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Conceptual Analysis of the Media Business Through Microeconomic Perspectives

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ABSTRACT

One of the most important lessons economics can provide is the understanding of the art of balancing expenditure and savings. Consumers often struggle to control their spending when it comes to the consumption of media content. Resources are not abundant. Therefore, no amount of production can justify the wants of the people. While a large section of the mass media (e.g., television, social media, etc.) is free to consume, the question remains: if not money, what else are we paying for? Therefore, understanding media consumption requires a deeper understanding of microeconomic factors, especially for marketers and advertisers.

The study applies the interdisciplinary approach to connect two social science disciplines, economics, with media and communication, to apply the theoretical concepts of microeconomics in understanding media businesses. Conceptual analysis was used to explain the economic concepts of consumer demand, utility, indifference curves, goods substitution, and consumer equilibrium to understand content consumption from a media and communication perspective. It is to apply the mentioned concepts in the media and communication industry, using graphical, mathematical, and statistical methods, with pertinent examples that help in understanding and predicting consumers' utility and preferences for a particular product, or a good or service bundle. The microeconomic concepts are explained throughout the study, highlighting the importance and application of business concepts to further evaluate media businesses. This will not only help in understanding the industry's dynamics but also in deciding the appropriate strategy for media businesses, while ensuring economic benefits for the organization and investors. The understanding will help marketers not only understand consumption patterns but also design their promotional campaigns with clarity and efficiency.

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INTRODUCTION

Every student or enthusiast who studies economics comes across a point when they wonder why they study economics. While some might study the discipline as a way of earning money or understanding the dynamics of supply and demand, grasp the idea of inflation and its impact, or be able to work in a predefined sector. One of the most important lessons economics can provide learners is understanding the art of balancing expenditure and savings (Marangos, 2002). While discussing spending, most consumers constantly struggle to control their spending in the media. It may seem ridiculous because a large section of the mass media (e.g., television, social media, etc.) is free to consume. However, if not money, what else are we paying? Therefore, understanding media consumption requires a deeper understanding of microeconomic factors, especially for marketers and advertisers (Backhouse & Medema, 2009).

At the very core of understanding the dependence of media on economics is understanding the solutions offered by the discipline of economics. It answers the questions of why government, business, or household behave in a certain way, Why it is easier or difficult for a person to get a job, why the government faces a budget deficit, what are the reasons behind inflation or deflation, why there is pay disparity between gender, why some people are richer than most, while some are poorest, why some goods are produced at a lesser price in some countries than others, and similar (Bye, 1939). The knowledge of economics also helps us understand an individual's life, society, and economic policies, including media regulations and controls. Tracing the origins of economic understanding, Adam Smith laid the foundation in 1776 with his book "Wealth of Nations". After a century, the capitalists entered railways and textiles, followed by other sectors with opportunities for expansion and profit. Karl Marx, in 1848, criticized the capitalist system and predicted economic depression, government-run socialism, and revolutionary upheavals. John Maynard Keynes later added knowledge of the understanding of monetary and fiscal management to the discipline in 1936 in his book "General Theory of Unemployment, Interest and Money" (Maynard, 2003). The scientific understanding of problems in economics relies on four primary methods: observation, analysis, statistical measurement, and experimentation (Maynard, 2003; Pal *et al*., 2022). Similarly, economics provides knowledge about the media industry and individual media consumption, as the industry and its consumers are integral to the economy and contribute to the nation's growth and development.

The scarcity and choice

Resources are not abundant. Therefore, no amount of production can justify the wants of the people. Resources can be allocated based on consumers' choices and necessities, while there is always an opportunity to choose the next best alternative when alternatives are available (Verhallen, 1982). Scarcity is an economic term that bridges the gap between 'limited resources' and 'limitless wants' for consumers. Marketers artificially create scarcity on occasion to stimulate demand for products or services. Stimulated market demand may improve that brand's market performance (Shi & Chumnumpan, 2020). The "commodity theory" proposed in 1924 by the Soviet legal theorist Evgeny Pashukanis stressed the "psychological effect of scarcity" that emphasizes that an individual pays more attention to an object that is scarce than to an object that is abundant. The theory also has three parameters: "commodity," which should have the qualities of being 'useful', 'transferable', and 'the potentiality to be possessed', followed by the second parameter, "value", which resonates the 'utility or desirability' and the third being the "unavailability" leads to scarcity (Lynn, 1991). Advertisements help marketers to create a sense of scarcity among consumers. This method of pulling consumer demand has often proven effective with a compatible pricing strategy. E-commerce platforms often use this strategy during specific times of year, calling on consumers to purchase from limited stock. The 'scarcity' is also used in the content creation to amplify the impact and exhilarate the purchasing process.

Positive and Normative economics and media Connections

While economics as a discipline spans both science and the arts, most economists tend to categorize it as either a science or a social science. Economics involves analyzing human behavior, distinguishing

between positive and normative statements, and answering the complex questions economists often encounter (Backhouse & Medema, 2009). Where positive economics answers questions about the facts and behaviors of an economy, normative economics focuses on ethics and value judgments (Hurley, 2000; Friedman, 1953). Both normative and positive economic analyses are closely linked to media consumption. For example, positive economists may try to determine how many households in rural areas have access to cable or DTH connections; therefore, the government can create public service advertisements focusing on specific rural issues such as education, healthcare, poverty, child marriage, iodine deficiency, etc., with greater intensity. On the other hand, positive economists may ask questions about the impact of allowing 100% foreign direct investment in media, subsidizing media sectors to create more jobs, and lowering the unemployment rate, etc.

Application of variables

In simple terms, variables are components whose values vary. It is essential to analyze statistical data representing a given sample or population (Kaliyadan & Kulkarni, 2019). Variables can be categorized in multiple ways; however, there are three distinctive ways through which the broader categorization can be done. They are based on "causal relationship," "study design," and "unit of measurement" (HKT, 2021).

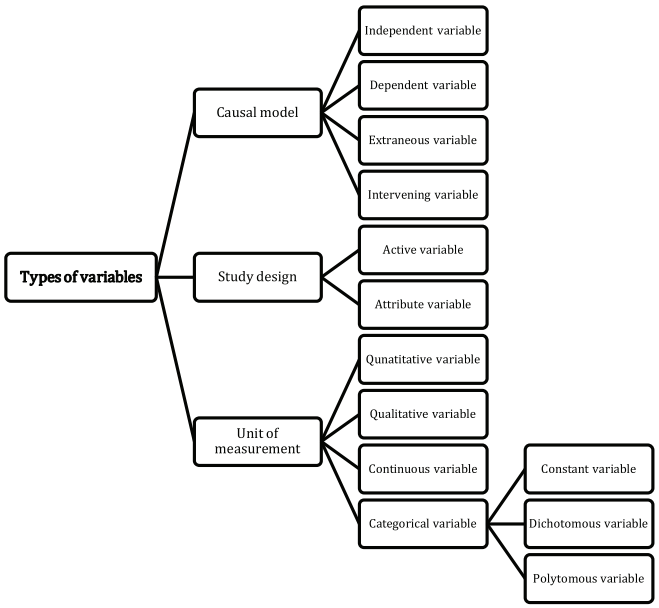


Figure 1: Types of variables.

"Independent variables" are responsible for introducing changes in phenomena, circumstances, and situations that remain unaffected by other variables (Peterson *et al*., 1982). For example, the changes in the behavior of the male audience of 18-years once they are exposed to the different levels of violent content on OTT have 'age' as the independent variable. On the other hand, dependent variables change with respect to other variables (Peterson *et al*., 1982). In the previous example, where 'age' was an independent variable, 'behavior of the male audience of 18-years' is a dependent variable that changes depending on the level of exposure, individual perceptions, etc. Factors that are neither independent nor dependent variables and may affect the results are called extraneous variables; it is important to identify and measure their effects (Rosenberg, 2017). For example, when measuring the behavioral changes of alcoholic adult males before and after the exposure to surrogate advertisements from an alcohol manufacturing brand, where 'gender' is an independent variable and 'behavioral changes' is a dependent variable, extraneous variables can be the personality, physical setting, time of the day, etc. Intervening variables are the factors that define the relationship between the independent and dependent variables. Sometimes, the presence of an intervening variable is crucial to explain the relationship between other variables (Maze, 1954). An example could be the case of measuring the trust of the audiences on the media platform when they are interpreting the news content efficiently, and the intervening variable can be the 'media literacy' that determines the degree of acceptance as well as the level of understanding of the media platform for the audience.

The variables can also be categorized according to the "study design" into two distinct categories: Active variables are independent variables that are often manipulated or controlled by the researcher. It is often referred to as a manipulated variable, which is used to observe its impact on other dependent variables (Kaur, 2013). For example, during an experiment testing children's (below the age of five) learning progression from exposure to popular jingles or rhymes, a researcher can introduce a reward system to encourage the children to follow the instructions. On the other hand, attribute variables cannot be manipulated,

although they vary across entities and observations. These variables are beyond the researcher's control and reflect certain population characteristics (Kaur, 2013). For instance, while studying students' learning models across different circumstances, the students' age, gender, and motivation remain constant and cannot be manipulated.

Based on the unit of measurement, variables can again be divided into four distinctive categories. Quantitative variables are designated to collect quantitative data that can be quantified while measuring the variables. Quantitative variables can be continuous or discrete (Kaliyadan & Kulkarni, 2019). For example, the participants' height, weight, age, etc., are considered quantitative variables during a study to determine the correlation between exposure to beverage advertisements and beverage consumption. Qualitative variables are generally expressed in tables or categories, which cannot be measured numerically. Qualitative variables are often called categorical variables because of the nature of sorting the variables into categories (Kaliyadan & Kulkarni, 2019). For instance, in a study measuring the impact of political news coverage on the number of newspaper subscriptions, educational qualification can be treated as a qualitative variable. Continuous variables are also quantitative and can take any value within a specific range. Frequency tables are often used to measure continuous variables (Altman, 1991; Kaliyadan & Kulkarni, 2019). For example, in a study measuring participants' height, weight, and age, the variables are categorized into equal frequencies and can be treated as continuous variables.

Categorical variables are a form of qualitative variable that help sort data into distinct groups or categories. The observations are sorted into categories based on their qualitative properties while using this variable (Kader & Perry, 2007). For example, when evaluating the impact of traffic rule posters on onlookers, the posters can be categorized into bicolor, tricolor, and multicolor categories. The categorical variable can be divided into three categories: a constant variable, whose values cannot be altered and remain static throughout the equation (Bergna *et al*., 2016). For instance, the number of news channels remains constant when analyzing the political news coverage for a longitudinal study. A dichotomous variable consisting of only two values, two mutually exclusive categories (Muthén, 1978). Examples of dichotomous variables could be "yes" or "no," "pass" or "fail," "present" or "absent," etc. A polytomous variable has more than two values and is considered a multi-category variable that can be arranged in order (Lee *et al*., 1992). For example, "male," "female," "non-binary, "strongly agree," "agree," "undecided," "disagree" strongly disagree," etc.

Equilibrium

Equilibrium indicates a situation where variables are balanced; therefore, the pressure to change the variables is not exerted. Equilibrium also indicates economic changes. When we know the equilibrium price, the path to reach that price becomes constructible. The stable equilibrium, on the other hand, stipulates the changes in the value of the variables in smaller amounts. Equilibrium can be either unique or multiple. Unique equilibrium occurs when a single set of prices satisfies the equilibrium conditions, and multiple equilibria occur when multiple sets of prices satisfy the equilibrium conditions (Shoven & Whalley, 1992). Equilibrium analysis can be of two types: static and dynamic. Static analysis concerns the relationship between a system that must satisfy equilibrium, whereas dynamic analysis addresses broader consequences, such as the inclusion of the 'cubweb theorem' (Travis, 1945). An example of Static analysis is when demand equals supply, or when MR (Marginal Revenue) = MC (Marginal Cost). Whereas the "Cubweb Theorem" is an example of dynamic analysis. When an OTT platform delivers the exact volume of content to viewers, and the demand for that content matches its supply, the equilibrium can be found through "static analysis".

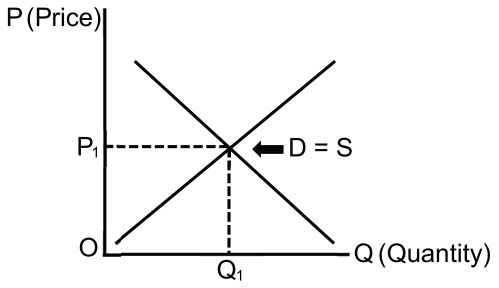


Figure 2: Graphical representation of Equilibrium, where P = Price, Q = Quantity, and Demand (D) = Supply (S).

Sometimes, it is essential to study a niche market, or a related market, or groups that are isolated from the rest of the economy, and the changes that are made within that economy do not create any broader economic impact, where "partial equilibrium" is applied (Bastianello & Fontanier, 2021). For example, the sudden increase in the horror content in the Bengali OTT platform in West Bengal that challenges the balance of the variables like subscription price, content duration, etc., however, the same content, because of its regional and native approach, hardly impacts the national or global market of the same genre. "General equilibrium", on the other hand, compares two different good and their exchanges. Here, equilibrium is achieved when the MRS (marginal rate of substitution) between those two goods = the relative price of those two goods (Shoven & Whalley, 1992). An example could be the connections between different content and technological exchange within the media industry that can affect industries that deal with similar content. The "partial equilibrium" is restricted, therefore manageable, whereas the "general equilibrium" is broader and more inclusive in nature. However, the equilibrium is challenging in the case of a "Giffen good," where the demand for the product increases with the increasing price of the product. This phenomenon defies the law of supply and demand, as there are lesser-known substitutes available in the market (Dougan, 1982). For example, if the price of a DTH (Direct to Home) subscription increases, the demand would increase in case of a war, where, despite the higher price, people would like to be informed about the war and its development, as they have hardly any option available in the market that can substitute a DTH connection.

Research gap

The existing studies mostly address various areas of economic development, challenges, and innovations across verticals; on the other hand, studies concerning the media industry are also largely focused on media-centric developments, challenges, and trends in the media and related industries. Therefore, this study bridges the gap between two disciplines by integrating relevant microeconomic concepts into the media business to provide an understanding of their application and to further examine the challenges and opportunities of the media business from an economic perspective.

MATERIALS AND METHODOLOGY

The study applies the interdisciplinary approach to connect two social science disciplines, economics, with media and communication, to apply the theoretical concepts derived specifically from microeconomics, and apply them in the media and communication to understand the economic forces that shape content consumption (Klein, 2007). The methodology used for this research is the conceptual analysis, which clarifies and explores concepts from a particular field or from multiple disciplines. Conceptual analysis has a long and revered tradition that connects it to the very origin of philosophy. Over the years, studies have been conducted connecting conceptual analysis with metaphysics, two-dimensional semantic frameworks, a priori deduction, etc., that establish the validity of the method for explaining an existing phenomenon using a different set of variables, applied in similar but unexplored circumstances. This method also involves breaking complex ideas or concepts into meaningful parts that help better understand their implications and applications. The conceptual analysis involves "definition", "clarification", "decomposition", "comparison", "contrasting", contextual analysis", "application", and "implementation" (Laurence & Margolis, 2003). This study uses a conceptual analysis to break down the microeconomic concepts applicable to understanding the media business.

This study targeted selected economic concepts, including consumer demand, utility, indifference curves, goods substitution, and consumer equilibrium, to understand content consumption from a media and communication perspective. This reflects the objectives of the study, which aim to apply the mentioned concepts in the media and communication industry using graphical, mathematical, and statistical methods, with pertinent examples that ultimately help in understanding and predicting consumers' utility and preferences for a particular product, or a good or service bundle. The understanding will help marketers not only

calculate consumption patterns but also design their promotional campaigns with clarity and efficiency.

DISCUSSION AND RESULTS

Individual demand analysis

Analysing individual demand is important for a marketer to understand the demand for a certain commodity in the marketplace. Individual demand identifies the quantity of a good that an individual is willing to procure at a given time, at a given price, keeping other things constant. As it is a multivariate function, it has a number of determinants: "price of the commodity", "price of the other commodity", "consumer income", and "consumer taste" (Biørn & Jansen, 1983).

Therefore, the market demand = ∑ all the individual demands

Therefore, if Dx is the market demand, and Dx_1, Dx_2, Dx_3, Dx_n are the individual demands

Then $Dx = \sum^{n} Dx$

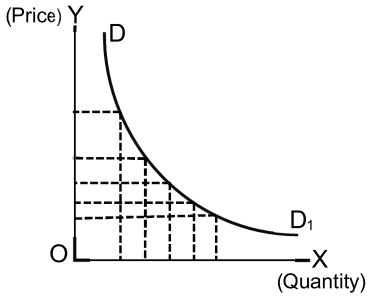


Figure 3: Graphical representation of D, D_1 curve, the demand curve.

The law of supply states that demand increases as the price of a commodity decreases and decreases as its price rises. The law also states that the demand curve shifts outward when the consumer's income increases, holding the price of the commodity constant (Biørn & Jansen, 1983). For example, when the subscription price of an OTT drops, then there is an increase in demand from subscribers who are willing to enjoy the benefits at a lower rate, and when the price of the subscription increases, the demand drops, and the platform may experience a loss of some of its existing subscribers. Similarly, when an individual's income increases, he may subscribe to a higher-variance plan or to a greater number of similar platforms.

Table 1: Changes in the quantity demanded as the price changes.

Price (₹) of channel subscription	Quantity demanded (units)
8	10
7	20
6	30
5	40
4	50
3	60

The quantity demanded changes for an individual as the price of the good or service changes. For example, Table 1 shows that the quantity demanded for a channel subscription increases as the subscription price changes. Therefore, the quantity demanded is adversely related to the price of a good or service for an individual.

Now, individual demand for the channel subscription may vary across individuals. For example, if there are three individuals who wish to subscribe to the channel in a market, and for person X, the quantity demanded is 10 units, for Y it is 12, and for Z it is 9, at a price level of 8.

The market demand (Dx) = 10 + 12 + 9 = 31

Income demand

Demand for a particular product also depends on a consumer's income level. Income demand indicates the quantity of goods or services a consumer is willing to purchase at various levels of income (Schultz, 1935; Biørn & Jansen, 1983).

With the increased income (Y_1, Y_2, in Figure 4), the *quantity purchased also increases* (Q_1, Q_2, in Figure 4), as the demand function is denoted by D = *f*(y). However, the quantity *consumed starts to decline* (Q3 in Figure 5) in the case of *inferior goods or services*.

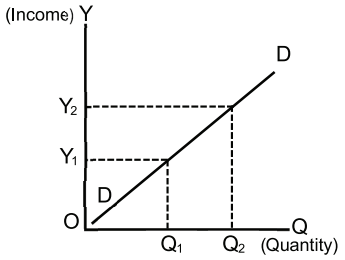


Figure 4: Graphical representation of income Demand (*quantity consumption increases as income increases*).

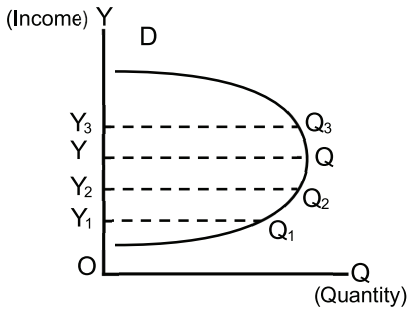


Figure 5: Graphical representation of income Demand (for *inferior goods* or services).

The consumption of media also depends on the consumer's income level; as income increases, they tend to subscribe to more media outlets or higher subscription plans to gain more benefits. Inferior goods are generally indicated by cheaper substitutes, such as goods from the local grocery store or public transportation.

However, for media consumption, consumers mostly opt for more media outlets or higher subscription rates to enjoy better service.

Cross Demand

Cross demand occurs when the demand for one good causes changes in the price of another good. There are two situations in which cross demand can yield two separate results. The first is for the substitution effect, where an increase in the price of one good results in an increase in the quantity demanded of the substitute good (Figure 6). The second one is the complementary goods case, where an increase in the price of one good results in a decrease in the quantity demanded of the complementary good (Figure 7).

An example of a substitute good is that the consumption quantity of "Amazon Prime" will increase if the subscription price of "Netflix" increases, as they are OTT platforms that substitute for one another. The example of complementary goods can be the consumption quantity of the television remote, which can decrease if the price of the television set increases, as the products are complementary; therefore, if consumers are avoiding the purchase of a television set because of the higher price, they will also avoid purchasing the television remote.

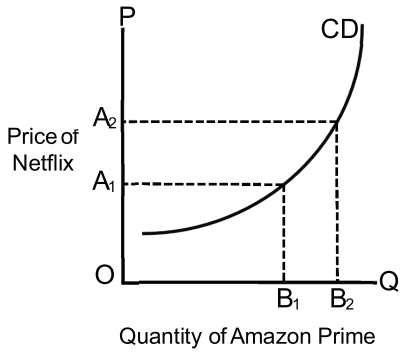


Figure 6. Graphical representation of cross demand for substitute goods

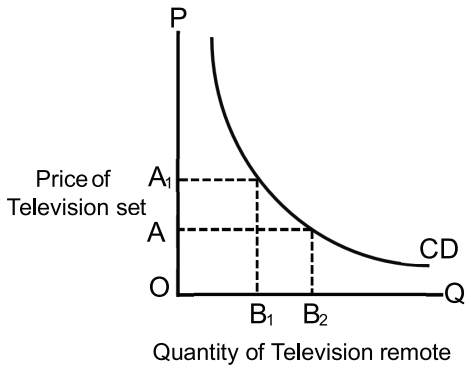


Figure 7. Graphical representation of cross demand for complementary goods

Elasticity of demand

Demand for a product or service can be classified into two categories: elastic, inelastic, or unitary. When the quantity demanded changes substantially in response to a price change, it is called elastic demand. If the changes are small, then it is called inelastic or unitary. Elasticity of demand can be categorized into three distinctive sections.

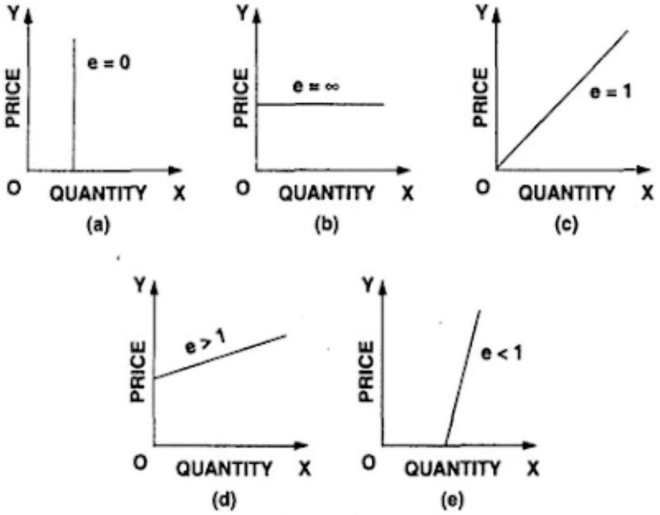


Figure 8: Graphical representation of price elasticity of demand, (a) perfectly inelastic, (b) perfectly elastic, (c) unitary elasticity, (d) relatively elastic, and (e) relatively inelastic (Akrani, 2009).

The first type is "price elasticity of demand," in which quantity demanded fluctuates with changes in price. The e_p (that is, the coefficient of price elasticity or coefficient of elasticity of demand) always remains negative. Here, the range of values for elasticity is $0 \leq e_p \leq \infty$ (Anderson, 1997). The six situations of "price elasticity of demand": "perfectly inelastic demand", "perfectly elastic demand", "unitary elasticity demand", "relatively elastic demand", and "relatively inelastic demand" are illustrated in Figure 8, and the corresponding equations to calculate the price elasticity are explained in Table 1.

Table 2: Five types of price elasticity of demand.

Price elasticity of demand	Coefficient	Corresponding equation
Perfectly inelastic	$e_p = 0$	$e_p = \frac{\Delta Q}{\Delta P} \times \frac{P}{Q} = 0, (dQ = 0)$
Unitary elasticity	$e_p = 1$	$e_p = \frac{\Delta Q}{\Delta P} \times \frac{P}{Q} = 1$
Perfectly elastic	$e_p = \infty$	$e_p = \frac{\Delta Q}{\Delta P} \times \frac{P}{Q} = \infty, (dP = 0)$
Relatively inelastic	$0 < e_p < 1$	$e_p = \frac{\Delta Q}{\Delta P} \times \frac{P}{Q} < 1, (0 < e_p < 1)$
Relatively elastic	$1 < e_p < \infty$	$e_p = \frac{\Delta Q}{\Delta P} \times \frac{P}{Q} > 1, (1 < e_p < \infty)$

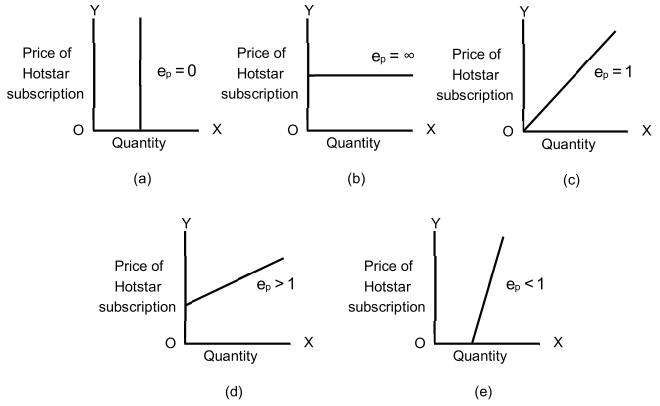


Figure 9: Graphical representation of "price elasticity of demand" for the demand for Hotstar and the quantity of the subscription sold, (a) perfectly inelastic, (b) perfectly elastic, (c) unitary elasticity, (d) relatively elastic, and (e) relatively inelastic.

An example of "price elasticity of demand" is the change in demand for Hotstar subscriptions when the subscription price increases. There are five different circumstances: "perfectly inelastic demand" is a situation in which the quantity demanded for a product or service is perfectly independent of changes in its price, i.e., demand is non-responsive. Therefore, in such a situation, whatever the price change on Hotstar, the platform's demand remains unchanged (a). For "perfectly elastic demand", at the fixed price, any number of subscriptions can be sold, however, a small increase in price may lead the demand to be zero (b), Therefore, the quantity becomes zero, if there is even a slight increase in the price of the Hotstar subscription, however, at a fixed price, there can be infinite number of subscription that can be sold (Figure 9).

"Unitary elasticity demand" shows the proportionate changes between the price of the goods or service and the quantity demanded. The illustration shows (Figure 9) that the changes in the price of the Hotstar subscription are equal to the changes in the quantity demanded for the platform (c). For "relatively elastic demand," the proportionate changes in quality demand for the good or service are much higher than the proportionate change in price. For the same set of examples, the changes in quantity demanded for the Hotstar subscription are much larger than the relative changes in subscription price (d). In the last variant, "relatively inelastic demand," the situation reverses, with the proportionate change in quality demand for the good or service being less than the proportionate change in price. For example, the changes in quantity demanded for the Hotstar subscription are smaller than the relative changes in its price (e).

The second type of elasticity of demand is "Income elasticity of demand." It measures changes in the quantity demanded due to changes in consumer income, holding other factors constant (Fuchs, 1965). Therefore, the "Income elasticity of demand" measures the relationship between the proportionate changes in the demand for a product or service and the income of the consumer.

$$e_y = \frac{Proportionate\ changes\ in\ quantity\ demanded}{Proportionate\ changes\ in\ money\ income} = \frac{\frac{\Delta Q}{Q}}{\frac{\Delta Y}{Y}} = \frac{\Delta Q}{\Delta Y} \times \frac{Y}{Q}$$

Note: The formula to measure the income elasticity of demand

The "Income elasticity of demand" stands positive, unless it is an inferior good, where the "Income elasticity of demand" becomes negative. There is a list of determinants that impacts the "Income elasticity of demand": (i) the percentage of income

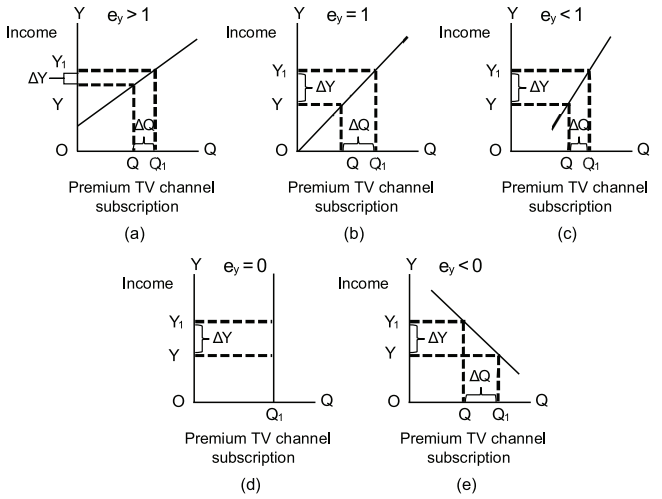


Figure 10: Graphical representation of "income elasticity of demand" for the quantity of premium TV channels subscription demanded and the income of an individual, (a) quantity demanded increases with income increases, (b) proportionate changes between quantity demanded and income, (c) quantity demanded < income increase, (d) quantity demanded remains unchanged with increased income, and (e) less quantity demanded at higher income, and higher quantity demanded at lower income.

spent on a particular food declines as the income of a person increases, (ii) the consumption of certain goods is considered necessary for developed countries, but a luxury for underdeveloped countries, for example, a television set is considered as a necessity for developed countries, however, it is considered as a luxury good for an underdeveloped countries, and (iii) consumption pattern changes over time. (Flores & Carson, 1997).

For example, the "income elasticity of demand" can be observed in the case of measuring the quantity of premium TV channel subscriptions demanded and an individual's income. There can also be five different circumstances: in the first scenario, "quantity demanded increases with income increases", where the number of subscriptions to premium TV channels would increase with the increase in income, however, not in a proportionate way (a). The second scenario explained the "proportionate changes between quantity demanded and income", which means the number of subscriptions to premium TV channels would be proportionate to the increase in the income of an individual. The third scenario shows that the "quantity demanded is less than the income increase", which indicates that the number of subscriptions to premium TV channels is less compared to the increase in income of an individual. The fourth scenario states that "quantity demanded remains unchanged with increased income," meaning that even as income rises, there will be no change in subscriptions to premium TV channels. The fifth scenario proposes an inverse relationship: "less quantity demanded at higher income, and higher quantity demanded at lower income," indicating that there would be fewer subscriptions to premium TV channels at higher income and more at lower income (Figure 10).

The third type of elasticity of demand is the "cross elasticity of demand", which indicates the change in the demand of one good or service because of the change in the price of another good. The changes can be positive or negative, depending on the relationship between the two goods or services (Busterna, 1987).

$$e_{xy} = \frac{Proportionate\ changes\ in\ quantity\ demanded\ of\ x}{Proportionate\ changes\ in\ the\ price\ of\ y} = \frac{\frac{\Delta Q_x}{Q_x}}{\frac{\Delta P_y}{P_y}} = \frac{\Delta Q_x}{\Delta P_y} \times \frac{P_y}{Q_x}$$

Note: The formula to measure the cross elasticity of demand

"Cross elasticity of demand" can have three different types: "cross elasticity of demand" for substitute goods, where it is positive, meaning the price and quantity consumption change in one direction, where an increase in price of one good indicates an increase in quantity demanded for the substitute good. The example illustrated in Figure 6 shows that an increase in the subscription price of "Netflix" is reflected in an increase in the quantity demanded of "Amazon Prime," as they are substitutes for one another. "Cross elasticity of demand" for complementary goods is negative,

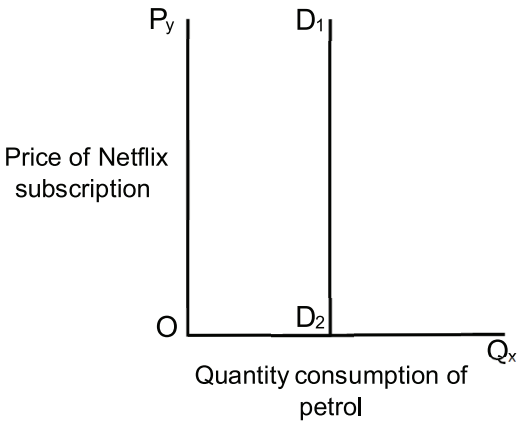


Figure 11: Graphical representation of "cross elasticity of demand" for unrelated goods.

where an increase in the price of one good indicates a decrease in quantity demanded for the complementary good. A case of complementary goods is also illustrated in Figure 7, where an increase in the price of the television set leads to a decrease in the quantity of the television remote consumed.

The third category of "cross elasticity of demand" illustrates the elasticity for "unrelated goods", where the price change of one good has no effect on the quantity demanded for another good, as they are not related to each other. An example could be that the increased price of the Netflix subscription has no relation to the quantity demanded of petrol (Figure 11).

"Promotional elasticity of demand" is also known as the "advertising elasticity of demand, where the changes in the demand of a good or service are measured due to the changes in the spending on promotional activities, like advertisement, or sales promotion. This is basically to measure the responsiveness of demand to changes in spending on promotion. This method helps optimize advertising budgets, allocate resources relative to demand, evaluate different promotional methods based on effectiveness, and select the most appropriate method. There are multiple factors that can impact the "Promotional elasticity of demand", like the total sales of the good or service, the cumulative effect of the prior promotions, promotional activities run by the competitors, changes in the price of the good or service, the income level of the consumer, and growth of the substitute good or service (Narasimhan, 1996).

$$e_a = \frac{Proportionate\ changes\ in\ sales\ of\ x}{Proportionate\ changes\ in\ advertising\ expenditure} = \frac{\frac{\Delta Q_x}{Q_x}}{\frac{\Delta P_y}{P_y}} = \frac{\Delta Q_x}{\Delta P_y} \times \frac{P_y}{Q_x}$$

Note: The formula to measure the promotional or advertising elasticity of demand

An example of "Promotional elasticity of demand" is a situation in which an organization finds that a 10% increase in promotional expenditure leads to a 2% increase in demand for the product. Therefore, the "Promotional elasticity of demand" would be 2% / 10% = 0.2.

Utility

The meaning of the word "utility" is usefulness. In economics, utility indicates the pleasure or satisfaction a consumer obtains from the consumption of a good or service. In other words, utility can be defined as the "satisfying power of the goods or services". Even if the commodity has a negative impact on the health of the consumer, because it is enjoyed by the consumer, it has utility. The concept was introduced as both a social thought by Bentham in 1789 and as an economic thought by Jevons in 1871. There are two ways utility can be measured: the cardinalist and ordinalist schools (Broome, 1991). Therefore, the media usage, as it is enjoyed by the viewers, has a utility that is measurable. The measurement of the utility of media content can provide an understanding for the media professionals in assessing the efficacy and, to some extent, acceptance of the content among the viewers.

Total utility (TU), along with marginal utility, can be measured using the cardinal approach. Therefore, total utility = the sum of all the utilities derived from the consumed commodity (Cannan, 1924). For example, if a consumer consumes five movies at a movie theatre, and derives utilities as U_1, U_2, U_3, U_4, and U_5, then TU = $U_1 + U_2 + U_3 + U_4 + U_5$. Marginal utility is "the change in the total utility resulting from a change in the consumption of a commodity at a given time". Interestingly, MU decreases with each extra unit of consumption (Kauder, 2015). Once the total utility is known, the marginal utility (MU) can be measured by applying the following formula:

$$\text{MU} = \frac{\Delta(TU)}{\Delta x} = slope\ of\ the\ total\ utility\ curve$$

Note: The formula to measure the marginal utility, where d = changes in the utility, TU = total utility, and x = difference between the total utility of 'n' and (n-1)

Table 3: Changes in total utility and marginal utility, TU = Total Utility, MU = Marginal Utility.

Unit (No.) of movie channel	TU in units		MU in units	
0	0	TU increases	0	MU decreases
1	20		20	
2	35		15	
3	45		10	
4	50	TU decreases	5	
5	50		0	MU Negative
6	45		-5	
7	35		-10	

The utility functions can be observed from an example of movies that have been watched by a person at a movie theatre, which is illustrated in Table 2. The values of TU and MU can be seen as they change with each unit of added consumption. At the zero level of consumption, both TU and MU stay 0. The TU increases with each unit of consumption, and as the TU increases, the MU decreases. When TU reaches the maximum, the MU becomes 0. The MU starts getting negative values when TU decreases with each unit of added consumption. Therefore, an extra unit of movie watched by a person will add total utility for the consumer, but at a certain point, the utility will start decreasing at a diminishing rate. However, the MU is adversely related to TU till the total utility reaches maximum for the consumer.

The utility is an important concept applicable in analyzing consumers' expenditure, understanding the distribution of limited resources by the consumer, determining the required units of production, analyzing the exchange ratio, setting the price of the products and services, devising an effective distribution policy, and determining the public finances (Cannan, 1924). In the service industry, such as media and entertainment, utility functions can help analyze and forecast viewers'/readers' consumption patterns, set competitive, standardized subscription rates, and manage content distribution effectively.

Indifference curve

Consumers' preferences are one of the most important components that marketers consider when crafting the product or service, setting price, selecting distribution channels and promotional outlets, and creating the "brand atmosphere" for its consumers (Solihin *et al.* 2021). Consumer preferences include factors such as shape, preferences, tastes, desires, and other relevant attributes when a consumer makes a purchase decision. Preferences are influenced by both internal and external factors, such as cultural and social influences, available alternatives, personal needs, lifestyles, values, and past experiences, that shape a consumer's preferences (Font-i-Furnols & Guerrero, 2014).

The indifference curve was developed to replace the concept of cardinal utility in demand analysis. Cardinal utility is a theoretical concept in economics that quantifies the utility or satisfaction derived from the consumption of a good or service. It believes that the utility can be measured numerically as it presumes that the consumer would behave rationally to maximize the total satisfaction (Strotz, 1953). An indifference curve displays the combinations of two goods that yield the same level of consumer satisfaction along the curve. The name suggests that the consumer will be indifferent across the curve with respect to his satisfaction (Samuelson, 1956).

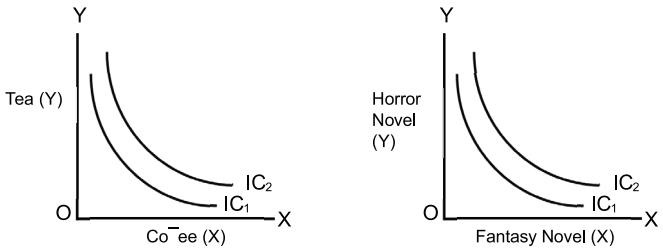


Figure 12: Graphical representation of the "indifference curve", IC = Indifference Curve.

A classic example of an indifference curve for goods is the consumption of tea and coffee. In Figure 12, the first graph shows indifference curves 1 (IC_1) and 2 (IC_2). A consumer enjoys the same level of satisfaction across the IC_1 curve, regardless of the consumption combination of Tea and Coffee, at a lower satisfaction level. The same consumer enjoys the same level of satisfaction across the IC_2 curve for different consumption combinations of Tea and Coffee, but at a higher level. The application of indifference curves is absolutely essential in the media and communication industry to determine the level of consumer satisfaction across the

bundle of goods and services offered. In Figure 11, the second graph represents the indifference curve 1 (IC_1) and the indifference curve 2 (IC_2) for the consumption of two different genres of novels: horror novels and fantasy novels. A reader enjoys the same level of satisfaction across the IC_1 curve, regardless of the consumption combination of horror novels and fantasy novels, at a lower satisfaction level. Whereas the consumer enjoys the same amount of satisfaction across the IC_2 curve with different consumption combinations of novels and fantasy novels, but at a higher level of satisfaction.

An indifference curve has a set of assumptions, which confines that the consumers are well aware of their choices and capable of ranking and ordering the available combinations of goods or services that will provide them with maximum satisfaction, and at the same time, it expects the consumers to behave rationally. IC also assumes that the Total utility (TU) depends on the qualities of the goods or products that are consumed (Samuelson, 1956). Although the IC curve helps predict the behavioral pattern of content consumption and identify the best possible product combination, several other factors, such as physiological factors, past experiences, peer influence, promotional influence, etc., also play a role in shaping a consumer's consumption pattern.

Marginal rate of substitution

Understanding the indifference curve is incomplete without knowledge of the marginal rate of substitution (MRS), as it is an important tool for analyzing it. The marginal rate of substitution measures the rate at which a consumer substitutes one good for another while maintaining the same level of satisfaction.

$$MRS_{xy} = \frac{\Delta Y}{\Delta X} = slope\ of\ the\ total\ utility\ curve$$

Note: The formula to measure the marginal rate of substitution, where ΔY = changes in the good Y, and ΔX = changes in the good X

From Figure 13, we can calculate the utility (U) along the indifference curve and, at the same time, the marginal rate of substitution at the points A, B, C, and D.

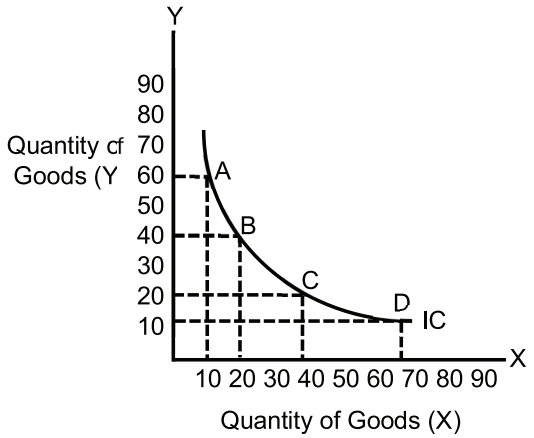


Figure 13: Graphical representation of the "indifference curve" and "marginal rate of substitution".

The quantity of good Y has the values in units of 10, 20, 30, 40, 50, 60, 70, 80, and 90

The quantity of good X has the values in units of 10, 20, 30, 40, 50, 60, 70, 80, and 90

Where, U= *f* (X, Y),

Therefore, the utility (U) across the points A, B, C, and D is

U = *f* (60,10) = (40, 20) = (20, 40) = (10, 70)

Now, the marginal rate of substitution across the points A, B, C, and D is as follows

$$\text{A to B} = \frac{\Delta Y}{\Delta X} = \frac{(60-40)}{(10-20)} = \frac{20}{-10} = \frac{2}{1}$$

$$\text{B to C} = \frac{\Delta Y}{\Delta X} = \frac{(40-20)}{(20-40)} = \frac{20}{-20} = \frac{2}{2}$$

$$\text{C to D} = \frac{\Delta Y}{\Delta X} = \frac{(20-10)}{(40-70)} = \frac{10}{-30} = \frac{1}{3}$$

Consumer equilibrium, budget line, and utility

Budget has always been a determinant of consumer decision-making, directly affecting the purchase of goods or services. The budget line shows all the combinations of two goods or services that a consumer can buy given constant prices and income. The budget line also shifts when the price of one of the goods falls; if the price of the other goods and the consumer's income remain the same, the consumer procures more of the good at a lower price. Similarly, the budget line shifts outward as the consumer's income increases

and inward as it falls. The question remains, how is the budget line related to the consumption of goods and services and connected to utility? The concept of consumer equilibrium and the income consumption curve connect the utility, budget line, indifference curve, and consumer equilibrium together (Hutchinson, 2017).

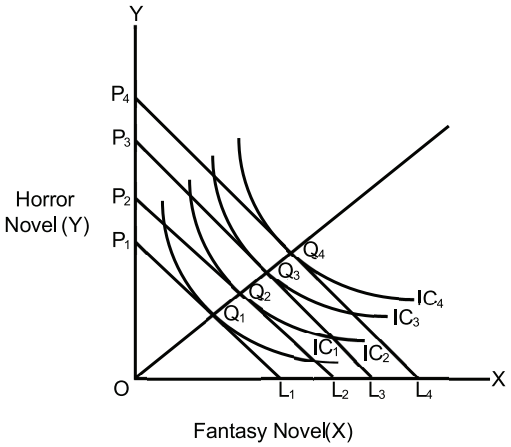


Figure 14: Graphical representation of consumer equilibrium that shifts over the budget lines from Q_1 to Q_4, stepping over Q_2 and Q_3

Consumer equilibrium is the point on an indifference curve at which a consumer maximizes utility or satisfaction, given the price of the product or service and the consumer's income, which remains constant (Ming & Tunca, 2022). Figure 14 shows the indifference curve (IC_1, IC_2, IC_3 and IC_4) for the consumption of two different goods, Horror novel (Y) and Fantasy novel (X), over four different budget lines (P_1, L_1, P_2, L_2, P_3, L_3, and P_4, L_4) creating consumer equilibrium points at each intersections (Q_1, Q_2, Q_3, and Q_4). This shows that higher consumption occurs as the budget line shifts with an increase in the consumer's income, shifting the consumer's equilibrium outward.

Revealed preference

The success of influencing consumers before the competitors lies in predicting their behavior with higher accuracy. Revealed preference theory holds that a consumer's choices reveal their preferences from the bundle of offered products or services. The revealed preference theory provides two types of information required to predict consumer behavior: the law of supply and demand. The first is the consumer's spending across different price-income situations, and the second is the "axioms of rationality" that describe the consumer's spending when behaving rationally (Richter, 1966). Consumers prefer certain goods over others because their liking for the good is higher than for the other options, or because the good's price is lower than the others'. The revealed preference theory, like any other economic theory, re based on certain assumptions, where the consumers are believed to choose the alternative or option that offers more quantity; the substitution pattern will keep on following the same pattern of consumption for every situation; the transitivity would be maintained if certain conditions stays constant; and the consumer are also believed to be holding on to the selected preferred bundle at every situation under the same budget line, that is also called "revealed preference axiom" (Chambers & Echenique, 2016).

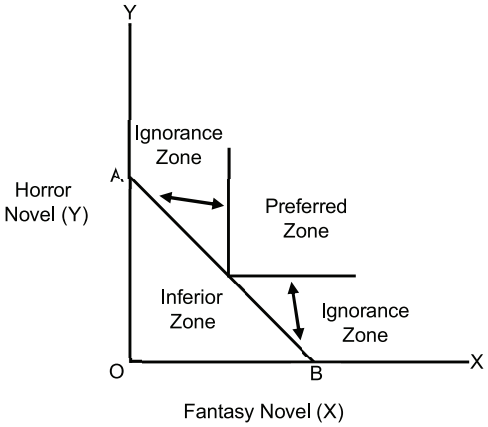


Figure 15: Graphical representation of revealed preference with consumer inferior zone, ignorance zone, and preferred zone.

Figure 15 shows the consumer's preference for the product bundle consisting of a horror novel and a fantasy novel. The inferior zone is observed to lie under the budget line. Therefore, the consumer is not at his maximum satisfaction or utility level, which places him in the ignorance zone where consumer equilibrium is not met. The preferred zone lies on the budget line, which reveals the consumer's possible preference for the goods bundle (a combination of horror and fantasy novels) that best satisfies the consumer.

CONCLUSION

Interdisciplinary research has its origins in ancient times and connects two disciplines through the

factors that affect both and analyzes the concepts and variables that concern both. Media and communication, on the other hand, have always been enriched by allied fields of study and have drawn on both theoretical and applied concepts to explain their phenomena. Economics is not an exception; however, there is not much emphasis given towards the collaboration of both these disciplines to form an alliance in explaining and predicting the phenomenon that is one of the most common areas between these two disciplines, the consumption of goods or services by an individual, which directly influences the market's decision on production and promotion strategies.

An individual would consume a good or service based on its market demand. It also ensures that the amount an individual is willing to procure at a given time, while keeping all the other factors constant. Similarly, the law of supply explains the correlation between the demand and price of the commodity. Consumer income is another determinant of the amount he is willing to purchase at both lower and higher levels of income; therefore, the consumption pattern changes with changes in consumer income. The study explains the role of other substitute and complementary products or services in shifting the demand for a good or service. Cross demand is an important concept for understanding the demand for media content (as explained in Figures 6 and 7) for related and unrelated products. The "price elasticity of demand(e_p)" and its variants explain five different situations (Figure 9) in which the market reacts to the quantity consumed in relation to the price of the commodity, with examples from the OTT market. The "Income elasticity of demand (e_y)" on the other hand, brings forth the dependability of the consumer on their income and the changes in consumption that occur at various income levels (Figure 10). The study also discusses the application of "cross elasticity of demand (e_{xy})" in the media business, which measures the relationship between the price and consumption of unrelated products, but unfortunately, has no direct effect on the consumption of a specific product or service, even for media content. The "Promotional elasticity of demand (e_a)" or "Advertising elasticity of demand(e_a)" connects the promotional expenditure with the quantity demanded, which can be explained by a simple mathematical formulation.

Utility indicates the usefulness of the product or service obtained from the consumption of a good or service, also viewed as the "satisfying power of the goods or services". Both the total utility (TU) and marginal utility (MU) are used to measure the usefulness of the product or service from the consumer's point of view. The diminishing rate of marginal utility indicates that consuming excess media content can be detrimental to him, even though the total utility may seem to increase with each additional unit of consumption (Table 3). When mapping consumers' shape, preferences, tastes, desires, etc., for the bundle of products they are consuming, the indifference curve (IC) becomes a handy tool to identify the consumers' satisfaction level at different points, which shows two goods that provide the same level of satisfaction to the consumers across the curve. The marginal rate of substitution (MRS), on the other hand, highlights the consumer's willingness to substitute one good for another along an indifference curve. Figure 13 explains the calculation of utility, and MRS points across the IC help measure the rate at which a consumer substitutes one good for another; therefore, the media content producer can understand how consumers may replace their content with another available option that provides the same level of satisfaction.

Revealed preference theory explains that a consumer's choices reveal their preferences from the bundle of offered products or services, by highlighting consumer behavior and explaining the law of supply and demand. Revealed preference indicates the product's or service's relative attractiveness to available alternatives, and the lower price of a product relative to those alternatives determines its relative attractiveness, keeping other factors constant. Figure 15 provides an example of an OTT content preference zone that helps markets understand which areas to avoiding potential audience loss and focus instead on areas that provide a competitive advantage. The selective concepts from microeconomics are explained throughout the study with examples from modern media businesses, highlighting the importance and application of monetary and business concepts to further evaluate media businesses, which will not

only help in understanding the dynamics of the industry, but also help in deciding the appropriate strategy for media businesses, while ensuring the economic benefits for the organization and investors.

REFERENCE

1. Akrani, G. (2009). Demand In Economics - Law Of Demand - Elasticity of Demand. *blogspot.com*. https://kalyan-city.blogspot.com/2009/08/demand-price-law-of-demand-determinants.html
2. Altman, D. G. (1991). Categorising continuous variables. *British journal of cancer*, *64*(5), 975.
3. Anderson, P. L., McLellan, R. D., Overton, J. P., & Wolfram, G. L. (1997). Price elasticity of demand. *McKinac Center for Public Policy. Accessed October*, 13(2).
4. Backhouse, R. E., & Medema, S. G. (2009). Retrospectives: On the definition of economics. *Journal of economic perspectives*, *23*(1), 221-233.
5. Backhouse, R. E., & Medema, S. G. (2009). Defining economics: The long road to acceptance of the Robbins definition. *Economica*, *76*, 805-820.
6. Bastianello, F., & Fontanier, P. (2021). Partial equilibrium thinking in general equilibrium. *Available at SSRN*.
7. Bergna, G., Suul, J. A., & D'Arco, S. (2016, June). State-space modelling of modular multilevel converters for constant variables in steady-state. In *2016 IEEE 17th Workshop on Control and Modeling for Power Electronics (COMPEL)* (pp. 1-9). IEEE.
8. Biørn, E., & Jansen, E. S. (1983). Individual effects in a system of demand functions. *The Scandinavian Journal of Economics*, 461-483.
9. Broome, J. (1991). Utility. Economics & Philosophy, 7(1), 1-12.
10. Busterna, J. C. (1987). The cross-elasticity of demand for national newspaper advertising. *Journalism Quarterly*, 64(2-3), 346-351.
11. Bye, R. T. (1939). The scope and definition of economics. *Journal of Political Economy*, *47*(5), 623-647.
12. Cannan, E. (1924). Total Utility" and" Consumer's Surplus. *Economica*, (10), 21-26.
13. Chambers, C. P., & Echenique, F. (2016). *Revealed preference theory* (No. 56). Cambridge University Press.
14. Dougan, W. R. (1982). Giffen goods and the law of demand. *Journal of Political Economy*, 90(4), 809-815.
15. Flores, N. E., & Carson, R. T. (1997). The relationship between the income elasticities of demand and willingness to pay. *Journal of environmental Economics and management*, 33(3), 287-295.
16. Font-i-Furnols, M., & Guerrero, L. (2014). Consumer preference, behavior and perception about meat and meat products: An overview. *Meat science*, 98(3), 361-371.
17. Fuchs, V. R. (1965). Income elasticity of demand. *In The Growing Importance of the Service Industries* (pp. 8-12). NBER.
18. HKT. (2021). Types of variable in management research. phantran. https://phantran.net/types-of-variable-in-management-research/
19. Hurley, J. (2000). An overview of the normative economics of the health sector. *Handbook of health economics*, *1*, 55-118. https://doi.org/10.1016/S1574-0064(00)80161-4
20. Hutchinson, E. (2017). 6.1 The Budget Line. *Principles of Microeconomics*.
21. Friedman, M. (1953). The methodology of positive economics.
22. John Maynard, K. (2003). *The general theory of employment, interest and money*.
23. Kader, G. D., & Perry, M. (2007). Variability for categorical variables. *Journal of statistics education*, *15*(2).
24. Kaliyadan, F., & Kulkarni, V. (2019). Types of variables, descriptive statistics, and sample size. *Indian dermatology online journal*, *10*(1), 82-86.
25. Kauder, E. (2015). *History of marginal utility theory*. Princeton University Press.
26. Kaur, S. P. (2013). Variables in research. *Indian Journal of Research and Reports in Medical Sciences*, *3*(4), 36-38.
27. Klein, J. T. (2007). Interdisciplinary approaches in social science research. *The SAGE handbook of social science methodology*. SAGE Publications, Los Angeles, 32-50.
28. Laurence, S., & Margolis, E. (2003). *Concepts and conceptual analysis. Philosophy and phenomenological research*, 67(2), 253-282.
29. Lee, S. Y., Poon, W. Y., & Bentler, P. M. (1992). Structural equation models with continuous and polytomous variables. *Psychometrika*, *57*(1), 89-105.
30. Lynn, M. (1991). Scarcity effects on value: A quantitative review of the commodity theory literature. *Psychology & Marketing*, 8(1), 43-57. https://doi.org/10.1002/mar.4220080105
31. Marangos, J. (2002). A survey of the value university students place on studying economics. *Economic Papers: A journal of applied economics and policy*, 21(3), 80-93.
32. Maynard, J. K. (2003). *The general theory of employment, interest and money*.
33. Maze, J. R. (1954). Do intervening variables intervene?. *Psychological Review*, *61*(4), 226.
34. Ming, L., & Tunca, T. I. (2022). Consumer equilibrium, demand effects, and efficiency in group buying. *Manufacturing & Service Operations Management*, 24(3), 1437-1456.
35. Muthén, B. (1978). Contributions to factor analysis of dichotomous variables. *Psychometrika*, *43*(4), 551-560.

36. Narasimhan, C., Neslin, S. A., & Sen, S. K. (1996). Promotional elasticities and category characteristics. *Journal of Marketing*, 60(2), 17-30.

37. Pal, S., Thilaka, N., & Kayal, S. (2022). Emerging power in industrialization: empowering India through entrepreneurship. *Journal of Liberty and International Affairs*, 8(3), 99-114. https://doi.org/10.47305/JLIA2283099p

38. Peterson, L., Homer, A. L., & Wonderlich, S. A. (1982). The integrity of independent variables in behavior analysis. *Journal of applied behavior analysis*, *15*(4), 477-492.

39. Richter, M. K. (1966). Revealed preference theory. Econometrica: *Journal of the Econometric Society*, 635-645.

40. Rosenberg, M. (2017). Extraneous variables. *Research Design: The Logic of Social Inquiry*, 263.

41. Samuelson, P. A. (1956). Social indifference curves. *The quarterly journal of economics*, 70(1), 1-22.

42. Schultz, H. (1935). Interrelations of demand, price, and income. *Journal of Political Economy*, 43(4), 433-481.

43. Shi, X., Li, F. & Chumnumpan, P. (2020). The use of product scarcity in marketing. *European Journal of Marketing*, 54(2), 380-418. https://doi.org/10.1108/EJM-04-2018-0285

44. Shoven, J. B., & Whalley, J. (1992). *Applying general equilibrium*. Cambridge University Press.

45. Solihin, D., Ahyani, A., & Setiawan, R. (2021). The Influence of Brand Image and Atmosphere Store on Purchase Decision for Samsung Brand Smartphone with Buying Intervention as Intervening Variables. *International Journal of Social Science and Business*, 5(2), 262-270.

46. Strotz, R. H. (1953). Cardinal utility. *The American Economic Review*, 43(2), 384-397.

47. Travis, R. C. (1945). An experimental analysis of dynamic and static equilibrium. *Journal of Experimental Psychology*, *35*(3), 216.

48. Verhallen, T. M. (1982). Scarcity and consumer choice behavior. *Journal of Economic Psychology*, *2*(4), 299-322.