International Journal of New Technology and Research (IJNTR)
ISSN: 2454-4116, Volume-4, Issue-10, October 2018 Pages 16-27

A Concept to Approach Demand and Supply in a Different Way

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***Abstract*— The purpose of writing this research paper is to investigate the applications, limitations and benefits of demand and supply framework. Antoine Augustin discovered the economic model of demand and supply in 1838[1]. His model works on the fundamental laws of demand and supply. Today many government policies and private firm decisions are taken after constructing and analyzing the demand and supply of their niche. However, the model is too simplistic and the applications of demand and supply shown by this framework is to an extent bend towards theoretical use then practical gains. In this ever-changing world, where business are becoming adaptively creative and the everyday market is becoming unpredictable, I believe that relying on a model which is centuries old may not help the upcoming business to grow and evolve. During 1800s, trading use to occur in a uniform manner and different markets use to grow in a linear, passive fashion. In this current era, demand is completely unpredictable because of the high competition and available substitutes. I believe every business toady have the power of some price discrimination or else a business will start losing the potential customers and may soon shut down. Prices today play a very small role in the process of trading, and that there are many factors other than price which determines the level of demand at a particular time period. These other factor play a big role in setting the equilibrium prices. For different situations, different prices will have to be charged by a business to keep the demand up to a level of supply.**

In this paper, I will demonstrate a way to view how does the practical world works in different equilibriums and situations by constructing a new model. In order to depict a practical market, ceteris paribus will have to be eliminated. Equilibrium in this new framework will be reached with not keeping things constant but with the factors, that influences price.

The new framework will be critically analyzed, evaluated and be compared with the existing economic models. The new framework will be an improvement to the existing economic models, as it will demonstrate different those concepts, which are not portrayed by the existing model such as the concept of market gap.

If I am able to prove my framework by providing concrete limitations of the existing demand and supply model and how are the old models limited to only theoretical use, I can then conclude by providing significant benefits to relying on the new theory. The aim of this report is to find a unique alternative of demand and supply, which will be more accurate and reliable in the real life scenarios.

***Index Terms*— Demand and Supply, Market Structure, Elasticity, Market Gap**

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I. Introduction

A. All about Demand and Supply Framework

As civilizations evolved in the ancient world, so too did systems for providing goods and services to populations. These early economic systems emerged naturally as various trades and crafts produced goods that could be exchanged. People began to trade, first by bartering and later with coins of precious metal, and trade became a central part of life. The business of buying and selling goods operated for centuries before it occurred to anyone to examine how the system worked.

Supply and demand are among the fundamental building blocks of economic theory. The interplay between the amount of a product available on the market and the eagerness of consumers to buy that product creates the foundation of markets. The importance of supply and demand in economic relationships was studied as long ago as the middle Ages. The medieval Scottish scholar Duns Scotus recognized that a price must be fair to the consumer but must also take into account the costs incurred in production and therefore be fair to the producer[2].

II. Flow

This report will cover 3 main topics; literary review, new model review and discussion. Literary review will provide a significant amount of information on the demand and supply diagrams. It will answer several important questions such as

- What is the significance and applications of demand and supply framework in the practical world?
- What are some of the significant works in economics?
- To what extent are the previous models reliable in the current era?

The new model review will talk about the alternative demand and supply framework. It will provide mathematical and diagrammatical prove to strengthen its applications. Several real life examples will be plugged in its concept to show its reliability and accuracy.

Discussion will consider the limitations, benefits and opportunities of both the models. It will emphasize on the enhancement and advancement that can be introduced in the models. Through the discussion, the readers can evaluate and justify which model is more reliable in the practical world.

III. Law

The amount of products a firm chooses to produce is determined by the price at which it can sell them. If the

assorted cost of production (labor, materials, machines, and premises) amount to more than the market is willing to pay for the product, production will be seen as unprofitable and be reduced or stopped. If, on the other hand, the market price for the item is substantially more than the costs of production, the company will seek to expand production to make as much profit as possible. This law of supply assumes that the firm has no influence over the market price and must accept what the market offers.

The law of demand sees matters from the viewpoint of the consumer rather than the producer. When the price of a good increases, demand inevitably falls. This is because some consumers will no longer be able to afford the item, or because they decide that they can gain more enjoyment by spending the money elsewhere. Price is not the only factor that affects demand. Consumer tastes and attitudes are also a major factor. If a product becomes more fashionable, the whole demand curve shifts to the right; consumers demand more of the product at each price. Given the static position of the supply curve, this drives up the price. Because consumer tastes can be manipulated through techniques such as advertising, producers can influence the shape and position of the demand curve.

A. Assumptions of Law

We expect the law of demand to hold for its:-

Substitution effect - If the price of X increases then all other goods automatically become relatively cheaper so consumers will tend to substitute other goods for X[3].

The income effect - If the price of X increases then purchasing power of consumers decreases and they will be able to afford less of X

The law of supply works because at a higher price, a firms profit margin is greater, inducing it to offer more units per period

B. Equilibrium

While consumers will always seek to pay the lowest price they can, producers will look to sell at the highest price they can. When prices are too high, consumers lose interest and move away from the product. Conversely, if prices are too low, it no longer makes financial sense for the producer to continue to make the product. A happy medium must be reached—an equilibrium price acceptable to both consumer and producer. This price is found at the point where the supply curve intersects the demand curve, producing a price at which consumers are happy to pay and producers are happy to sell.

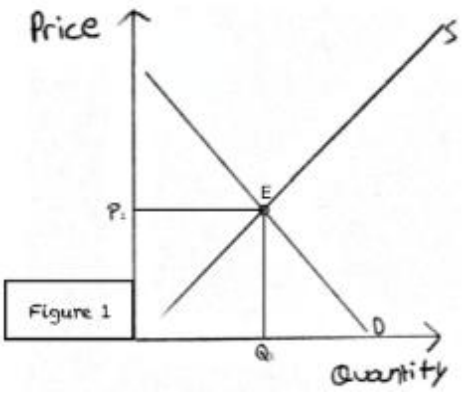

Figure 1

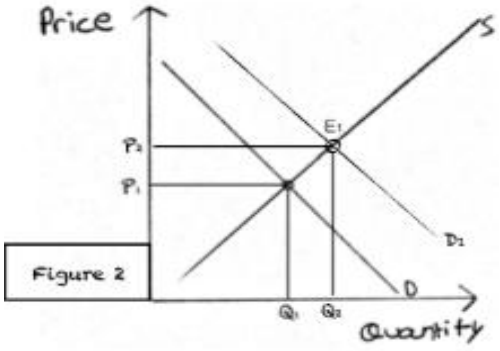

Figure 2

Figure 1 shows demand, supply and market equilibrium. In figure 2, due to several other factors (except price) demand curve shifts rightwards, sowing an overall increase in demand. If the demand curve had shifted leftwards, overall demand would have fallen, prices would have lowered and quantity demanded had been reduced.

A price is an equilibrium price if quantity demanded is equal to quantity supplied, so there is neither excess demand nor excess supply. However Many factors complicate these relatively simple laws. The position and size of the market are crucial in price determination, as is time.

The price at which producers are happy to sell is not just influenced by the costs of production [4]. For instance, consider a market stall selling fresh product. The farmer arrives having already paid for the costs of production, buying the seeds, the labor involved in planting and harvesting the crop, and his transport to the market. He knows that to make a profit, he must sell each apple for $1.20. Fruit sellers may have to throw away any unsold apples at the end of the day. The urgency to sell in time is a major factor in determining the price at which to sell perishable goods. Therefore, at the start of the day, he decides to market his apples at $1.20. If his sales are going well, he may feel he can make more money and raise his price to $1.25. This may cause a slowdown in sales, but if he manages to sell his entire stock, he will be happy. However, if the end of the day is nearing and he finds that he still has quite a few apples left, he might decide to drop his price to $1.15 to avoid being left. with an excess of apples that are likely to rot before his next chance to sell them.

"The price of any commodity rises or falls by the proportion of the number of buyers and sellers... [This rule] holds universally in all things that are to be bought and sold."

- John Locke [5]

Elasticity

We know from the law of demand how the quantity demanded will respond to a price change: it will change in the opposite direction. But how much will it change? It seems reasonable to expect, for example, that a 10% change in the price charged for a visit to the doctor would yield a different percentage change in quantity demanded than a 10% change in the price of a Ford Mustang. But how much is this difference? To show how responsive quantity demanded is to a change in price, we apply the concept of elasticity [6]. The price elasticity of demand for a good or service, PED, is the percentage change in quantity demanded of a particular goo d or service divided by the percentage change in the price of that good or service, all other things unchanged.

Characteristics of price elasticity of demand

Value of *PES*	Classification	Interpretation
Frequently encountered cases		
$0<PES<1$ (greater than zero and less than one)	inelastic supply	quantity supplied is relatively unresponsive to price
$1<PES<\infty$ (greater than 1 and less than infinity)	elastic supply	quantity supplied is relatively responsive to price
Special cases		
$PES=1$	unit elastic supply	percentage change in quantity supplied equals percentage change in price
$PES=0$	perfectly inelastic supply	quantity supplied is completely unresponsive to price
$PES=\infty$	perfectly elastic supply	quantity supplied is infinitely responsive to price

Tragakes, Ellie. *Economics: for the IB Diploma*. Second Edition. Cambridge university press. 2012, pp. 49

The price elasticity of supply (PES) is the responsiveness of quantity supplied when the price of the good changes. It is calculated as the percentage change in quantity supplied divided by the percentage change in price.

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The primary objective of any firm is to earn profit or increase revenue. Therefore, increasing price of its products to maximize profit is one of the primary concerns of producers. If the product is inelastic (less or no effect on demand with change in price), the producer can earn profit by setting high price. However, if the product is elastic (highly affected by even slightest change in price), the producer must set low or at least reasonable price so that the consumers are attracted to buy the goods.

Market Structures

In the 18th century Adam Smith wrote about the impact of competition on firms abilities to set prices and make profits above a "natural" level. Later it was found that our economy traditionally works in 4 sets of market structures; Perfect competition, Monopolistic competition, oligopoly and monopoly. Market structures are distinguished based on the number of firms in the market (whether there are many, few or one firms), the type of product (homogeneous or differentiated) and whether entry barriers do or do not exist [7].

In **perfectly competitive** market, there will be many small firms in an industry. These firms will produce homogeneous products and there will be no barrier to entry and exist. Very few markets in the real world share the characteristics of perfect competition such as currency exchange and gold market [8].

Monopolistic Competition is where many small firms exist in the market (each firm has a very small share of the market). The firms produce differentiated products. Differentiation can be based on quality, durability, packaging, design or product service and there is no barriers to entry. Under Monopolistic market, most of the manufacturing brands lie such as detergent companies where they all sell similar products but not identical[9].

Oligopoly is where there are few firms operating in the market. They can produce homogeneous products or differentiated products and there is significant barriers to entry[10].

A **Monopoly** occurs when one firm produces a good without any close substitutes. Monopolies have a unique product (as there is by definition only one firm in the market) and there are barriers to entry. It is said as monopoly if it dominates the market[11].

Inflation

In 16th-century Europe prices were rising inexplicably. A French lawyer Jean Bodin had published his response, Paradoxes of Malestroit. It argued that prices in Europe quadrupled during the 16th century, at the same time as the amount of physical silver and gold circulating in the system tripled. He also highlighted other factors behind the inflation: a demand for luxuries; a scarcity of goods for sale due to exports and waste; greedy merchants able to restrict the supply of goods through monopolies; and, of course, the rulers adulterating the coins[12]. Inflation is the rate at which the general level of prices for goods and services is rising and, consequently, the purchasing power of currency is falling.

Later economists concluded an increase in any component of aggregate demand may prove responsible for demand-pull

inflation. Demand-pull inflationary pressure may originate from a rapid increase in consumption and investment expenditures caused by excessively optimistic and confident households and firms. Inflationary expectations themselves are a common cause of continuing inflation. If prices are expected to continue climbing then firms and workers with pricing power will increase their prices and wages to keep ahead of the game, adding to the inflationary spiral.

The easiest way to understand this is by quoting Milton Friedman's famous saying that inflation exists when 'too much money chases after too few goods' and so inflation is to an extent a monetary phenomenon.

Limitations

Within the demand and supply model, neither the producers nor the consumers know as to how the price of a good is set. The price is just given. In short, they both react to a given price. The model does not articulate about who is given the price or where has it originated from. As presented by mainstream economics this framework doesn't originate from the facts of reality. They are purely conjectural. The framework of supply-demand curves rests on the assumptions of unchanged consumer preferences and income and unchanged prices of other goods. In reality, however, consumer preferences are not frozen, and other things do not remain constant. Demand and supply curves are framed for a competitive market. A competitive market is a market where there are many small firms, the good is homogenous and nothing prevents a new firm from entering or existing. That means demand and supply framework shows hypothetical results as a competitive market do not exist in the real world. So when the demand and supply shows perfectly elastic or perfectly inelastic curves and that we are told these 2 ranges of PED are hypothetical in nature, it is not only these 2 curves which are impractical in the model, unitary elastic, highly elastic and highly inelastic curves are also impractical. These all curves are a subset of the competitive market where in fact if we concentrate on real life scenarios in which government and big companies work, no one follows the characteristics of competitive market.

No matter how successful a business becomes, there will be a day when it will lose its competitiveness and market share. Launching a business is hard to do, and ensuring its longevity is even harder. Many businesses may sunk by corporate scandals or because of resistance to change. In the near future even the well established businesses, which are now on a saturation point and which have provided services from many centuries will fail because of continuous change in the pattern of trading, marketing and consumers need. I believe that now small business are more volatile to the changing environment. In the coming years we will see big companies failing at an exponential rate. This is because the bigger a firm is the more inflexible it gets in anticipating and identifying consumer needs[13]. Big companies that have served its market from several decades will soon fade. This happened with the Blockbuster videos. This company was founded in October 19, 1985. It was achieving good market growth and market share till 15 years. The firm was successful in providing what the target audience demanded. The real reason why Blockbuster lost their HUGE customer base over the years was due to one thing: Pride. Put simply: when the whirlwinds of change swept through the movie and video industry, Blockbuster Video stuck to their guns.

In the year 2000, Netflix approached Blockbuster for a buyout deal, priced at $50 million dollars. Blockbuster refused. They were saying, "No thanks. That can't work. Nobody wants a month-to-month subscription to have DVDs delivered to their door"[14].

They believed in their business plan that brought them millions of dollars' worth of success in the past. They believed in their superior marketing advantage as the largest video rental company in the United States. If they ran into a hiccup in the revenue department, they figured that they could increase radio and TV ad frequency to increase the exposure of their brand to other consumer's minds.

But that's not the only decision that killed them. If you are familiar with Netflix, you probably remember that they started to transition from DVD shipments towards online-streaming content around 2007. Their goal was to head off the technology trend at the head, and prepare for a technological revolution in personal computing and internet usage.

Netflix was the first successful, major corporate adopter of the new economy.

Now where was Blockbuster in all this? With the news of Netflix's new business move, Blockbuster Video balked at the idea of entering what was being heralded as "the online revolution". After all, they were a retail-rental company, not a technology company.

After seeing Netflix enjoy tremendous success with their new business model transition, Blockbuster made several other moves to copy Netflix, and their model. Only they were too late. Their customer base had already fled from Blockbuster's field (late fees) to Netflix's greener pastures ("No Late Fees" and unlimited online streaming). Netflix already had complete control over the new industry.

I believe the reason why blockbuster couldn't compete with Netflix was because of 2 reason. One is that a big company cannot change its core objectives and strategies to respond to an outside threat. From the beginning, their specialization was in selling DVDs through physical means but had never provided online movie streaming services. Moreover, since Netflix was in a situation where they could have aligned their team, objectives and strategies in favor of the change, being small at that time had allowed Netflix to quickly respond to the changing demand in movie streaming industry. A newly established small firm is like a steam cell; it has the ability to differentiate and specialize into different pathways. Second big reason for blockbuster for not adapting with the change was the 85,000 workers employed in output process. Netflix on the other hand started competing with blockbuster with only 35 workers. This allowed Netflix to quickly their resources in regards with the needs of target audience.

Now if we see this situation from the perspective of blockbuster videos, demand had become extremely unpredictable no matter what the price was. Firm had no idea of how much to produce to remain competitive. Simply

drawing a demand and supply framework to anticipate would have a least effect to analyze the trading pattern. At this situation things cannot be kept constant. I believe ceteris paribus is a way to convince entrepreneurs that something is true simply because they want it to be true. Without ceteris paribus things fall apart in demand and supply theory, however things become better in practicality without ceteris paribus.

Economies relying on a middle age framework has to work inefficiently, as the thing on which they are relying on is to an extent impractical. Ceteris paribus can never be applied in real life scenarios. It is never possible to keep all other factors constant to assume what effect will occur from factor that is observed. When the factor, which is being observed with ceteris paribus, is introduced to real life scenarios, it will not show the results at it showed with ceteris paribus. As a result, observation is only correct to an extent where it is for theoretical gain. The framework of demand and supply is read with ceteris paribus.

The curves of the diagram does not take in account the market gap. On just one price and quantity, it tells the perfect market clearing point; however, it depends on the producers and sellers situation that at which price they are able to charge the customer. Prices are not constant. It fluctuates according to time flexibility, urgency, eagerness, etc. Trading of goods and services does not take place over a fixed set of laws. There are many factors that influences a perfect trading to take place.

Market gap are the unmet customer needs of a group of potential customers who are not yet purchasing a good or service. This model does not clearly shows the opportunities of companies to expand their customer base and reach untapped markets. In the graphs, there are no entrepreneurs. Instead, the shift of curves is in response to various factors that set prices. For instance, it is held that a shift in the demand curve to the right for a given supply will lift the price of a good. The price will also increase if, for a given demand curve, the supply curve shifts to the left. In other words, the supply-demand framework does not deal with human beings but with automatons that react to various factors. The whole idea that the price of a good is simply given produces the impression that the price is an attribute of a good--i.e., that it is part of the good itself. There is, however, no such thing as a price of a good in general. The prices of goods are established in a particular transaction at a particular place and at a given time.

In addition, the Law of Supply and Demand is perhaps the most frequently cited economic principle by the American press; it is cited every time an oil company raises gasoline prices. But the precise definition of price in the doctrine is "equilibrium price" which is a purely theoretical concept. What relation it has to the actual price is a mystery[15].

When an oil company or an economist claims that the price of gasoline is rising because of increased demand, he/she is weaseling. The precise claim should be that the equilibrium price is rising because of increased demand, but that is never claimed, and even if it were, it would have no relevance unless the relationship between the equilibrium price and the actual price were specified. All equilibrium price means is the price at which the number of units for sale is equal to the number of units consumers buy. But equilibrium is a fantasy. If it is ever attained in reality, the attainment is purely accidental. So the Law of Supply and Demand plays no place in the marketplace.

It is true, of course, that retailers sometimes lower prices during "sales" to rid themselves of excess products. But they do not raise prices when the number of items available decreases. The products are sold at the fixed price until they are gone or are restocked. Even oil companies function this way at the retail level. After a supply of gasoline is delivered to a filling station, the price is set and even if a long line of automobiles forms at the station, the proprietor does not dash out and increase the price to get some of the people lined up to drive away. The same is true of toy makers at Christmas. Often one new toy becomes very popular with children whose parents attempt to buy it. But toy stores do not increase the price when they notice the unexpected demand; they merely sell the toy first come, first acquired until the toy is sold out. So the Law of Supply and Demand is a principle without a practice.

Also a producer will always have a knowledge about his market. His prices can fluctuate from the cost of production to what a consumer can maximum pays. Every business have the power of price discrimination. This is evident every time as consumers have the power to bargain and producers a lot often satisfy the requirements just to keep up with the brand image and brand loyalty. A producer before entering a market decides the expected price that he/she will charge the consumers. This expected price is not always an equilibrium price. It depends on the seller that weather his set price can achieve him everyday goal of expected revenue or some alteration is required for getting near the goal. At which ever price does the trading takes place (except the extreme scenarios where producer sells product without added value or consumer pays the highest possible price) there will always be a consumer and producer surplus. Consumer surplus is the difference between how much consumers are willing and able at the most to pay and what they actually end up paying. Producer surplus is difference between the amount a producer of a good receives and the minimum amount the producer is willing to accept for the good.

Mini Conclusion

To integrate demand signals into supply chain management, you need a solution that brings together input and insights from different teams in your organization and present them on a centralized dashboard to improve visibility, transparency, and the ability to respond to market fluctuations quickly and accurately[16]. The relationship between supply in demand relies heavily on maintaining an equilibrium between the two, wherein there is never more or less supply than demand in a marketplace. It is essential to know that there is no such thing as a price of a good in general. Price is a part of good itself. The prices of goods are established in a particular transaction at a particular place and at a given time[17]. I believe forces of demand and supply cannot set a fix equilibrium price. Ambitions of producers, cost of production and the nature of demand are the 3 components that works together to

set the price of the commodity.

When there is a shift in demand or supply curve, we state that there is an increase or a decrease in price where in fact the precise claim should be that the equilibrium price is rising or falling because of an increase or a decrease in demand or supply.

In order to remain competitive, business will have to eliminate the idea of selling the quantity of goods at fixed prices. Every time a producer in involved in trading process, his equilibrium of quantity and price may be slightly different from the previous trading. Unless the firm is a franchisee or operating as an outlet of well-established firms, every entrepreneur will seek to discriminate prices in order to differentiate and adapt to the external threats and strengths,

Kansos Review

~ All about new framework.

Introduction

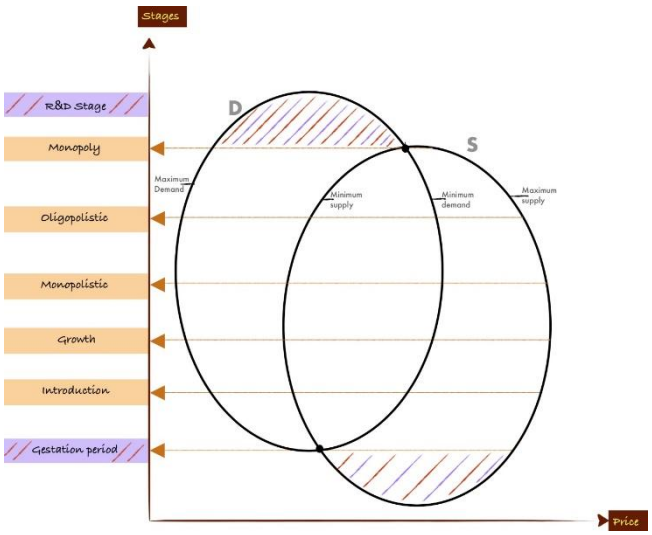
As discussed in the above section, many flaws can be found in demand and supply framework. In a market where a group of consumers and producers buy and sell goods and services, price and quantity exist in perfect harmony. For reading the new framework, it is important to know that weather the prices of goods are set by markets or by firms. In today's modern marketplace for goods and services, we consumers do not typically engage in price discovery. Rather, we go to the supermarket, to the mall, online to amazon or overstock, to the farmers' market, or to the restaurant. When we arrive at these places to shop, we are subject to their prices. Sure, some companies will offer a price-match, some will offer coupons, and some will have sales - but typically we do not haggle and rarely do we buyers say $x is the price I am willing to pay for these apples and I'll simply wait for the price to drop to that level before I buy. The kinds of prices that we are used to are not set by a free market depicted in the supply & demand diagram; they are set by firms[18].

Entrepreneurs and producers play a big role in a market full of competition. They are always finding the untapped markets where consumers are desperately waiting for a product to be launched. They are involved in product development strategies so that rising competition creates less of a problem. Also a firm will want its newly established product to move from the introduction phase of product life cycle to growth and maturation. Such aims and strategies are as important as deciding price and quantity. With the increasing use of technology and online services, demand for the product comes in a variety ways. It becomes difficult for a business to fix an equilibrium where they can trade with their consumers. Firms needs to have a holistic view of their market. No matter what it takes a business to do, satisfying consumers is the most important thing. In order to gain brand loyalty, a firm will have to be flexible in charging prices. Flexibility will allow for growth and image in the market. To face the rising competition, price discrimination is essential for all business. Adding on to these points, the concept of market gap is crucial for any business to identify and anticipate the changing taste and fashion. If a business is aware of the potential gaps that exists between the sellers and buyers, they will become well known to the changes that are required to narrow down the threat[19]. Through this model, producers can view the potential opportunities that exist for an existing product. The framework will show the market gap, which will give the producers an idea of how much alteration is required in the price they have charged so that they reach the untouched customers.

Things to know

A business initially starts with no demand for its product however, when the product is marketed, demand and awareness increases. The new model, which is an alternative of demand and supply, will show how the stages of a product changes with the changes in demand pattern.

Maximum & Minimum demand and supply



In this model, stages go on y-axis and price is on x-axis. Price increases in a horizontal way, from left to right. This is because demand will always exist at low prices and supply will be high when the prices are maximum. This also explains the reason of demand oval being drawn at left and supply at right; it is to follow the fundamental law of demand and supply.

This diagram does not show a systematic movement from one stage to another. A firm can move from monopolistic to R&D or oligopolistic to base Developing directly.

The diagram is divided into 3 sections:-

I. Demand exists but supply
II. Demand and supply Intersection. (Market Equilibrium)
III. Supply exists but no demand.

The commonality between the three sections is that all of them goes under seven stages:-

I. Gestation
II. Introduction
III. Growth
IV. Monopolistic
V. Oligopolistic

VI. Monopoly
VII. Research & development

There are seven stages of business. A successful firm with high market share seek to work in any of the top three stages whereas a newly established business with low market share would work in any of the bottom four stages.

Gestation - Supply is there, but product is not introduced in the market. It implies as the "pre traction" period. In simple words, this stage refers to the time taken for the business to reach a stage where it can start showcasing results[20].

The results could be in form of MVP, first consumer conversation, first sale, first user on app - depending on business. Hence, gestation is the period in which the business is not really a business but preparing to be one.

For example beta mode products and startups who are initially pitching there products to investors, lie under this stage. Gestation stage has no demand as it involves high uncertainty. An entrepreneur always faces high risk when making a decision to startup a firm. No one can analyze that will the product have a high demand or not. Once gestation is clear, the product comes to the business world.

Introduction - Low priced products of standardized quality or if good amount of investment was done in gestation period, high prices could be charged for high quality. Very little demand exist in the market as it is a stage where people are being introduced to the brand new product. Firms will be investing a large sum of money for marketing the product in order to reach at a level where they would become competitors. Introductory stage is considered one of the most crucial and significant part of a product for becoming successful. It is a stage where consumer's likes and dislikes are instantly analyzed. Owner gets the feedback and likelihood of its product surviving in the market in a very short period. If introduction goes successful, firms can make big decisions and aims for their product and business as the chances of these decisions going successful increases immensely. Firms are then also indicated that it is the perfect time to change their business objectives.

Growth - This is the time where business seeks to achieve their big aims and objectives. A lot many changes occur in the business structure . A more specialized group of employees are employed to handle high and increasing demand. Working process of the firm changes as it should become more productive and fast. Innovative techniques and thoughts are introduced in the firm in order to stand out of the competitors and to increase brand image and brand loyalty. It is also the time where leadership style needs to be changed to handle the firm and to keep it in flow. It is a time where business departments are made and everyone are to specialize in it. An intense recruitment process takes place for employees.

Monopolistic - Many firms become monopolistic of there substitutes as they grow big. Prices of these firms are at the equator. A slight rise in any of the firms price would significantly reduce its total revenue. A slight fall in firms price will not give any impact on the total revenue as other competitors will instantly react to these market changes. In order to control and become king of this market, New offers needs to be introduced for the product that does not only change and focus on the price of the product. Innovative ways of promoting the product needs to be introduced for earning greater than the rivals. In monopolistic competition a firm has grown immensely, now products that have already fulfilled the demand of the customers are fighting.

Oligopolistic - Limited supply exists for big market. High prices and high quality goods are sold. Low advertising is required as market over flows with high demand. Firms can keep a high range of profit margin when selling as there demand is usually inelastic in nature. For this model, collusive oligopoly is not considered. Collusion shares more of its characteristics with monopoly than oligopoly.

Monopoly - One seller and rest of them are buyers of the product. No direct or indirect competition that exists for the product. Due to the product being a need which will be highly demanded, owner can either focus on the quality or price. Monopoly is one of the most profit making market structure. However to work in such type of industry, a person is required to have a lot of innovation, creativity, materials and big ideas to make a product which is entirely new and essential for human.

Research and development (R&D) - This is a stage where demand exists but no supply. Scientists, inventors and engineers are constantly working on things that humans desperately need and want for example flying cars and cures for deadly diseases such as HIV and diabetes. R&D is gathering, analyzing and making future things as soon as possible. Innovation, creativity and patience is what makes R&D go successful. Simply, it is a series of investigative activities to improve existing products and procedures or to lead to the development of new products and procedures[21].

Mini Conclusion

- In gestation stage, business is not really a business but preparing to be one. Business idea is well thought, which can be sold at any price.
- In introduction phase, due to lack of information, the supply succeeds the demand.
- In growth stage, demand for the product picks up in the market, leading to increased consumption.
- In monopolistic market, stronger brands have assured demand.
- In oligopolistic market, the supply is restricted because of the constituents profit motive.
- In monopoly, higher profit desirability leads to inelastic supply and accordingly inelastic demand.
- R&D stage is where new products and procedures are being created. No close substitutes of the product once it is launched.

Assumptions

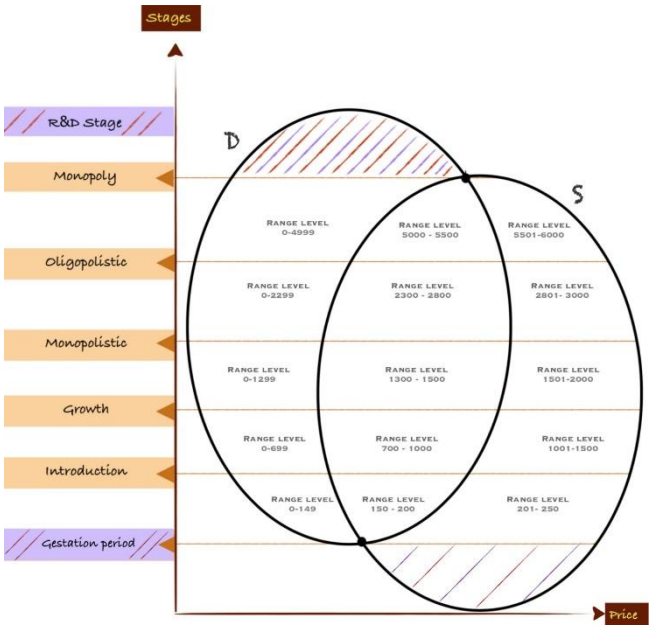
1) Market is volatile. It is liable to change rapidly and unpredictably. Increasing competition meaning increasing volatility.
2) All the stages except gestation and research and development stage, has the power of price discrimination. This is because producers who are

involved in product making process and entrepreneurs who are involved in maximizing profit have a very good knowledge about the market they are working in. consumers on the other hand are always in a dilemma of price of the product and quality of the product. They can only strengthen their market knowledge by comparing the product form its close substitutes. However, they always confront a situation where high prices makes them think of high quality goods. This mindset hinders their market knowledge.

3) It is assumed that as price increases, quantity increases. Price determines the quantity and good is a part of price.

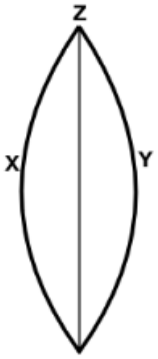
Price System

Price system



This model does not work on a fixed price and quantity. There is a range of price in the trading region (where the demand and supply intersect) where the producer can make a deal and sell the goods and services. For example in the growth stage of the above diagram, a producer may sell the commodity in any price ranging from 700-1000. In this price range, 850 ([700+1000]/2) will be the producer's market price. A price, which he/she expects to sell the good. Price of 700 and 1000 are the two extreme prices on which the trading can occur. Only In rare cases, it is visible that producers or consumers are willing to sell or buy at such price. If for instance a consumer have a very good knowledge about the market and his bargaining power is strong, he might get successful in purchasing the product at the lowest minimum cost of 700. At this price, there is 100% consumer surplus and 0% producer surplus. 700 is a normal profit-earning price where cost of producing it is covered but no added value is incurred. As a result, net profit after selling the good remains zero. Such type of trading can be found in gem stone market or where product is sold from business to business. When a producer sells the good to other producer, trading price is only set to an amount where normal profit is earned. This is because the buyer will have a perfect knowledge about the product he buys from other business as a result in case of B2B trading is often done below the market price. On the other hand, if trading is done on a price of 1000, producer earns the maximum that he could from selling the product. Producer surplus is maximum at this price and consumer surplus is the minimum. This is also a rare scenario but is seen more often than least price trading (trading at 700). For such high prices to be charged, producer takes the advantage of short-term opportunities where demand gets highly inelastic or where the customer has a poor knowledge about the market. For buying the basic products such as vegetables and fast moving consumers goods, children's are not sent alone to buy the commodity. This is because of the fear of price exploitation where producer will take the advantage of a young child and may charge the maximum amount he/she could pay.

Producers are aware of how much cost is incurred in the production of the good they offer. The urgency of selling the commodity is one of the pressuring factor that makes the prices to fluctuate. The trading region shows that the business can either maximize profit and earn the greatest revenue from the product or sell the commodity without any added value (no loss no gain).in the practical world, trading does not take place with ceteris paribus. For the same product, prices fluctuate due to several different factors. It depends on the producers, why they choose to sell below market price or at higher price. However, a business will never sell its commodity below cost of production.



The equilibrium is divided into 3 parts.

- An invisible line that dissects the area equally into two parts (Z).
- (X) Holding the minimum price.
- (Y) Holding the maximum price in the price range.

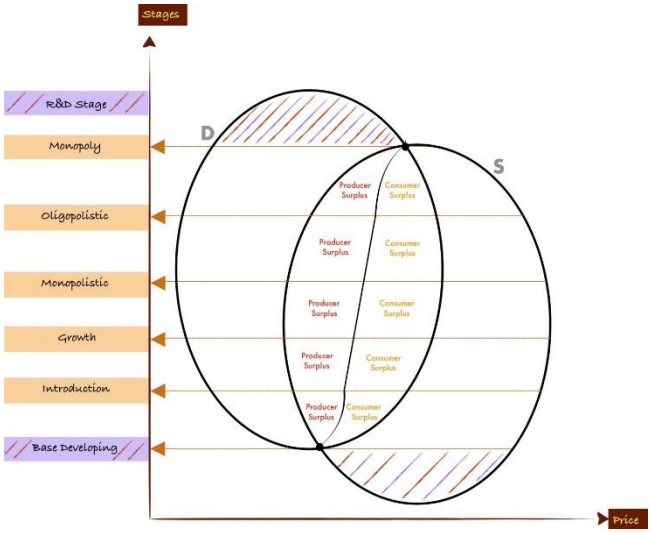
Trading can occur anywhere between "X' and "Y" area.

Several factors that makes the price of the good to fluctuate from market price in trading are-

- **Time flexibility** - If a customer have a limited time to gather all the resources for an occasion or due to some other reason, producer might get the opportunity to charge prices higher than the market price.
- **Requirements and desires** – If a producer is facing hardship with his working capital or if there is a need to earn revenue to pay of the debts, he might lower the prices, below the market price to increase demand and revenue.
- **Relatives and friendly favor** – People who are close to the producer are charged with low prices, near to the minimum price, as to enhance family bonds.
- **Discount** – During discounts, prices are lowered than the market price to remove the old stocks for new collection.
- **Limited Edition** – Since the product is out in market for a limited amount of time, high prices are imposed because of its virility, time inflexibility and limited supply.
- **Seasonal benefit** – During summers woolens and warmers

have a very low demand. At such off-season, prices are reduced to near minimum amount for keeping a sustained demand.

- **Market knowledge** - A producer can play with consumer and charge high from them if consumers have no knowledge about the market of that product.
- **Consumer loyalty –** Consumers who are regular buyers of a firms good, often request for low prices and discounts for their loyalty.
- **Nature of good –** Food products such as vegetables and fruits are perishable in nature. At the start of a day, prices would be inflating due to its freshness however, by the day ends, prices are lowered just to avoid rotting.
- **Competition –** Till the time competition is low, and there are no close substitute of the product, firm can benefit from greater monopoly power and charge high prices. In times of intense competition, business might be forced to charge only till the amount cost of production is covered.



Concept of Producer Surplus and Consumer Surplus

Price range incorporates the idea of consumer surplus and producer surplus. Consumer surplus is the difference between how much a consumer is willing and able to pay for a good and what he actually pays[22]. In an equilibrium if a price range for a product in introduction stage is for example 2$ - 10$ and the trading takes place at 4$, then consumer surplus will be of 6$. This is because, the producer could have charged the maximum price of 10$ which the consumer was capable to pay, however the producer charges 4$ less, which becomes consumer surplus. If the trading takes place at 2$, consumer surplus is maximum of 8$. 2$ is the minimum price that a consumer could have paid for the commodity. If trading takes place at 10$, consumer surplus is 0. 10$ is the maximum price a producer was willing to charge, and if the consumer pays it, he/she will gain no benefit.

Producer surplus is the difference between the amount a producer of a good receives and the minimum amount the producer is willing to accept for the good[23]. Let us take the same price range of a product which is in introductory stage, 2$ - 10$. If the trading takes place at 4$, producer surplus will be of 2$. This is because 2$ was the least price that a producer was willing to trade his product. If he receives a price of 4$, producer will gain additional 2$ as a markup. This becomes the producer surplus. If the trading occurs at 10$, producer surplus is maximum of 8$. 10$ is a price which a producer aims to sell. It is the highest price a consumer could pay. If the trading takes place at 2$, producer surplus is 0 as there is neither a gain nor a loss.

This concept can be shown in the model by bisecting the equilibrium into 2 equal parts. The bisecting line will show the market price of the product. If the producer charges more than the market price, producer surplus will be greater than consumer surlus. If the producer charges less than the market price, consumer surplus will be greater than producer surplus.

Concept of Elasticity

In this model, it is demonstrated that if the demand is high and supply is comparatively low, the nature of market is inelastic. When demand is low and supply is comparatively High, nature of market is elastic. In real scenariors, if supply is in abundance and the demand for the product is low, then the limited customers will have great number of supply to choose from. When Supply is high demand is more flexible. Thus an elastic trading will take place where customers will have more power than suppliers.

When demand is in abundance and supply is low, producers will have greater power. Product supply is limited and buyers are high, the market is less flexible. Customers will have no choice but to be satisfied by the good that is available at which ever cost. Thus inelastic trading takes place.

This is an important concept for understanding the framework. If we consider oligopoly stage of this model, it can be seen that the area of the 1st section (demand exists but no supply) is more than the area of 3rd section (supply exists but no demand). This tells that demand is comparatively more than the supply, and hence the nature of market is inelastic. Producers have more power than the buyers, which enables them to charge high prices for the commodity.

In monopolistic stage, the area of 1st section is equal to the area of 3rd section. This shows that the distirbution of goods and serives between the producer and consumer is in balance. Neither the buyers nor the sellers of the product have an additonal power over the market. Hence excess demand equals to excess supply which gives use a unitary elastic market.

In introductory stage, the area of 1st section is smaller than the area of 3rd section. This indicates that supply is in greater quantity than the demand. Consumers gain greater power than the producers. Their requirments will need to be addressed in the most efficient manner to gain some customer loyalty. Supply is greater than demand which makes the market more flexible.

Research and development and gestation stage are the 2 extreme stages where in one, their exists no demand and in

one there is no supply. In R&D stage, nature of market is perfectly inflexible (perfectly inelastic) where for demand there is no supply. In gestation stage, nature of market is perfectly flexible (perfectly elastic) where for the supply, there is no demand. This makes market research important, in gestation stage so that those goods and services are produced which consumers actually want.

Hence it can be seen that from the initial stages of gestation and introduction to monopoly and research and development, nature of market changes from higly elastic (flexible) to highly inelastic (inflexible).

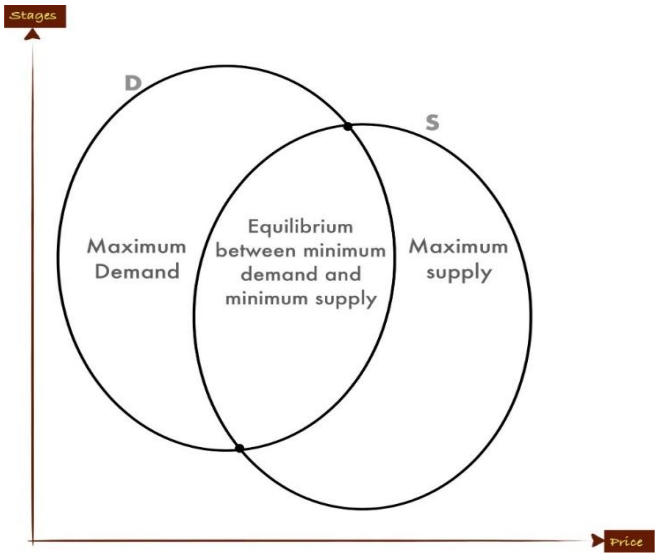
Concept of Quantity supplied

In this model, quantity of product produced in the equilibrium region will always remain only one unite. For that one unite of supply, different costs are potrayed which a producer can charge to his potential buyers. Beyond this equilibrium region (which is known as the 2nd section), in the 1st section, there is no supply of the product. This is because the cost of producing the good is more than the price which the conusmers of that 1st region are willing to pay. 3rd section where supply exist but no demand can be caused by many reasons.

These can be the product which costed more than the average cost of production. It can be caused by wrong resources used for making the product, communication barriers, breakdown in technology, short term labour unproductivity, mistakes in production line or cost of additional quality assurance on few products.

Off season stock pile up which caused there prices to rise more than the equilibrium prices. So to sell these excess products, producer will have to charge the market price below the cost of production.

Maximum and Minimum Demand



Law of demand states as the price rises, quantity demanded falls. Law of supply states as the price rises quantity supplied increases[24]. With price in X - axis increasing from left to right, demand will be greatest at left side and it will keep on lowering as the price increases towards right. Supply is minimum at left side and maximum at right side. This is because producers will supply maximum goods at highest prices. Trading region is at between minimum demand and minimum supply.

This has 2 reasons:-

- This is the area where there is nether excess demand nor excess supply. Neither overprovision nor under provision of goods and services in the equilibrium region.
- Consumers will try to maximize their utility. These are the goals of a typical consumer. Consumers will always try to move from minimum demand to maximum demand market. As their income and purchasing power increases, they get closer to achieving their goal.

Concept of shift and movement of the curve

This model does not show a movement along the demand curve. Which is a movement that occurs when a change in the quantity demanded is caused only by a change in price or vice versa. In the equilibrium region it is not only the price that influence the trading. Many other factors cause the movement as discussed above.

When the complete circle of demand moves, it is a shift in the demand curve. It causes an overall increase or decrease in the demand. One of the factors causing the shift is income. When the shift occurs, it is not only one product that benefits with high demand, all the products in the 7 stages will benefit.

In this model if the supply curve shifts to left, price falls as the price range decreases. If the demand curve shifts to right, price range increases. Shift in demand towards right signals the producers to increase their profit markup.

Demand shifts right - It is an indicator of growth as well as rising inflation. It shows that income of people have risen causing an increase in purchasing power. People who cannot afford to be in the market of maximum supply, they will still trade at low prices where profit markup is low. Those whose incomes have risen can play in maximum supply and can maximize their utility.

Demand shifts to left - It shows that profit markup is reducing. When the demand falls, stock will rise, as supply is not available at the price consumers are willing to pay. It will cause lower equilibrium price and lower quantity trading. This is an indicator of recession and poor economic growth. With excess supply pilling up, unemployment will tend to rise. Normative economic statement.

Supply curve shifts to left - More trading at low prices, caused by technological advances, subsidy or direct government provision. Cost of production will fall, as a result the gap between the minimum price and market price will lower.

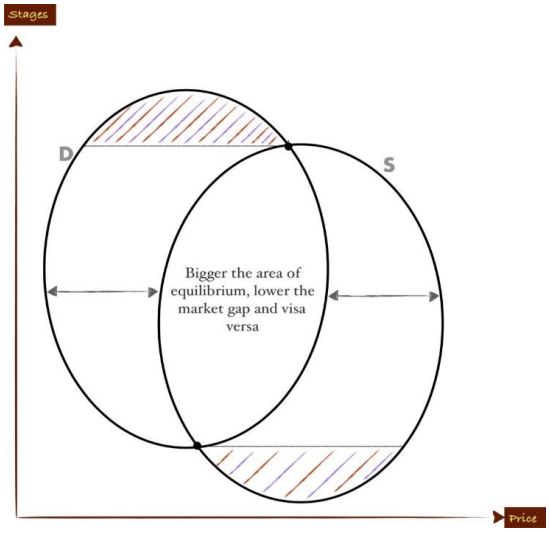
Supply curve shifts to right - Less products will be supplied. This is due to less deviation in the price range. Trading of goods and services will fall. People will be worse of as demand won't be fulfilled and suppliers won't gain high revenue.

Concept of Market Gap

Market gap is the unmet needs of a group of potential

customers who are not yet purchasing a good or service. As the area of equilibrium increases, market gap reduces. Shift in the demand and supply toward each other will reduce the market gap. This is because more people will purchase goods and services offered by the producers. There are two conditions of rising market gap. First condition is when supply shifts to right. Second condition is when demand shifts to left.

Market Gap



Market gap is shown by the area that is either side of the equilibrium. If the equilibrium occupies greater area, market gap is minimum as the area of excess demand and supply will reduce. If the equilibrium occupies low area, market gap is high.

Note

It is not necessary that if equilibrium prices are high, trading will fall. Trading can increase at high prices if demand curve shifts to right keeping supply constant. This indicates that a qualitative trading is taking place in the economy. Making people better off due to rising living standard.

Theory Evaluation

I believe that the assumption of ceteris paribus has limited the scope of economics. The pace of change in this globalized world is fast. In 2016 it was recorded that every hour 80 companies were born. To face this intense competition, business are willing to shape their company in any format that is desired by the people.

Competition forces a firm to keep differentiating its product in a tangible or in an intangible way. Price discrimination is one of the intangible way to differentiate a product from its close rivals. Kansos theory proposed above is created to tackle the emerging problems arising from the current dandelion market where there is not a fixed price set to trade the goods and services of a business. Producers now have complete hold of the market they are working in as now only those businesses sustain who have some goodwill in the society. Once a buyer is aware of firm services and they show a loyal response in their buying pattern, a business gains power to alter their prices. This is a general pattern, which is followed by almost all businesses currently operating in a market. It can be seen that no two business offering similar product have identical prices. For a similar product, many prices can be explored depending on its quality. Those customers who are willing to pay at its least price and those customers who are capable enough to pay high price for high quality, they both will be on the same equilibrium level. However those buyers who are unable to pay even the lowest price of the product and those suppliers who are not willing to supply the product at even the most maximum price that the market can afford and sustain, it will result in the formation of a market gap where demand and supply will remain unmet. This is the point where new suppliers and businesses get an opportunity to innovate in order to tap into the market where large pool of potential customers are available but at a price where existing producers are unable to supply. This is the practical approach taken up by the markets for which the Kansos is created.

IV. DISCUSSION

Both the economic models are evaluated in the research paper. Widely accepted demand and supply framework was critically analyzed and was then brought to a conclusion that its results are no longer effective in the current dandelion market. Demand and Supply framework was significant during early ages when competition faced by business was minimal. People had more value for money then due to which they were highly sensitive to a sudden fluctuation in price of a commodity. After rapid industrialization and globalization where it has now created more openness and has provided abundant choices, people are now slightly affected from fluctuating prices as they are now adapting to this new convention of trading.

If trading of goods and services are done on fixed prices and quantity, it will become extremely difficult for a firm to sustain in this fluctuating market. Consumer relationship is built on the basis of price charged for the product. Discount, quality, depth of customer relation and many other factors that were stated above affects the price of a product. Due to these different factors, prices cannot be fixed for a set of quantity. After considering all these factors that a business faces in practicality, it was becoming evitable that the pre-existing demand and supply models were becoming ineffective as its concept was valid only till the time businesses were establishing and people were hesitant in opening one.

The new economic concept proposed in this paper talks about a different approach we should take when analyzing demand and supply of the competitive market. It is the price of the product, which decides the quantity, but not the quantity of it, which decides the price. Quantity is an integral part of price and as the price increases, quantity increases too.

Formation of market gap, close relationship of different market structures and basic economic concepts has been made more clearer and practical under Kansos framework.

V. ACKNOWLEDGEMENT

This research was partially supported by Gunjan Raisinghini, head of Neerja Modi School economics

department. I thank my colleagues from Manipal, Hong Kong and New York universities who provided insight and expertise that greatly assisted the research, although they may not agree with all of the interpretations of this paper.

I thank Alok Jain for validating my proposed theory and for his crucial comments that greatly improved the manuscript.

I would also like to show my gratitude to the Neerja Modi School for sharing their pearls of wisdom with me during the course of this research, and I thank Shane Pancherz's critical reviews which has strengthen the new theory.

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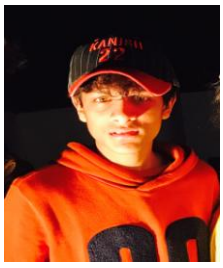

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