing of the clothes when the washing of clothes is being done. While if you are charging your vehicle, you can interrupt the energy consumption at any time and defer the remaining energy consumption.

Time slots

After studying the requirements power consumption requirements of the device and the time limit for the energy consumption. The HECD device will search for the opportunities to lower the electricity bill by shifting/deferring the power consumption. And will finally find out the appropriate time slots for the device to operate. The HECD device will tell the device to switch off or switch on the operations at the appropriate timings.

Consumption shifting devices

Consumption shifting devices are those devices which can shift their electricity consumption in time domain without having any affect of user convenience.

Consider an example of a washing machine. If I want to get my clothes washed by the tomorrow morning to go to the office it would make me no difference whether the washing machine is washing your clothes in the midnight or in the evening. As far as I am getting my clothes washed by the morning it doesn't matter to me what time the washing machine chooses to wash my clothes. So the washing machine can shift its electricity consumption in time domain and select the timings in which the electricity prices are lower to help reduce my electricity bill without affecting any of my convenience.

But now consider an example of light bulb if I want to read a book in the night to give a presentation tomorrow in my office. And if I have to switch off the bulb to save my electricity bill I would have to compromise my convenience. So light bulb is a device which cannot shift its consumption without compromising the user convenience. Therefore light bulb is not a "consumption shifting device".

"Consumption shifting devices" give us an opportunity to lower our electricity bill without affecting the user convenience. So in order to save our electricity bills we need to use these opportunities to the maximum extent possible.

These devices are the devices which can intelligently defer/shift their energy consumption to a time when the energy prices are lower.

Each device need to have a network interface. A network interface could be a low cost Ethernet interface or a wireless interface. Each device would have a device network address which identifies the device over the home network. Each device can communicate with the HECD device and regulate or defer the consumption accordingly.

All the electricity switches in the home need to have a network interface too so that the HECR device can switch on/off each device in the home as per the requirement.

Some of the examples of devices which can shift the consumption to lower prices without affecting user convenience are.

Washing machine

We have already discussed how a washing machine can shift its consumption.

Electric cars

The electric cars can choose the timing when the prices are lower in order to charge the batteries.

Air conditioners

Air conditioning requires large amount of energy. If we could shift the electricity consumption of air conditioner to a time when the electricity prices are low it would save us a lot in our electricity bills.

You have to use the air conditioner when it's hot in the summer days. So how can you really shift the air conditioners energy consumption to the time when the electricity prices are lower?

The answer is ICE cooling

When the prices of electricity are low the air conditioner of your home can cool the water into ICE. It could be the time in the night when the prices of electricity are low. Now when it gets really hot in the afternoon, you don't need to switch on the air conditioner. You can simply blow the fan over the ICE which will cool the air. So your home is getting air conditioned or cooled without even switching on the air conditioner.

What are you actually doing? You are storing the air conditioners' electrical energy into ICE and this is the electrical energy that goes into air conditioning. You can use this stored energy for air conditioning anytime you want. Therefore ICE cooling acts as storage of air conditioners electrical energy.

With the help of ICE cooling you can shift the energy consumption of air conditioner to the times when the prices of the energy are low.

ICE cooling can actually bring down your energy usage in two ways.

It is cheaper and more energy efficient to cool the ice in the night because the temperatures in the night are lower. Cooling the water into ice would require lower energy in the night because the outside temperatures are lower in the night. This will save you on your energy consumption for the air conditioning.

ICE cooling makes the air conditioning more energy efficient. If you have two vehicles one is more fuel efficient than another the vehicle with higher fuel efficiency will save on your fuel costs by reducing your fuel consumption. ICE cooling will be a vehicle with higher fuel efficiency.

ICE cooling can reduce you air conditioning bills in two ways

Reason 1: Due to increased energy efficiency

Reason 2: By allowing you to shift the energy consumption by acting as energy storage

Immediate reduction of consumption (Regulation of consumption)

When the prices are going high I would want to reduce my consumption accordingly in order to bring my electricity bill under my financial budget. Since I cannot keep a watch on the electricity prices I need some kind of an automated regulation. Let us see how we can achieve the automated regulation of electricity consumption.

The HECR device will use some algorithms by which it will decide what should be the suitable electricity power consumption limit at a given time. We will study those algorithms later. Now say for an example if the HECR device decides that the suitable power consumption limit should be 1200 watts. It means that my current power consumption should not exceed 1200 watts. If my current power consumption is more than 1200 watts. The HECR device will have to switch off some devices in order to bring my power consumption under 1200 watts.

So how could we do it? We can assign a priority level for each device. The HECR device will start shutting down the devices in the sequence of their priority until the power consumption falls under the specified limit.

For example if my current power consumption is 1500 watts. Consider that I have 15 devices running in my home each consuming 100 watts. Each device has been assigned a different priority level. The HECR device will shut off the least priority device. The consumption will drop to 1400 watts. It will again shut off another least priority device and will continue in this direction until the consumption drops to 1200 watts.

Assigning the priority levels to the devices is the job of the Home user. The home user can assign the priority levels to the devices according to his convenience and requirements.

We need to know that “shifting/deferring of consumption” and “immediate reduction of consumption” are two different techniques and both work together. We should not confuse these two techniques. The purpose of each techniques is the same which is to reduce the electricity bill for the given power consumption.

Home user HECR programming

The home user would need to configure each device by giving the following parameters

Device Information/ Device based programming

Device Name

It provides user friendly identification for the device

Network ID

It is the network address that identifies the device over the home network.

Switch ID

The ID of the switch in which the device is connected

Automatic restoration/ Manual restoration

If the user wants to restore the device automatically to the Power ON state after it has been switched OFF by the HECD device the user would need to set the device to automatic restoration. Otherwise the user would set the device to Manual restoration.

Priority Level

There could be many priority levels say for an example 1 to 10. Two or more devices can have the same priority level.

The user can set the lower priority for non essential devices. And the user can assign high priority for essential devices.

Smart Switches and Smart Switch Boards

Each Switch needs to have a network interface so that the HECD device can connect with the switch over the home network.

Switch ID

Each switch needs to have an ID to help the HECD device identify that switch over the home network.

Regulation Override (Yes / No)

If the user wants to switch ON the device even when it is switched OFF by the HECD device, he can still switch ON the device by using the Regulation Override option.

Implementation Example

If the HECD has put the switch in the OFF state and the user pushes the switch for say 5 seconds continuously it would be considered as a regulation override.

HECR internal algorithms

The HECR needs to have the algorithms which regulate the consumption according to the specific needs of the home user and the prices of the electricity.

Electricity prices can be categorized as low, medium and high depending on price trends and the range of variation in the electricity prices.

The user would tell the HECR device his monthly or weekly Electricity budget. This is the only thing that user needs to do. Now it is the job of HECR device to regulate the consumption to get the electricity bill under the allocated budget. Let us see how the HECR device can do that.

Before understanding the regulation logic we need to see few equations.

Desired average billing rate = (Monthly electricity budget) / (total time)

If your electricity budget is 300 bucks for a month your desired average billing rate would be $300/30 = 10$ bucks per day. Your average billing rate should not exceed this value in order to stay under the budget.

Current billing rate = Price x Power Consumption

This is the rate at which you are being billed currently. Power consumption is in watts and Prices in Bucks per joule. Billing rate would be in Bucks per second.

$$\text{Electricity Bill} = \int_{t_1}^{t_2} (\text{price} \times \text{Power consumption}). dt$$

This will be your total electricity bill for the time range from t_1 to t_2 . Price and consumption are given as a function of time.

$$\text{Average billing rate} = \frac{1}{(t_2 - t_1)} \left\{ \int_{t_1}^{t_2} (\text{price} \times \text{Power consumption}). dt \right\}$$

Average billing rate is equal to the total bill divided by the time range. This is your average billing rate. The job of the HECR device is to make sure that your average billing rate does not exceed the desired average billing rate in order to get the final electricity bill under the expected budget.

Immediate reduction logic for HECR (Home Electricity Consumption Regulator)

Our purpose is to reduce the user's power consumption when the prices are high and medium and encourage the user to consume higher when the prices are low.

Whenever the prices are high or medium the current billing rate would be restricted and limited to desired average billing rate and when the prices are low there would be no such restriction.

If prices are (medium or high)

{

Max Current billing rate = Desired average billing rate

}

Max Current billing rate is the maximum value the current billing rate can achieve. The current billing rate should be under this value.

Your current billing rate should not exceed the Max current billing rate. In case it exceeds the Max current billing rate the HECR device would reduce your power consumption to bring down your current billing rate.

Let us see how that would work out.

$$\text{Power consumption Limit} = \left(\frac{\text{Max current Billing rate}}{\text{Price}} \right)$$

Max current billing rate is a constant. So when the prices are increasing the consumption is being reduced accordingly.

There is no restriction on the user's power consumption when the electricity prices are low so when the prices are low the user can exceed his power consumption without any restrictions.

This algorithm is just an example of how we can regulate the power consumption of the user. The designers can modify the algorithm and suite them according to their needs. My purpose here was just to show how we can regulate the user's power consumption and help him get his electricity bill under his desired financial budget that he has set for his electricity bill.

We can see that the automated regulation of power consumption is essential because without any automated regulation the user would have no means to regulate his consumption and his electricity bill which is the basic purpose behind the concept of dynamic pricing. So the concept of dynamic pricing would not really benefit the people unless we have the mechanisms to regulate the user's consumption.

Cutting down on electricity wastage

If a person leaves the home to talk to his neighbors and friends he might forget to switch off the lights and air conditioning. In this situation there is wastage of electricity. We need some automated mechanisms to cut down on wastage.

Occupancy sensors

Each home and each room in a home can have occupancy sensors. If the occupancy sensors detect that there is nobody in the room or home it can report the situation to the HECR device. The HECR device will then switch off the unnecessary devices accordingly.

Networking

Communication between Smart Meters and dynamic pricing service is something I do not require to address here because I think there is a lot of research already done in that area. The electricity prices can be transmitted over the radio signals I guess.

The communication between the Electricity Price Prediction Service (EPPS) can be accomplished with the help of internet. In our near future due to feasibility of the home networking solutions we can expect every home to have device networking with the home based router which can be connected to the internet. All the devices in the home can communicate with each other within the home over the home based network. HECR (Home Electricity Consumption Regulator) is also one of the devices capable of communicating over the home network. It can connect with Electricity Price Prediction Service (EPPS) with the help of internet connectivity. Smart Meter should be capable of communicate over the home network. So that communication between Smart Meter and HECR device can be accomplished.

The devices can be connected over the home network with the help of low cost Ethernet interfaces and wireless interfaces. The networking could be done at a low cost. Given that some of the organizations take initiatives to pass on the benefits to the home users the home users can expect to have all these solutions in affordable and reasonable costs.

Benefits

Improvement in the utilization of power generation capacity

Because there is no proper communication of truth about electricity supply in the end users, the end users fail to regulate their consumption according to the supply at the grid. As a result there are times when the power consumption falls below the power generation capacity. This is the wastage of electrical energy considering that our demands of electricity are not fully satisfied. Due to techniques like shifting/deferring of consumption the devices can intelligently adjust their consumption so that the power generation capacity at the grid is properly utilized to the maximum extent possible. This will reduce the wastage of the electrical energy.

Reduction in the Electricity bill of users

People can expect their electricity bills to come down due to efficient utilization of the power generation capacity.

Elimination of the problem of Load shedding and routine electricity blackouts in the urban areas

The problems like load shedding and routine blackouts occur when demand for electricity exceeds the available capacity and we do not have any automatic measure to reduce the consumption in that situation. So we have to resort to load shedding. But when the homes are able to reduce their consumption at the time of electricity shortage we will not require to resort to load shedding and

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routine blackouts. This will add to the convenience of home users because load shedding and routine blackouts cause inconvenience for the home users.

Governance Issues in the distribution of electricity

Different prices of electricity for “Service provider organizations” and “home users”

In a nonprofit society we cannot have different prices of electricity for service provider organizations and Home users. The differences in prices would give rise to distortion of truth similar to the distortion of truth caused by subsidies and taxes. Therefore the prices of electricity should be same for every user.

People have to travel to their workplaces on daily basis. It is more efficient if our cities are designed so that people could just walk to work. It is very inconvenient for the people to travel long distances to their workplaces on daily basis. Walk to work can be automatically accomplished if people are able to find homes at reasonable cost near their workplaces.

Artificial demand is caused due to people desire to profit from change in resource prices. It creates huge instability in prices. It even seems to increase the resource prices (observation yet to be verified).

Walk to work

The elimination of the artificial demand will bring stability in the prices of land and it can even reduce the prices of land and homes. People would buy the land only when they really want to live and build their home. People tend to live near their workplaces so this would automatically make it easier for people to find a home to live near their workplaces because only the people who are working in a given area will want to live there and have a home in that area. One of the problems our cities are currently facing is people tend to live far away from their workplaces because they are not being able to find a home at a reasonable cost near their workplaces. This results into wastage of resources and put pressure on city infrastructure and it also results in inconvenience for the people because they have to travel a long distance on daily basis.

Ability to find a home near your workplaces would automatically enable the people to find homes near their workplaces and walk to work.

Further cities should take initiatives so that people are able to find homes near their workplaces. We need to plan our cities properly and city administration can even enforce certain regulations to enable people to walk to work. It will release a huge burden on the city infrastructure and also provide convenience for the people.

Agricultural production like fruits and vegetables and other crops like sugarcane are perishable in nature. If they are not consumed within the given time frame the production will be wasted.

Sometimes the perishable agriculture produce is wasted because of the oversupply when farmers end up producing more than what the economy can consume which results into wastage of agricultural produce because the extra produce cannot be preserved to be used in future. Oversupply is resulted due to lack of proper networking between the farmers and proper planning of the production of the agricultural produce. The situations of oversupply can be avoided by the proper networking between the farmers so that they can plan their production properly.

Agricultural demand-supply synchronization service (ADS)

We can help the farmers predict the supply of their agriculture produce so that they can avoid sowing the crops when there is a possibility of an oversupply.

The farmers would report the crops that they are sowing to the ADS service. The ADS service will store all the information of the crops that are being planted by the farmers. With the help of this information the ADS service can predict the supply of the agricultural produce and warn the farmers when there is a possibility of oversupply.

Whenever a farmer is sowing his crop he would first consult and study the future supply of his crop with the help of ADS service. If there is a possibility of oversupply the ADS service will warn the farmer that it is not a better time to sow that crop and it might result into the wastage and oversupply. The farmer can also ask the ADS service to suggest him the crops that could be in short supply and more suitable for plantation at the given time.

To sum up

ADS service would study the information available with it. It would warn the farmers of the situations of the oversupply and help them avoid the situations of oversupply. By studying the future supply of agricultural produce the ADS service will also suggest the farmers the crops which are more suitable to be planted at the given time.

ADS Service Implementation

For ADS service to function we need all the farmers to sincerely register with the ADS service. They also need to legitimately report their plantations to the ADS service.

With the help of this information received by the ADS service the ADS service can predict the supply of the agricultural produce.

Human agricultural experts can also be required to participate in the functioning of this service. The ADS service will have the information of the agricultural demand which can be forecasted with the help of human experts or any other measure. So with the availability of the demand supply forecast of the agricultural produce the ADS service can suggest the suitable plantations to the farmers and warn them against the possibility of oversupply.

I do not require going into the detailed implementation of this service because professionals and people who are working with the implementation can figure out the rest of the implementation details by themselves.

Infrastructure utilization prediction service

In the large urban conglomerations we usually face congestion of infrastructure and people suffer due to such congestion. There are traffic jams in the cities and due to traffic jams and people waste their time in traffic jams. In many cities traffic jams occur on regular basis and people waste their time on regular basis. There is also congestion in metro rails when there is a huge influx of commuters for using the metro rail service it makes travelling a very uncomfortable experience because of the rush.

Infrastructure congestion

If we ever go to these urban conglomerations and study how people are using the infrastructure if we study the infrastructure usage pattern we can see that the congestion in the infrastructure usage is not always there.

If we observe the metro rail service there is a huge influx of commuters but it occurs only at certain timings. In the other times there is no rush and we can see that even the capacity is not fully utilized.

We can see that the congestion in infrastructure usage is there because large numbers of people are using the infrastructure at the same time and there is no proper synchronization between the people for the time when they will be using the infrastructure.

We can see that there are highs and lows in the infrastructure usage. In the lows the infrastructure capacity is underutilized and in the highs the demand for the infrastructure capacity is higher than what is available. If we can simply shift the infrastructure usage in the time domain we can reduce or eliminate the congestion in infrastructure usage. For example if we shift some of the metro rail commuters from the rush hours to the non rush hours we could reduce the congestion problem in metro rail service.

If we observe the infrastructure usage pattern we can see that

People are going to offices

People are coming from offices

We can pretty much study and predict the infrastructure usage by just recording the way people are using the infrastructure in the city.

We assume that people are giving us their usage pattern and we can develop infrastructure usage database which will store the information about the usage of infrastructure in the city.

After predicting the infrastructure usage we can advise people to shift their usage from congestion hours to no congestion hours.

For example if there is an office in the city and employees are using the metro rail service for commuting between the office and their homes and consider a scenario where employees are daily facing the congestion in the metro rail at the time when they are going to office and when they go back to their homes. The office can consult the infrastructure usage prediction service and find out alternative timings for the office hours so that the employees do not face congestion in the metro rail service.

Cities can maintain a proper and updated infrastructure usage information and database. We can call it the “infrastructure usage prediction service”. People can consult the “infrastructure usage prediction service” to figure out what time will be better for them to go to offices come back to home, go to shopping go to watch a movie with their friends. They could avoid the timings when they can face congestion in the infrastructure.

We need to make this service easily accessible for the people. In order to do that we can provide these services in such a way that people can access these services on their mobile devices that they can carry with them.

Whenever I want to go to shopping in the city with my friend I can just take out my mobile device from my pocket and check the traffic situations in the city if I am going to use the metro rail I can also check out for the congestion in the metro rail service, if I am going to a shopping places I will check out the congestion in the shopping complexes. The “infrastructure usage prediction service” can tell me the timings which would be comfortable for me to go out shopping.

I can avoid the time when there is congestion and go to shopping only at the time when there is no congestion. I could avoid the discomfort of travelling in a metro rail when there is a huge rush, I could avoid the wastage of my time due to traffic jams. I could avoid the timing when there is a huge rush in the shopping mall which would allow me to finish my shopping earlier. A common citizen of the city can make his life much comfortable if he can easily access the “infrastructure usage prediction service” on the regular basis comfortable on mobile devices.

Offices can report the timing when their employees come to their offices and go to their homes they also tell the location of the home of their employees and their office. It can help us to predict the usage of human transportation infrastructure in the city.

The traffic department of the city can maintain the traffic patterns that they observe in the city.

The shopping complexes will maintain the information about the commuters.

Movie theatres can maintain the information about the commuters. So that people could avoid bumping into the movie theatres and discovering that it’s a “house full”.

Metro rail service can maintain the information about the congestion hours in the metro rail service.

We can see that each and every person, organization maintains their updated infrastructure usage pattern we could use all this information to generate a simple service which can help people to avoid the congestion.

Offices, traffic department, metro rail department, movie theatre's, shopping complexes and individuals all need to report their infrastructure usage to the "infrastructure usage prediction service".

24 x 7 Economy

Cities need to relax the restrictions for the timings when the people can commute in the city. So that the shopping complexes and markets, offices, institutes can remain open and function 24 hours a day. In the night the infrastructure usage drops below the available capacity. So if the people start to use the city infrastructure in the night hours it will release the burden of the city infrastructure usage in the day hours. Imagine that the cities are functioning twenty four hours a day. The infrastructure usage will be normalized.

I know it seems like a very radical approach but if we consider the problems that the people go through due to infrastructure congestion. They can be willing to go out in the night. It is better to work in the night, go out in the night rather than to waste two hours of your life in the traffic jams.

Institutes, offices and markets can function 24 hours a day irrespective of it's a night or a day. People can come to offices all the day. If we provide people proper facilities like policing in the night people would take more initiative. The services would cost lower in the night due to higher availability. It will increase the productivity of available infrastructure.

Consider an example of shopping complexes. Typically a shopping complex is open for 10-12 hours a day. If a shopping complex is open 24 hours a day. One shopping complex can do the job of 2 or at least 1.5 shopping complexes. So if we need to build 100 shopping complexes we will require building only 75 or 50 shopping complexes. We are saving 25 percent to 50 percent of our infrastructure cost. If we city requires 100 movie theatres we can satisfy the requirements with 50 or 75 movie theatre's.

The question that comes to our mind is why people would go out in the night even if it saves the cost. How can we really tell it to the people and encourage them to use the infrastructure 24 hours a day. When the shopping complexes are opening 24 hours a day they can pass on the benefits and savings on the cost to the commuters who shop in the night. So shopping in the night can cost you lower than shopping in the day. This can encourage people to go out in the night and adopt a 24 hours lifestyle.

Our institutes, offices, markets, government offices and policing services all can function 24 hours a day without a break. This can help us decongest our congested infrastructure.

If we plan our cities properly we will not require taking any such radical initiative. But for the cities which are already suffering from the problems of infrastructure congestion this is something that we can look for.

Walk to work

Whenever the organization is setting up an office the organization needs to make sure that employees can find the homes to live nearby so that they can just walk to their offices instead of travelling from huge distances.

There is no point in setting up an office in a location where employees could not find the homes to live nearby and have to travel huge distances to get to their offices.

Further if we ensure that the employees live near to their offices we would also cut down on travelling expenses, fuel costs and travelling infrastructure costs.

City governance needs to enforce restrictions to ensure that people can walk to their offices. It might include the restrictions like density restrictions.

Density restrictions

Cities need to have the density restrictions the where cities can restrict the density of offices in one single area which can cause infrastructure bottlenecks and infrastructure congestion and make it difficult for people to find a home near their workplaces. Cities need to have density restrictions to ensure that there is no infrastructure congestion.

Section 6:

Ethics, Values, Culture and Society

In this section we will discuss various observations, conclusions and various lessons that we can learn from the Nonprofit Economy. How ethics and culture affect our lives, and our economy. What kind of changes we can expect in the Nonprofit Economy and why do we really need to have a sense of ethics in our lives and in our economy.

We can see that there are hundreds of ways by which we can simplify people's lives and bring down the costs. And all these solutions are low cost and can be implemented cheaply such that every person can have access to these solutions. But the question that arises in our minds is why people are still living miserable lives and why they are still poor why they are still not being able to benefit from these solutions.

Lessons to Learn: Issue of Patents

It is because our conventional economy is inherently inefficient and it is resulting into a situation where people are not being able to benefit fully from the advancements in research and engineering.

Let us consider the issue of patents

Due to the concept of patents the organizations get the monopoly over the solutions. This allows them to artificially reduce the competition because they get the sole rights to offer or sell the solutions to the people. Because there is no competition or lower competition for these organizations it gives them the freedom to manipulate the people and take advantage of their helplessness and offer them the solutions at higher costs than what is reasonable. If people are suppose to be paying 100 bucks for a solution they are asked to pay or they are compelled to pay 1000 bucks for the same solution. Patents are one of reason it takes so much time for solutions to be widely adopted and start to actually benefit the people. It is the reason poor people and working class people which consist of large number of people are not being able to benefit from low cost simple solutions and the advancements in research and engineering in our society.

The question that comes in our mind is, are patents really fair are patents even ethical?

Finding solutions is not a big deal anybody who is working to solve a given problem can come up with the same solution for that problem. So how could you deny other people to find solutions to the problems just because someone has already found the solution for that problem? You cannot claim the sole right for any solution. Solutions cannot be owned by anyone because solutions are something that belongs to the society irrespective of whoever has found those solutions. Patents are unethical. Further they are bad for the health of our society because they deter the environment of open sharing and collaboration which is essential for the good health of the society and economy.

What would really happen if we get rid of patents the only thing difference it would make is some organizations would lose opportunity to make huge profits? They would lose the opportunity to make huge amount of profits. But even without the patents they can still make profits because they are not denied to sell their solutions in the society. Well in the "Nonprofit Economy" the issue will not arise because every organization is nonprofit organization. So there is no requirement of patents in a Nonprofit Economy.

It is time that we learn and we grow up. We cannot move forward and progress as a society if we continue to behave in immature way.

Let us consider the issue of artificial demand

Artificial demand is caused due to people's desire to profit from change in resource prices. The elimination of the artificial demand will bring stability in the prices of land and it can even reduce the prices of land and homes. People would buy the land only when they really want to live and build their home. People tend to live near their workplaces so this would automatically make it easier for people to find a home to live near their workplaces because only the people who are working in that area will want to live there and have a home in that area. One of the problems that our cities currently facing is people tend to live far away from their workplaces because they are not being able to find a home at a reasonable cost near their workplaces. This results into wastage of resources and puts pressure on city infrastructure and it also results in inconvenience for the people because they have to travel a long distance on daily basis.

What I have described here are only few examples of the outcomes of behaving in the immature way. We can find many other such examples.

We can see that whenever we are behaving in immature way and living with bad ethics we are actually getting ourselves more into suffering. We can see all the problems in our society are ultimately pointing us to look into our ethics. They are telling us to look into the ethics that we are living with. So I hope you get why I need to stress so much on the issue of our ethics when we are discussing the topics like economics and engineering.

Each person has a unique role to play in the society which requires its own unique set of abilities and capabilities, you cannot play the role of another person and other person cannot play your role. If we cannot play the role of the other person then how can we evaluate, compare or grade his capabilities.

Ethics of Evaluation

Therefore evaluation and grading and comparison of the capabilities of another person/ other people is unethical and a sign of bad ethics. Speaking further anything that involves evaluation, grading and comparison of the capabilities of the people is a sign of bad ethics.

Self evaluation is an exception because in the self evaluation individual wants to evaluate his own capabilities. This helps the individual to understand whether he can effectively play his role or not.

Grading in education, awarding a qualification and accepting a qualification involves grading, comparison and evaluation of people capabilities and therefore they are all the signs of bad ethics.

But now the question comes if we do not evaluate the capabilities of another person then how can we accept or say hire individuals on a given job in the organization?

In a nonprofit economy people work and do their jobs without the expectation of monetary incentives. And due to financial security people are not under any obligation to do the job just for the sake of doing it. In such an economic setup an individual asking to do a job is an indication of his genuine desire to do that job. When a genuine desire is there a person spontaneously acquires the capabilities that are required for doing the job that he is asking for because that person is genuinely interested in doing that job.

But now we have one more question? If we cannot evaluate the capabilities of another person then how can we trust a person on critical jobs the jobs like the job of a doctor?

If a doctor is corrupt he might end up killing many patients.

Therefore we have trusting issues here. We need to know how we can really trust a person on a given job without evaluating his capabilities.

In order to resolve the trusting issues we can evaluate the ethics and maturity levels of an individual. A person who possesses good ethics will have higher maturity levels and someone on whom people can trust and depend upon. A doctor with good ethics would not really treat a patient unless he is sure that he can treat them well.

Evaluation of maturity levels is not really a big deal. It is even easier than evaluation of knowledge of a person. You can easily tell the maturity levels of the person just by looking at how they are living their lives and how they are behaving with other people in the society. A person cannot act mature when he

is not mature. A person cannot hide or act their maturity levels when it comes to the ethics and maturity levels of an individual. If a person possesses bad ethics and is immature then his maturity levels will show up in his behavior because a person cannot hide his ethics and maturity levels.

There are some clear indications and symptoms by which you can easily tell the maturity levels of a person.

Resolving the Trusting Issues: Evaluation of Maturity Levels

Evaluation of the capabilities of a person involves evaluation of the person's knowledge and facts.

But the maturity levels of a person can be evaluated without asking a single question about what facts the person knows and what knowledge the person possesses.

Trusting Issues

The maturity level of the person is the closeness to the truth. Maturity levels of a person is not how much knowledge a person possesses or how many facts a person knows. Maturity levels of a person is how much closer to the truth his behavior is. And how much closer to the truth his understanding of the world really is.

When the maturity levels of a person falls down the behavior of a person tends to deviate from the truthful behavior. The more immature the person is the more his behavior will deviate from the truthful behavior.

Maturity levels of a person can be solely evaluated just by observing how the person is behaving with other people in the society and how the person is living his life.

In the next topic we will see the symptoms of the maturity levels of a person.

But there is one more point that we need to understand regarding the evaluation of maturity levels. Only a person who himself is mature enough can understand the difference between the truthful behavior and the deviations from the truthful behavior.

So a person who is not really mature enough would fail to understand and evaluate the maturity levels of other people.

So the question that we had previously asked was how can we really trust a person on a job of a doctor or other such responsible jobs?

A job of a doctor is a job that requires a high level of maturity levels. A trusted doctor himself is the only person who can evaluate the maturity levels of the other person who aspires to be a doctor.

If a doctor who is already a trusted doctor introduces a person and tells us that we can trust this new person on the job of a doctor then only we can trust the new aspirant doctor on the job of a doctor.

For this purpose the aspirant doctor may need to spend some time with the group of trusted doctors. He can do that by working with them as a trainee.

Age and the maturity Levels

The maturity levels of the people may fall down or increase with the age. Generally an increase in the maturity levels is observed with the aging of a human being.

From the observations of the human behavior we can also observe that some people are simply more mature irrespective of their age and there are some other people who do not really mature up irrespective of their age.

Maturity levels of the person depend on the desire of the person. A person may not really be interested in growing up. While there could be other people who take more interest in growing up and becoming a mature person.

Unlike what many people would think having higher maturity levels does not mean/imply that you deserve higher compensation. Instead the opposite is true.

In the Nonprofit Economy having a higher maturity levels might imply that you deserve lower compensation or no compensation at all.

Maturity and Compensation

Let us try to understand how do we arrive at that conclusion.

Having a higher maturity level implies that the behavior of the person is closer to the truthful behavior. When the behavior of the person gets close the truthful behavior the inequalities in the relationship that he forms in the society fades away. To understand this you would need to look at previous topic 'Elementary relationships in Nature' that we studied previously.

When a behavior of the relationship gets closer to the truthful behavior the inequalities in the relationship fades away in this situation the relationship becomes a relationship of equality where the entities benefit equally in the relationship. In such a relationship the give and take and expectation of compensation doesn't make any sense.

Speaking in simple terms a person with higher maturity levels would have lower expectation of compensation or would have no expectation of compensation at all.

The jobs that require higher levels of maturity levels would have lower compensation compared to the jobs that require lower levels of maturity levels.

Speaking in simple terms:

Every job in the society is equally important and no job is inferior or superior. But there are some jobs that require higher levels of maturity levels and there are some jobs which do not require higher levels of maturity levels.

In the Nonprofit Economy we might see that the salary of a doctor, professor and an Engineer could be lower than the salary of a salesman or a job which does not require higher maturity levels.

People with higher maturity levels do not have any expectation of compensation or have a lower expectation of compensation. They live a moderate lifestyle and their needs are satisfied with incomes which are lower than the average middle class incomes. Therefore in the Nonprofit Economy we might observe a trend where people with higher maturity levels would ask for lower compensation. Compensation could be inversely proportional to the maturity levels.

In order to evaluate the maturity levels of the people we need to understand what are the signs of maturity and the signs of immaturity. Let us discuss the various signs of the maturity.

Symptoms of maturity

Absence of anger, greed, pride and jealousy is a sign of maturity. All the human beings experience these emotions at some point in their life but less the person experiences these emotions the more mature the person is.

Kindness towards all the beings including the animals and every other living being is a sign of maturity. Those who are immature are brutal and do not show any empathy, kindness for the suffering of other beings.

Those who are immature categorize people by their race, gender, ethnicity, nationality and other such physical attributes.

Those who are mature do not categorize beings by their nationality, ethnicity, race, gender and other such physical attributes because they can see that in the heart of every being lie the same soul which feels the hurt, pain and suffering the same way you do.

Those who are mature do not categorize people by their physical attributes but they do categorize the people by their ethics, values, morals, maturity levels and integrity.

Those who are mature do not take any interest in arguing, debating and criticism. Taking interest in Arguing, debating and criticism are a sign of immaturity.

Those who are mature have a sense of what is appropriate and what is not appropriate. What is truthful and what is not truthful. Those who are not mature enough lacks the sense and unable to differentiate between what is appropriate and what is not appropriate and what is truthful and what is not truthful. Those who are very immature have an exact opposite sense of what is truthful and what is untruthful and as a result they end up constantly hurting their soul.

Ability to understand the emotional needs of the people is a sign of maturity. Those who are mature are polite and soft spoken and speak kind words which do not hurt the sentiments of other people. Those who are immature cannot understand the emotional needs of other people and as a result they end up saying things that might hurt the sentiments of other people.

Conclusion:

There is no fine line that could tell if the person is mature or immature. People have different levels of maturity. A person might not be mature enough but still have the desire to become mature. A person can be midway between being a mature person or an immature person. There could also be people who are very immature.

Those who are very immature and those who associate with those who are immature would fail to comply with the ethics of the Nonprofit Economy.

Let us discuss the various changes that we can expect to see in the culture of the Nonprofit Economy compared to the culture of the Conventional Economy.

Cultural Differences

In the conventional Economy people are classified and categorized according to their capabilities. In the Nonprofit Economy people are not categorized on their capabilities or competence. They are categorized on their maturity levels, morals and integrity.

In the conventional Economy people have a tendency towards secrecy and competition. When we are educating as students we are taught to compete with our peers for grades. When we grow older we are taught to compete with other organizations in order to make more money and incomes.

In the Nonprofit Economy we do not have a culture of secrecy and competition. There is no concept of grading in educational institutes and students are encouraged to share openly and collaborate with their peers. Organizations are nonprofits therefore they do not have a tendency to compete with each other and hide the knowledge and live in secrecy.

In the conventional Economy the culture is task oriented and lacks human warmth. In the Nonprofit Economy we can expect to see a culture which is relationship oriented and does not lack human warmth.

In the conventional Economy people are focused on personal gains and in Nonprofit Economy we can expect to see that people are focused on the needs of other people.

In the Conventional Economy due to being burdened by the obligations of the economy people become lazy and dumb. We can expect to see an improvement in this regard. People might be less lazy and less dumb in the Nonprofit Economy.

In the Nonprofit Economy Instead of having big centralized factories, we might expect to see a lot of small scale and decentralized factories. We can expect to see a gradual shift in the patterns of manufacturing. The manufacturing might shift from the bulk and centralized manufacturing towards the natural way of manufacturing which is the on-Demand and decentralized manufacturing.

In the Nonprofit Economy we can expect to see the bigger organizations would break down into smaller organizations. People would prefer to work in smaller organizations which provide healthier work culture and environment for the people.

In the Nonprofit Economy earning a high paying job is not the reason why you educate. And monetary incentives are not the reason why you do your job. In the nonprofit Economy we may expect to see a gradual collapse of the Gates. We might see a gradual collapse of the admission gates. Desire to get an admission in an institute would be enough to get an admission in that institute.

We might see a gradual collapse in the hiring gates. The desire to do a given job would be a reason enough to allow that person to do that job.

Falling under the influence of bad ethics is something that is a part of natural routine of our life. When people are living their life they come under the influence of bad ethics when people come under the influence of bad ethics they start to go through pain and suffering. When people go through pain and suffering they seek solutions and then they come out the influence of bad ethics.

Ethics and society

Coming under the influence of bad ethics and then coming out the influence of bad ethics is something that is inevitable and a part of natural routine of our life. Every person goes through some kind of pain and suffering. Some go through it more and some other goes through it in lesser amount. But we all go through it in some or other part of our lives.

So now the question comes what can we do in order to come out of the suffering?

To come out the suffering what we need to do is to introspect ourselves. We need to introspect and look at our ethics.

Introspection is a process of challenging our beliefs, questioning our beliefs, questioning the conventions, questioning our understanding and questioning the way we see the world.

Truth will be provided to us but what really matters is our desire to challenge and question our beliefs because if we do not have any such desire we would not reach the truth even if it lying in front of us all the time.

Introspection is the way we can overcome the pain and suffering we go through in our life. It is the way we can find solutions to the problems in our life.

But under the influence of bad ethics people are misled they search into wrong directions, they waste their time in unfruitful endeavors. Rather than introspecting if we are wasting our energy on doing other things like blaming other people and situations for problems in our life we are wasting our time. If you are doing that you need to know that you do not need to feel guilty about that because blaming other people and situations for our problems is the first thing that we all do when we face problems in our life but we need to understand that it is our ethics not other people and situations that are responsible for the pain and suffering that we are going through.

Lessons that we can learn

If we are blaming our government and other organizations for the bad health of the economy and the society we are wasting our time. What we instead need to look for is our ethics. Because if the people in the society have good ethics, the corrupt organizations and even the corrupt government cannot do/cause any harm to our society.

We had seen that in a “Nonprofit Economy” a profit oriented organization cannot survive due to the presence of “Nonprofit service oriented organizations”. So you can see that a corrupt organization cannot cause you any harm if people in the society choose to live with good ethics.

The governance of the society will also improve if the people possess good ethics. Since other people cannot choose for us what ethics we want to live with and we would have to choose for us the ethics that we want to live with. So other people cannot be responsible for the pain and suffering we go through in our lives. They can only help you but they cannot make choices for you. The pain and suffering that we go through is the result of our own choices that we make for ourselves.

Rather than looking outside what we need to do is to look inside of us. What do we need to do is to introspect ourselves and not to judge other people and the society.

The same thing applies to an individual also if an individual is having good ethics nobody else can cause any harm to that individual. Good ethics is something that provides you strength and protects you from all kinds of harm and suffering.

Bad ethics is something that makes you weak. It makes an individual weak and if the society comes under the influence of untruthful ethics it will also weaken the entire society. Just like water can weaken the highly strong iron foundation and change it into the powdered rust which even the breeze of air can blow away similarly bad ethics can weaken and shatter the entire foundation of a highly strong society. The society will no longer retain its strength if it loses its ethics.

Lessons for an individual

In a nonprofit economy everything is simplifying. Issues are being resolved and we are finding simple solutions for everyone’s problems.

We can see that when we are living with good ethics we are simplifying our lives, cutting out the waste making things more efficient and we are reducing the pain and suffering that we are going through in our lives.

Good ethics take us towards the truth while the bad ethics take us towards the untruth. When you are living entirely for personal benefits and personal gains you are going towards the untruth. When you are changing your focus from personal benefits and working for everyone’s benefits you are taking yourself towards the truth.

When you are taking yourself towards the truth you are reducing your pain and suffering. In our lives whenever we are trapped and we are suffering we need to seek the truth. We need to look for the truth wherever we could find it and in whatever form we could find it. You can find it inside yourself and even from other people. Even the situations and people you despise the most can take you towards the truth.

Untruth is misleading it will make you believe that other people are causing you pain and making you suffer. It will also make you believe that working for personal gains and profits is better than working for everyone’s benefits. And you would end up blaming other people, your friends, your government for

problems in your life. Do not believe in those things. Rather than wasting your energy in blaming other people you can always utilize that energy for searching for the truth and overcome all the suffering. Truth will provide you strength it will protect you from all the suffering. While untruth will do the opposite, it will make you weak it will take out your entire strength make you helpless. In order to overcome the challenges of your life you need to have strength you cannot face your life if you are a weak person therefore do not fall prey to bad ethics and untruth.

As a parent the most important thing that you can do for your children is to teach them good ethics, good ethics is something that will help them become a stronger person and face the challenges of their life. As an educator the most important thing that you can do for your students besides giving them knowledge is to teach them good ethics, because if your students come under the influence of bad ethics they will not be able to utilize any of the knowledge you gave them in a useful direction and this will result into wastage of all of your efforts you took in teaching them. Therefore you need to deemphasize your focus on grades and qualifications in the education and give more emphasis of making your students good citizens and teaching them good ethics.

Another thing that we can see is as an individual you are forming many relationships with other people and society. You are in relationship with your friends, your family, your government, and with other organizations.

We can see that just changing the way people are forming relationships in society and having more truthful understanding about how relationships work is having a huge effect on your entire economy which you can measure even with numbers and statistics. Similarly the kind of relationships we form in our life has a profound effect on your entire life. There is no other thing that has so profound effect on your life. Money, profits everything is secondary.

If you lose money, your qualifications you lose nothing. But if you are deteriorating your relationships you are making big losses in your life. The kind of relationships you are forming is making huge differences in your life there is no other thing that makes so much difference in your life. So give more priority to your relationships and don't screw your relationships over silly issues like earning profits and other such things. I am not talking just about the relationship you form with your friends and family but I am talking about every relationship you form in the society. As an engineer you are focused on finding the solutions to problems of people's lives. As a doctor you are focused on helping your patients have a better health. As an educator you are helping your students learn and become better citizens. In every role you are playing in the society you are forming relationships with other people and society. The kind of relationships you are forming with other people and society makes huge difference in your life. As an engineer are you more focused on people's problems or you are focused on what you are getting in return from them? As a doctor are you focused on treating your patients or you are focused on what you are getting in return from them? I hope you get the point, the kind of relationships you form with other people and society is making a difference in your life.

In the end what really sums up your life are the bonds of love that you formed with other people and society. Other things like how much money you have earned and how many qualifications you have gained are all secondary and will not make any difference in your life.

Let us see how it would be to live in a Nonprofit Economy

Children can play with their friends all day and all night and their parents and teachers would not tell them to stop playing and study instead.

Education will be more interesting because we will not have to worry about getting a job so we can study whatever we want. We can work together on projects, collaborate and share openly with each other which can be such a wonderful life experience. Professors and teachers would find their job more interesting because students will take more initiative in learning and education.

Closing Notes

Because people do not have to worry about the financial security they can do whatever job that interests them. They will find their job more interesting and the job satisfaction will improve. Because people are offering their services without any expectation of something in return they will be more in touch with the needs of people. This will help the service providers to improve their relationship with the people. The boundaries of our homes will extend.

Everyone will be middle class so it will provide a sense of equality in the society and it will foster better culture in our society. People will give more importance to other people and relationships compared to money, grades and material possessions. People will not be judged according to their competence and qualifications and other such things and every person would receive an equal treatment irrespective of their background.

Nonprofit economy will foster open sharing and collaboration among the research and engineering organizations. We will see faster adoption of low cost efficient and better solutions in our society. Needs of people will be addressed in an effective way and our society will be more responsive towards the needs of the people.

Due to lower risks of failure of Nonprofit Ventures the service providers will find it easier to obtain loans and start new ventures and provide innovative solutions to people's needs. The organizations would provide better work culture due to lack of requirement of hierarchies and other restrictions in the organizations.

In overall we can expect to see a sense of equality, better culture, harmony and peace in the Nonprofit Economy.

Topics for General Reference

Let us discuss some of the questions that would arise in the people's minds after studying the "Nonprofit Economy".

On scarcity of human efforts

Functional logic of the Economy says that everything that is scarce needs to have a cost. If we are distributing the human Services free of cost wouldn't that result into problems because human Services could also be scarce?

If we study the Nature we will recognize that human services are not subject to scarcity. Nature ensures and it provides for all the needs of the society. Therefore human services are not subject to the scarcity.

Frequently Asked Questions

Legislation for mandating people to do the job

Because there is no obligation to work in order to earn the money. What if the people do not want to work? Should we have a legislation to make them work? Should we have a legislation that mandates people to pick up a job?

We should not ever have any kind of legislation in a Nonprofit Economy that mandates people work and do their jobs. Any kind of legislation which mandates people to take up a job goes against the basic purpose of a Nonprofit Economy. The basic advantage of the Nonprofit Economy is that people do not have the obligation of pick up a job due to the obligation of financial security reasons. Therefore a Nonprofit Economy provides people freedom to pick up the job according to whatever that interests them. So by having the legislation to mandate the people to pick up a job you are killing the basic purpose of the Nonprofit Economy.

It is a natural tendency of a human being to pick up a job in the society and do something useful and contribute to the society. Even if we do not use the monetary incentives to encourage people, people still do not want to sit idle. They would still want to contribute, socialize and do something productive in the economy.

Even if a person sits idle for some time for example when he is taking a break from education or taking a break from his job. He is probably doing it for learning and growth and introspection or to rejuvenate himself. All these initiatives are ultimately helping to improve the productivity of a person.

It is in the nature of human being to contribute to the society. A human being can never not contribute to the society even if he doesn't need to work for monetary incentives, even if there are no legislations or restrictions to make him work.

Further enforcing unnecessary legislations and restrictions on the people is always bad and it will curb the freedom of the people in the society. It goes against and violates the code of free society. It is the violation of the 'freedom to not be in a Relationship'. Any violation of the free society and the freedom of the people is unethical. So there is no requirement of legislation and restriction to make people work. And such legislation is bad for the health of the society.

Age limits for receiving Resource Earnings

Should there be any age limits or age range for receiving Resource Earnings?

The Resource distribution mechanism is based on the assumption that all the resources in the state are owned by the "people of the state" so existence of a person is a reason enough that he is the citizen of the state and should receive the Resource earnings. There should not be any age range or limits to receive the resource earnings. The person should start to receive the resource earnings right from the day he is born up to the day he dies.

"Resource ownership Earnings" or "Resource Earnings"

"Resource Earnings" are basically the earnings obtained by the people due to the ownership of resources so why we are not calling it as "Resource ownership Earnings"?

Saying that an individual owns a resource is ethically wrong. All the resources are owned by the Earth and Nature. But Earth or Nature is not asking for any human money so for the sake of fairness of distribution of resources we can assume that "people of the state" own all the resources in that state.

Therefore we need to refrain from the term "resource ownership Earnings" because it will give wrong message to the people. It will give a message to the people that they own a share in the resources. All the resources are owned by the Nature and Earth and no individual or no organization owns any share in the resources. Resources are owned the Earth and Nature but they are provided to us by the Nature so that we can survive and sustain. Therefore I am refraining from using the term "Resource ownership earnings" because by using this term people will forget that it is the Nature and Earth who actually owns all the resources. So the term "Resource ownership Earnings" is misleading and we should refrain from using it.

Let us discuss some of the benefits and changes we can expect in the “Nonprofit Economy”

The organizations cannot obligate people to make them sign contracts and bonds because they have no obligation to work for monetary incentives and the financial security.

People can pick up the jobs according to their interests. If people do not want to do a certain job they can simply choose to not do that job because people are not under any obligation to take up a job that they do not want to do.

Expected Changes

We had seen that Nonprofit Economy fosters the Essential automation in the economy and we are encouraged/ compelled to automate all the manual jobs in the economy. So due to the automation of the manual jobs people would not be under any obligation to take up the boring and manual jobs the kind of jobs that they generally do not want to do but end up taking due to obligations of financial security.

Sense of Equality

People in the Nonprofit Economy have nearly equal earnings. Therefore everyone in the ‘Nonprofit Economy’ is a middle class person because there are no classes of incomes in the economy. This will foster a better culture and sense of equality in the society.

Improvements in Open Sharing and Collaboration

The environment of open sharing and collaboration in the Conventional profit based economy is paralyzed and crippled due to the restrictions caused by patents and copyrights. Open source in the software industry is a very good example of the benefits of open sharing and collaboration.

But the potential benefits of open sharing and collaboration are not utilized to a full extent due to the restrictions caused by patents and copyrights which exist by the inherent drawbacks in the functioning of the conventional profit based economy.

Further we can see that profit based organizations have competing interests so they are not suitable for collaboration. Inability to effectively collaborate with each other to offer better services to the end users and people in the society is an inherent drawback of the profits based organizations which is caused due to their ethics.

The fact that you cannot run your software's on every personal computer is a very good example of failure of profit based organizations to collaborate effectively to offer better services to the people. If you study the field of computers you will see that it is possible with the help of engineering to allow software's to run on almost all the personal computers. It is possible with the help of concept of "platform independence".

So we can see that due to their ethics the profit based organizations cannot allow the people to receive the full potential benefits of Research and Engineering.

Faster adoption of new solutions in the society

We will see that due to restrictions caused by patents and copyrights the benefits of research and engineering are not reaching the poor people and most of the people. These restrictions lower the rate of adoption of new solutions in the society because due to patents only limited number of organizations can offer these services to the people. And these organizations generally use this opportunity to sell their services at a cost higher than what is reasonable which makes these services out of the reach of most of the people. When we do away with these restrictions we would see faster adoption of the new solutions in the society.

Reduction in the wastage of resources

Due to unnecessary competition and lack of open sharing and collaboration among the profit based organizations results into wastage of resources and manpower. We can achieve more output from the available manpower and resources if we are able to utilize the full potential benefits of open sharing and collaboration. Failure to utilize the full potential of open sharing and collaboration is the inherent drawbacks of the profit based organizations caused by their ethics.

In the "Nonprofit Economy" all the organizations are nonprofits and since earning the profit is not the objective of the organizations so they can utilize the full benefits of open sharing and collaboration. So this will help us to reduce the wastage of manpower and resources.

Further we had discussed in the topic of recycling that the "Nonprofit Economy" helps in improving the recycling of the resources. Improvements in the recycling of the resources increase the availability of resources.

Easier to start new ventures

A proposal for starting a profit based organization has higher risk of failure compared to the risks involved in the proposal for starting a "nonprofit Service oriented organization" where people are working without any incentives. We had already discussed the reason behind that in the previous topics.

Therefore it would be much easier to obtain loans for starting a new nonprofit venture in a “Nonprofit Economy”. Most of the people will prefer to work in the smaller organizations that they own or are familiar with because it provides better work environment.

We can expect bigger organizations to break down into smaller or medium sized organizations which are comfortable for the governance and people to work. This would help end the dominance and monopoly of bigger organizations in the economy.

Improvements in the standards of Education

Because students and people have no obligation to pick up a job for the financial security they would be learning just for the sake of learning and not for the sake of money or getting a job. Therefore the educators would see a genuine initiative in the students to learn and educate. This will improve the standards of education. The standards of education in a “Nonprofit Economy” would be higher.

Improvements in the work environment

Because people are not working for incentives the organizations which do not treat their employees well and do not provide better work environment will fail to find employees. Therefore the organizations are compelled to take care of the employees and provide them better work environment.

Improvement in Middle Class –Average living standards

If you analyze the production efficiency of Nonprofit Economy you will find that it provides efficient utilization of resources. Due to equality of earnings the Nonprofit Economy would function at higher efficiency. So we can expect to have better standards of living.

You can observe that after the emergence of middle class there was an improvement in the people’s average standards of living. And this is something that is even taught in our history classes. So we can see that improvements in the equality of earnings always foster an increase in the standards of living.

We studied various ethics for the Nonprofit Economy in the entire book. A Nonprofit Economy cannot function properly until people live with these ethics this is the reason why I need to explicitly mention these ethics at the appropriate places. I have compiled here all the ethics that we studied in this book so that people can find all the ethics at one place.

Ethics of Nonprofit Economy

Ethics are something that is not supposed to be enforced by legislation. People are free to choose for themselves what ethics they want to live with. These ethics are only for those people who find them useful and those who desire to live with these ethics.

These ethics are applicable only for the “Nonprofit Economy”.

Ethics General

People have different ethics and values in the society. The individuals would respect the different ethics and values of all the people irrespective of whether the other people respect your ethics or not.

The states would respect the individual’s freedom to adopt the ethics and values that the individual desires to live with and would not enforce ethics and values with the help of restrictions or legislations.

The individual or the organization can own the resources but they would understand that all the resources that are obtained is provided to them by the Nature and the Earth and they have not earned these resources as something in return of doing their job.

Whenever an organization or an individual finds a scarce resource that it intends to sell in the economy it would report the resources to the State and register it with the DRO (Department of Resource Origin) so that the resource cost would go to the “people of the state”.

The individual or the organization would not participate in the activities of generating profits by obtaining resources at lower costs and selling them at higher costs. It indicates bad ethics and such activities are bad for the health of economy and the society because it give rise to artificial demand and problems like instability of prices and bubble bursts.

The individuals would sincerely donate to the Open service providers to help them recover the costs of offering the services. This will allow them to offer their services free of cost in the economy which is good for the health of the economy.

Ethics of Preaching/Teaching ethics

Different people have different needs so different people would find comfortable to live their lives with different set of ethics and values. A given set of ethics would not help all the people. Some people may find it useful but other people would not.

Therefore the first thing that we need to learn is not to preach our ethics/ given /one set of ethics to every other person. Preaching other people a set of ethics they do not find useful is disrespecting their freedom. So first thing that we need to learn is to respect the other people's freedom to live with the ethics and values that they find comfortable to live with.

We are not supposed to preach or teach our ethics to other people unless we are sure that they find it useful and helpful which is indicated by their desire to live with these ethics.

Ethics of ownership of resources

All the resources are provided and owned by the Earth and the Nature so the individuals and the organizations claiming the ownership of resources is unethical. But for the sake of simplification we can make various assumptions at different situations.

For making macroeconomic decisions

For making macroeconomic decisions like generation of currency and distribution of resource earnings we can assume that people/citizens of the state own all the resources in that state.

For distribution of resources

For the sake of distribution of resources we can assume that individuals and organizations who are paying for those resources own those respective resources.

Ethics of lender and borrower relationship



Image: Lender and borrower relationship

In the nonprofit Economy the relationship between the Lender and borrower could be the relationship of equality or it could be the relationship of inequality depending upon the situation.

If I am sacrificing some of my commitments in order to lend my money then in this situation the relationship between the lender and borrower is a relationship of inequality and the lender deserves a compensation in this situation. Consider an example if I am cancelling my holiday trip or some another commitment in order to lend some money then I might deserve a compensation. The Compensation would be a simple interest on the loaned amount.

In another case if I have some spare money and which I am not going to use anywhere and I do not have any commitments for this money. In this situation the relationship between the lender and borrower would be the relationship of equality where both the lender and borrower benefit equally from the relationship. Therefore the give and take doesn't make any sense in this relationship.

Speaking from the perspective of ethics in this situation the lender does not deserve any compensation and he need not ask for any compensation from the borrower. For example consider that I have around 10000 bucks with myself and currently considering all my commitment I do not require more than 6000 bucks at least for next 6 months. In this situation the remaining 4000 bucks that I have is the spare money that I have and speaking from the perspective of ethics I can lend this 4000 bucks for 6 months without asking for any compensation.

In the Nonprofit Economy we have two different kinds of banks - a zero interest bank and a simple interest bank.

If a person seeks a compensation for the money that he is lending then he would put his money in a simple interest bank. If a person does not seek a compensation for the money that he is lending then he would put his money in the zero interest bank.

Regarding the Simple interest and Compound Interest

We had already discussed that in the Nonprofit Economy monetary incentives are not supposed to be used in order to encourage people or motivate them.

There is a difference between monetary incentive and the compensation which we have already discussed in this text.

Asking for compound interest is like asking for a monetary incentive and using monetary incentive in order to motivate/encourage people. Therefore in the Nonprofit Economy the compound interest doesn't make sense and needs to be discouraged.

Ethics for the relationship between Intellectuals and Society

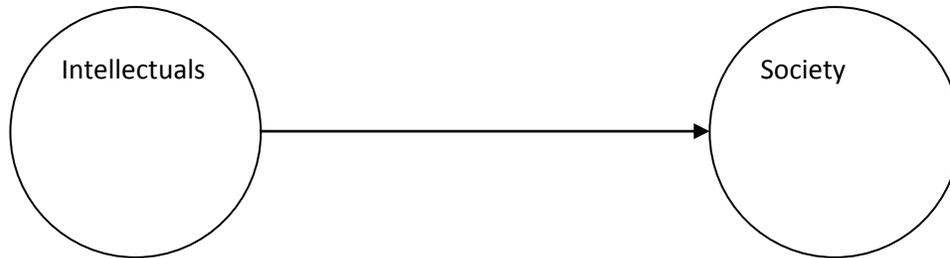


Image: Relationship between intellectuals and society

The relationship between the intellectuals and society is a relationship of equality where both intellectuals and society benefit equally from the relationship.

Intellectuals would offer its services free of cost to the people without any expectation of profits, incentives or something in return.

Intellectuals would express gratitude towards to society for giving them an opportunity to do their job.

Intellectuals would not claim the ownership of knowledge and solutions because the knowledge and solutions belong to the society. Intellectuals would not try to limit or restrict the free access of the knowledge and solutions to the people in the society by using the measures like copyrights and patents.

Intellectuals would recognize that they do not deserve anything in return for doing their job because the society has already compensated the intellectuals by giving them the opportunity to do their job and therefore the society does not owe anything to the intellectuals.

Ethics of student and educator relationship

Educators are the service providers who offer the services of education in the society. So the ethics of service providers apply to the educators also.

On scolding and punishment

The educators are not supposed to scold the students or punish the students irrespective of whatever mistakes they have done. By scolding the students and children or punishing them you are giving them the wrong message you are giving them the message that “doing mistakes are not acceptable”.

People learn from their mistakes and if they do not allow themselves to do the mistake how would they really learn. So when you are punishing someone you are telling them it is not acceptable to do the mistake. You are not really helping them.

There is no such thing as an unacceptable mistake, every mistake is acceptable.

So scolding children and students and punishing them is bad ethics.

Whenever the student has done a mistake or something that is not good for them the only thing that the educators need to do is to try to tell them the right thing.

Further there are two kinds of people, people who have the desire to grow and learn from mistakes and there are people who would not have any desire to grow or they would have lower desire to grow and learn from their mistakes. If the student does not seem to have any desire to learn and grow you just need to let them go. Someday they would understand why they are suppose to be living with good ethics and why they need to know the right thing and that time would be the right time to tell them what is the right thing and the mistakes that they have done. But to allow that to happen you need to let them go and let them learn from their own life experiences.

In any situation irrespective of whatever person or student you are dealing with it is never a reasonable thing to punish and scold a student.

On understanding students

Educators are the service providers who provide the service of education in the society so in order to provide a good service the service provider requires to understand the needs of their end users. The job of the educators requires them to understand their students and the needs of their students. It is essential for the educators to be able to understand their students.

Educators are not supposed to judge the students according to their capabilities. The capabilities of a person only tell half of the story of a person it doesn't really tell much about that person the only way you could really understand a person is by understanding where their heart lies. To understand the

student only thing that educators need to see is the desire of their students the capabilities of the students are secondary.

The job of the educators is to help the students to gain the capability. The only thing that is really required from the student is the genuine desire. When the desire is there the capability would automatically come.

When you are judging your students or people by their capabilities you are not looking into the heart of your students. You are not being able to understand them and when you are failing to understand them how would you really educate them?

Ethics of Asset provider and Asset User Relationship

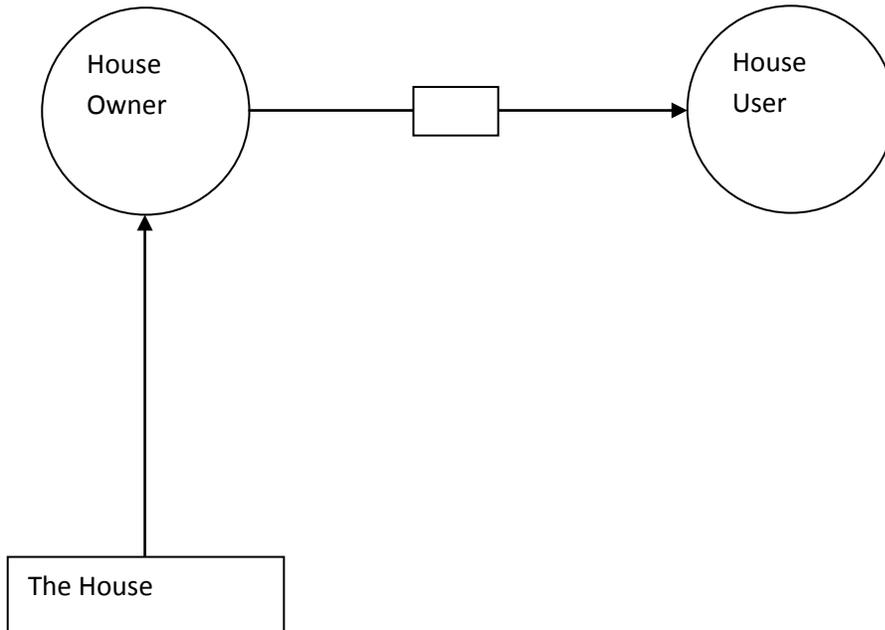
The asset provider would not recover more than the asset usage cost from the asset receiver.

Asset Usage Cost = Asset Depreciation cost + Maintenance cost (If any)

Cost of Depreciation = (Asset cost) / (Life of asset)

Maintenance cost can include the cost of maintenance and repair of the asset carried out in the duration of the asset usage by the asset receiver.

Example of house Renting



Cost of house = cost of land + cost of building

In the Nonprofit Economy the cost of land is not depreciating therefore we do not need to consider the cost of land in order to calculate the depreciation cost.

Consider that the cost of building is 10000 bucks. And the building has a life of 10 years. In this case

Cost of Depreciation = (Asset cost) / (Life of asset)

Cost of Depreciation for building = 10000/ 10 = 1000 bucks/year.

If the house user lives for one year he would pay 1000 bucks to the House owner. In other case if the house owner lives for two years he would pay $1000 \times 2 = 2000$ bucks to the House owner as the rent of the house.

Ethics of inviting people to work in the organization

Every individual has its own unique role to play in the society. Other people cannot play your role and you cannot play the role of other person therefore when we cannot play the role of other person how can we evaluate the capabilities of other person to see whether he can play his role or not.

We cannot evaluate the capabilities of the student or other person. Even if we are doing that we are just wasting our time. The only thing we can do is study the interests and the role the individual is interested in playing in the society. If the interests of the individual is in sync with the interests of the organization and the organization feels that the person can add value to the organization then the organization can go ahead and accept that individual to work in that organization.

Further there are some issues. When we are not evaluating the capabilities of the other person the question arises how we can really trust the individual. For trusting issues we need to see the ethics and values of the person. Refer to trusting issues in the topic 'Education in Nonprofit Economy'.

To sum up

Studying and understanding the interests of the person and the ethics and values of the person is enough to decide whether to accept the individual in the organization or not.

The most appropriate thing you can do is let the person choose his role and try to give them an opportunity to play the role that they desire without any kind of evaluation. If they are not being able to do their job efficiently someday you would know that. So there is nothing to lose to give people the opportunity to do the job that they desire.

If the individual is not sure about what role he wants to play but he still wants to work in that organization in that case the organization can allow the individual to work in the organization as a trainee until the individual have an idea and figure out for himself the role the individual wants to play in the society as a part of that organization.

Lessons to learn

Performance based incentives basically assumes that the more incentive you give to the people the better performance they will deliver. Now this is exactly opposite of how human beings function. The higher the expectation of something in return lower will be the quality and performance of the job.

Human beings are not the commodities and objects and the concepts that we apply on commodities, objects and resources do not apply on human beings.

Similarly we can need to evaluate the objects capabilities to see whether it fulfills our requirements or not. We do not and we cannot evaluate human beings capabilities, even if you are doing it you are wasting your time because when you are trying to evaluate person's capabilities you are failing to look into their hearts and you are completely failing to understand the person. When you are failing to understand the person what is the point in evaluating his capabilities. What would you really do with his capabilities when you do not really understand anything about the person?

Ending Topics

Got to do some stupid formalities !!)*#)(*#!

Resource Earnings

Earnings obtained by the individuals by the virtue of ownership of resource origins as the citizens of the state.

Resource Distribution Mechanisms

They are the mechanisms for distribution of scarce resources in Nonprofit Economy.

Terms and Conventions

Nonprofit Economy

Nonprofit Economy is an Economic and Social Setup for people who desire to living with Nonprofit Ethics

Hybrid Economy

A hybrid Economy is an economy which implements the mechanisms of Nonprofit Economy but people fail to conform to Nonprofit Ethics.

Nonprofit Ethics

Set of ethics adopted by the people in a Nonprofit State.

Nonprofit State

Any state formed by the people who desire to and choose to live with Nonprofit Ethics.

About Me

Hi I am Sumeet. If you've read this book you pretty much know me already and I don't think I need to describe anything about myself. Thanks for giving your time and taking the pains to read this book.

If you have anything to say to me please do not hesitate to shoot me a mail or a message. You can find my contacts from the project website.

Project website: <http://nonprofiteconomy.wordpress.com>

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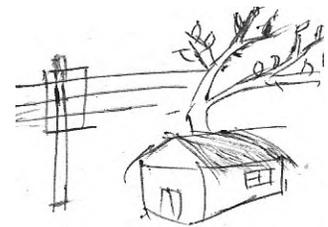
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Social Life and Economics

Sumeet Kumar

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