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POWER SECTOR OF INDIA: “CHALLENGES AND CONTRIBUTION TO ECONOMY DUE TO COVID 19”

Malvika Verma*
Prof. (Dr.) J.P. Yadav**

ABSTRACT

Placing of India in Lockdown, directly affects many areas such as transportation sector, communication channel, education sector, service sector and including Power Sector from social & economic point. The placing of lockdown directly affects many areas but the power sector had a great impact of covid-19. Power sector had to face many problems like nonpayment of bills, difficulty in collection of bills, impact on private generators, financial crisis theft etc. This research paper will help to study the effect of corona virus on the Indian economy and will explain the economic impact of corona on power. Indian Power sector needs to undergo a lot of introduce energy policies, institutional changes and emulate the organizations with global practices. In This paper researcher reviews various Challenges, Concerns, and Prospects in the Indian Power Sector. This paper discusses the impact of COVID-19 on the Indian power sector. The objective of the paper is to broadly assess the potential impact on sector elements such as demand, supply, resources, business continuity, utility finances and investments. The paper also presents measures taken by different countries especially the power utilities to manage and mitigate the impact, particularly to provide uninterrupted supply in lockdown affected regions. The paper also presents broad recommendations for Indian policy makers and operational actions for utilities to effectively manage the services in the times of crisis, and beyond. The analysis presented is evolving as the situation unveils for India.

KEYWORDS: *Good Governance, Power Sector Reforms, Economic Growth, Financial Crisis, MoP.*

Introduction

The novel Coronavirus disease (SARS-Cov-2), or COVID-19, is a global pandemic which has affected over 0.7 million people across 199 countries as of March 30, 2020. COVID-19 has come to be known as one of the worst known health, social and economic crisis in modern times. As COVID-19 tightens its grip across the world and forces several countries to impose unprecedented lockdowns, there are looming concerns over the livelihoods and overall direction of economy. The duration and degree of economic impact will depend on the trajectory of individual countries and their policy response to support health, livelihoods and larger economy. Energy is the flow of electricity. Electricity is a strategic commodity, and it plays an important role in economic development of the India. In the present scenario, Indian economy will continue to grow at more than 7% for proper planning; energy statistics play a significant role for policy makers in India & also help them in decision making. The power sector is among the sectors affected most. According to an estimate by CII, the Lockdown until 3 May, 2020 could result in total demand compression of up to 36 billion units of electricity, implying a net revenue loss of around Rs. 30,000 crores at the Discom level. "this could further increase the liquidity crunch to approximately Rs. 45000 crores to 50000 crores, taking into account expected delays in payments," said CII in its research paper. In This research paper researcher deals with various issues and challenges faced by the Indian power sector. How to enable this world's largest democratic nation to become globally competitive as far as infrastructure & energy is concerned, with an objective to address the opportunities of an ever-liberalizing Indian economy.

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The MoP has now clarified that Discoms will have to continue to pay for power within 45 days of presentation of bill. The MoP has also stated that the Discoms cannot invoke force majeure for non-payment of amounts to generators. The CERC has through an order on 3 April 2020, reduced the LPS on bills presented between 24 March and 30 June, 2020, for which payments have been delayed beyond 45 days from 1.5% to 1%. The CERC however, did not allow any moratorium on payment by the Discoms and insisted that even though the Reserve Bank of India (RBI) has allowed banks to grant a moratorium period for repayment of all loans between 24 March, 2020 and 30 June, 2020; and deferred interest on working capital facilities for this period, interest will continue to accrue and the generators will continue to have fixed and other costs. Accordingly they need to be paid for the power supplied.

Following are some of the factors which have impacted the financial situation during the lockdown:

- Reduced cross-subsidy: In most states, the electricity tariff for domestic and agriculture consumers is lower than the actual cost of supply. Along with the subsidy by the state governments, this gap in revenue is partly compensated by charging industrial and commercial consumers at a higher rate. Hence, industrial and commercial segments cross-subsidize the power consumption by domestic and agricultural consumers.
- The lockdown has led to a halt on commercial and industrial activities while people are staying indoors. This has led to a situation where the demand from the consumer segments who cross-subsidize has decreased while the demand from consumer segments who are cross-subsidized has increased. Due to this, the gap between revenue realized by discoms and cost of supply will widen, leading to further losses for discoms. States may choose to bridge this gap by providing a higher subsidy.
- Moratorium to consumers: To mitigate the financial hardship of citizens due to COVID-19, some states such as Rajasthan, Uttar Pradesh, and Goa, among others, have provided consumers with a moratorium for payment of electricity bills. At the same time, the discoms are required to continue supplying electricity. This will mean that the return for the supply made in March and April will be delayed, leading to lesser cash in hand for discoms.
- Some state governments such as Bihar also announced a reduction in tariff for domestic and agricultural consumers. Although, the reduction in tariff will be compensated to discoms by government subsidy.
- Constraints with government finances: The revenue collection of states has been severely impacted as economic activities have come to a halt. Further, the state governments are directing their resources for funding relief measures such as food distribution, direct cash transfers, and healthcare. This may adversely affect or delay the subsidy transfer to discoms.
- The UDAY scheme also requires states to progressively fund greater share in losses of discoms from their budgetary resources (10% in 2018-19, 25% in 2019-20, and 50% in 2020-21). As losses of discoms may widen due to the above-mentioned factors, the state government's financial burden is likely to increase.
- Due to the impact of COVID-19, the capacity addition targets for various sources are likely to be adversely impacted in the short run as:
 - construction activities were stopped during the lockdown and will take some time to return to normal,
 - Disruption in the global supply chain may lead to difficulties with the availability of key components leading to taking time in execution of projects, for instance, for solar power plants; solar PV modules are mainly imported from China.
 - Reduced revenue for companies due to weak demand will leave companies with less capacity left for capital expenditure.

Key Reforms Likely to be Delayed

Following are some of the important reforms anticipated in 2020-21 which may get delayed due to the developing situation:

- The real-time market for electricity: The real-time market for electricity was to be operationalised from April 1, 2020. However, the lockdown has led to delay in completion of testing and trial runs. The revised date for implementation is 1st June 2020
- UDAY 2.0/ADITYA: A new scheme for the financial turnaround of discoms was likely to come this year. The scheme would have provided for the installation of smart meters and incentives for rationalization of the tariff, among other things. It remains to be seen what this scheme would be like since the situation with government finances is also going to worsen due to anticipated economic slowdown.
- Auction of coal blocks for commercial mining: The Coal Ministry has been considering auction of coal mines for commercial mining this year. 100% FDI has been allowed in the coal mining activity for commercial sale of coal to attract foreign players. However, the global economic slowdown may mean that the auctions may not generate enough interest from foreign as well as domestic players.

Review of Literature

Nweze (2013) illustrates that sufficient supply of power is an important requirement for the development of a particular nation. This paper further revealed that generation of electricity, transmission and distribution (T&D) are amongst those intensive activities which require huge amount of funds and huge resources of capacity. This paper further revealed that persistent power failures in Nigeria have resulted into non-regular production of electricity in addition to under utilization of industry resources and resources in educational institutes.

Little (2013) illustrates that there are number of factors which ultimately can enhance the efficiency and effectiveness of distributing companies in electricity sector. Some of these important factors include transparent regulation of tariff, delegation of decision making, reliable supply of fuel, more participation of private players, conduction of regular operational audits and implementation of incentives for the employees related to efficiency in operations.

Jain, Garg & Sadaka (2013) analyzed in their study, that operational efficiency is the main factor responsible for the success in the operation of distributing companies in different states. This study further examined the role of tariff hike and found that the tariff hike is also an important factor responsible for the successful operation of distributing companies (Discoms)

Bajaj (2012) examined that "the electricity sector is an area where both the center and the states have very vital interests, apart from being constitutional position of being a competitor matter. The leadership in this sector for the change comes from central government, and in general, many of the fundamental guidelines for the States now account. The author also examines the need for regulators to conduct a Regulatory Impact Assessment (RIA), because regulators can impose very large costs for the system, which perhaps are unjustified to produce the intended benefits".

Sankar (2011) examined that "the Electricity Regulatory Commission (ERC) have given tariff orders only to namely, Andhra Pradesh and Haryana have adopted the cost-to-serve concept , while others ERCs were based on the same level of data availability. It is categorically stated that the data is insufficient to estimate the cost for service.

Objectives of this Study

- To propagate measures for the conservation and efficient use of energy due to COVID-19.
- To identify technical and other impediments in the efficient and economic operation of power.
- To promote common objects of the State Electricity Boards, Public & Private Sector Power Generation, Transmission & Distribution companies and undertakings with a view to promote national interest.

Impact on the Indian Power Sector in India Due to COVID-19

Impact on the Indian Power Sector in India, the most COVID-19 affected sectors includes aviation, tourism, hospitality, and retail, manufacturing and automotive. The impact on the power sector is relatively less pronounced. The following table summarizes the market environment, potential impact and key response for the power sector in India.

Element	Impact
Energy Consumption/Power Demand	<ul style="list-style-type: none"> Industrial, commercial, and traction demand hit especially during the lockdown period. Domestic demand has increased. Total electricity demand significantly affected (negative 26%) in first week of lockdown. Uncertainty on the lockdown period is likely to continue. Medium and long-term demand growth likely to be tepid till economy regains the pre-COVID-19 activity levels.
Power Supply	<ul style="list-style-type: none"> Fuel and plant availability are not constrained as electricity supply is an essential service. Raw material availability (especially solar PV modules and capital equipment) impacted in short term due to supply chain disruption. Potential supply disruption on account of payment defaults by distribution companies (DISCOMs).
Price Impact	<ul style="list-style-type: none"> Reduced coal demand by other industries may put pressure on prices (e-auctions for coal). No significant impact on power off take through long term power purchase agreement (in the short run). Spot prices (IEX) remain suppressed due reduced off take by industries and surplus power availability. PV module cost likely to go up in the near term due to supply chain disruption.
Utility Finances	<ul style="list-style-type: none"> DISCOM finances will be affected by reduction in demand from more remunerative customers (industrial and commercial). It will also impact the DISCOM ability to cross-subsidize other customers. Additional working capital hit due to delay in collections including subsidy and government dues. Cascading impact on payments to generators and debt service by utilities/plants if lockdown sustains over a longer period.
Investments and Capex	<ul style="list-style-type: none"> Potential delay in project construction and commissioning especially for under construction plants. Delay in meeting renewable energy (RE) targets, if the lockdown continues. Likely slowdown in future investments due to stress in capital markets, reduced risk appetite and demand uncertainty.

Issues in Indian Power Sector

- Issues in power generation NTPC are the largest Thermal Power Generation Company in India with the power generating capacity of 51,410 MW at present and with a long term plan to become 128000 MW Company by the year 2032. The issue in coal sector is lack of private investment and low plant load factor due to shortage and poor quality of coal supplied. The low utilization rate of operational plants reduces the volume of generated capacity & also undermines the financial performance of generating companies. Coal India limited and The Singareni Collieries Company limited have a monopoly on coal production. Gestation period, pollution and environmental concerns also impacts thermal power generation in India.
- Issues in power transmission Power Grid Corporation of India limited is the India's largest electric power transmission utility and also the central transmission utility of India. As on 31st march 2017, the total transmission capacity is 75050 MW of the interregional links. Power System Operation Corporation limited manages the national & regional grids through latest technology from National Load Dispatch Centre. The issues are transmission tariff design, right of way, Investment in the sector and allocation of transmission corridor to exchange the power.
- Issues in power distribution Reduction of distribution losses is a major issue in Indian Power sector. One of the most important features of Electricity Act 2003 is the Open Access wherein, consumer and distribution companies have the freedom to buy electricity directly from the generating companies. A lot of awareness is required to educate the consumers about the open access. Installation of availability based tariff, availability of independent feeder & automation in

power distribution are the critical issues in distribution sector. Reduction of aggregate technical and commercial losses, improved power quality supply, improved customer satisfaction, strengthening of distribution network, provision for 100% metering and introduction of competition through Open access are some of the salient features of restructured power system.

Challenges in Indian Power Sector

- Demand supply gap Indian power sector offers enormous prospects for foreign investors. India's Energy-GDP elasticity of 0.8 reflects the industry movement beside with economic growth. By 2018, India will overtake China to become world fastest growing economy. In the next 20 years, India will need an additional 869 GW.
- Huge Transmission & Distribution losses Indian government targets cut down transmission and distribution losses to 15% by 2019. Transmission and Distribution loss also includes Pilferage/theft. In 2015, Indian government designed Deen Dayal Upadhyaya Gram Jyoti Yojna scheme to provide Continuous uninterrupted power supply to all the villages in India and to improve the quality and reliability of power supply. As of march 2017, 593184 villages have been electrified out of 597,464 census villages. Indian government launched Integrated Power Development Scheme to focus on improvement of transmission and distribution networks in India. All distribution companies including private distribution companies and state power departments can get financial assistance under this scheme. It is basically a new version of Restructured Accelerated Power development Programme. Power Finance Corporation is the Nodal agency for this scheme.
- Approval and License Biggest challenge that is faced by Indian power sector is the land acquisition. A number of government bodies needs to be contacted for the clearances. Currently Foreign direct investment is not allowed in nuclear segment. To set up new power plants, there is no requirement of licenses and it is done through a transparent bidding process, Power procurement is permitted. Only 49% Foreign Direct Investment and Foreign Institutional Investor is permissible for Power Exchange. Energy companies in India need to be improved to create a well- functioning & financially viable Electricity market. Effective implementation of energy policies should be increased to assure timely completion of energy projects. Based on market principles, India should complete unfinished reforms on its power sector. A greater degree of liberalization in Indian power sector allows Foreign Direct Investment along the entire value chain that is Generation, Transmission & Distribution. Building up the infrastructure that is grossly insufficient, perennial shortage of fuel and inherent financial weakness of state owned power companies are some of the key challenges faced by the Indian power sector. To increase the domestic production, renewable energy sector as well as the oil & gas sector vies for strong private investments. Coal sector is least open to private investments. Central government exclusively controls nuclear sector.

Recommendations

On the whole, the key focus should be on – Response (during the emergency conditions and beyond), Recovery (post-Covid), and Resilience (in the long-term). From a specific company, and/or a utility perspective, a more data driven and analytics approach that covers the impact on 4Cs – (i) Cash; (ii) Customer; (iii) Costs, and (iv) Capital will be critical to assess. All the above will have short, medium and long-term implication for the utilities, in terms of business continuity, customer management, managing cash flows, implementing new investments, employee and work force management, etc. Factors like safety, security, resilience, etc. will come to fore in the longer term.

Long Term Action	Short Term Action
Easing financial stress in utilities	Ensuring Business Continuity
Managing project delays/costs	Safeguarding critical functions
Resilience planning	Avoiding customer disruption
Pooling of critical resources	-

There is huge investment inadequacy in Indian power sector. India needs to invest in transmission and distribution sector at a very large scale. The solution of the problem lies in building and upgrading infrastructural base of local urban and rural sectors. More and more private players should be brought into the process of power distribution in the states, supporting the loss bearing state DISCOMs and thereby increasing competition in power distribution sector and improving its efficiency.

The benefits of growing power generation in India cannot be realized unless operational, financial and organizational efficiencies are achieved in generation, transmission and distribution sector. If serious efforts are taken to manage the losses in generation, transmission and distribution of electricity, India can undisputedly attain the status of a full-fledged power surplus nation.

Efficiency in power generation can also be attained by shifting of energy dependency from non-renewable sources to renewable resources. Government of India is primarily focusing on increasing power generation through solar power installations and by 2022 aims to add 100 GW of solar power. Boosting up of IT enabled operations, encouraged use of energy proficient solutions and emission free renewable technologies can offer various profitable business opportunities, widening power generation prospects.

Conclusion

As it stands now, the Indian Power Sector is wrought with issues and challenges but at the same time there are plenty of opportunities that beckon. The numerous initiatives announced by the government, as well as those being implemented have started yielding results towards Energy Rich India though the pace of development leaves a lot to be desired. The next five years are going to be very crucial for the Power Sector in India. The targets set for achieving self-sufficiency in energy needs of the country are quite high and the time lines set for the same are too stiff. However with perfect planning, clinical execution, complete transparency and committed approach, the magic figure of 1000 GW with a sizeable contribution of about 15% from the Renewable sources, is not only achievable but can be surpassed.

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REVIEW ON ALGEBRAIC METHODS OF CHANGE DETECTION

Gaurav Sharma*

ABSTRACT

Change detection is the process to identifying the differences in the images that are collected at different times. The segment of the images is called the objects. Change detection is the process of identifying differences in the state of an object or phenomenon by observing it at different times. Essentially, it involves the ability to quantify temporal effects using multi temporal data sets. [1] The investigation of land use/land cover (LU/LC) changes is very essential to have orthodox designing and usage of natural resources and their management. Change detection is recognizing dissimilarities that arise in the characteristics of an object, over a period of time. In many applications, remote sensing change detection has played a vital role.

KEYWORDS: Deforestation, Urbanization, Greenness, Threshold, PCA.

Introduction

Remote sensing technology provides a large-scale view of landscape over a long period of time and has been demonstrated to be an efficient method for change detection. In many applications such as land-use/land-cover monitoring, ecosystem monitoring, disaster monitoring and urban development, change detection by remote sensing has been widely used.[2] Change detection between two images are done through various methods these methods include algebraic approach, transformation method, classification method, visual analysis, object oriented methods. We can also classify change detection methods in terms of unsupervised and supervised method. Change detection identifies the locations in the field of view where structural differences between two registered input frames occurred.[3] To detect the changes between images we used remote sensing data of the sensors which are collected on different different times of same area. Through detect the changes we can analysis the deforestation, urbanization, greenness, wetness, brightness, mortality of the land.

Change Detection

Change detection is the process to identify the changes of the land that are captured by satellites, cameras etc, but for this paper we are considering the remotely sensed images. When we going to detect the changes which are captured through remote sensors the accuracy of the change detection results are affected by the noise effects. Noise due to differences in brightness, climatic conditions, sensor analysis and wetness of ground at the two acquisition dates considered causes apparent changes. Selection of the change detection method or technique is the last step of the procedure of the change detection. Change detection procedure as follows:

- First selection of the images.
- Registration of the image.
- Corrections(Radiometric and atmospheric)
- Multi temporal analysis.
- Selection of the change detection technique.

Thresholding

It is a value T if $I(x,y) > T$ then there is change and if $I(x,y) \leq T$ then there is no change. T is a threshold value which is experimental value supply by the analyst.

$I(x,y) > T$ there is change(Light objects)

$I(x,y) \leq T$ there is no change(no change)

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It is also a preprocessing method in a remotely sensed image classification. In thresholding, the color-image or gray scale image is reduced to a binary image.[4]



- **Techniques to Define the Threshold**

- **Density Slicing:** In this slicing several segments of the image which is called objects are assemble into pre-defined slices. This method is used to define more then one threshold.[5]
- **Grey Level Thresholding:** Grey level thresholding can be done interactively with a monitor and operator-controlled cursor, but selection of the best threshold level should be usually associated with a priori knowledge about the scene or visual interpretation to be meaningful.[5]

Digital Change Detection Techniques

There are algebra techniques, transformation techniques, classification techniques for image change detection, There are other techniques such as Li–Strahler reflectance model, Spectral mixture model, Biophysical parameter method, GIS techniques such as Integrated GIS and remote sensing method, GIS approach, Visual Interpretation. In this paper we discuss about the algebra techniques. There are two categories also which are called supervised and unsupervised methods. Supervised methods use training sets for learning purpose. Unsupervised learning methods include basic more spectral images to generate new images. Image differencing, normalized difference, vegetation index, change vector analysis, image rationing, expectation maximization, markov random field, object level detection are the unsupervised techniques. Principle Component Analysis, Neural Networks, Support vector machine, knowledge base systems are the supervised methods.

S.No.	Category	Technique
1	Algebra	a) Image Differencing b) Image Regression c) Image rationing d) Vegetation index differencing e) Change vector analysis f) Background subtraction
2	Transformation	a) Principal component analysis (PCA) b) Tasselled cap (KT) c) Gramm–Schmidt (GS) d) Chi-square
3	Classification	a) Post classification techniques b) Spectral combined analysis c) EM detection d) Unsupervised change detection e) Hybrid change detection f) Artificial neural networks

In above table three categories of the change detection is consider algebra, transformation and classification. In algebra category image differencing, Image Differencing, Image Regression, Image rationing, Vegetation index differencing, Change vector analysis, Background subtraction are the techniques. In transformation Principal component analysis (PCA), Tasselled cap (KT), Gramm–Schmidt (GS), Chi-square methods are used. In classification method Post classification techniques, Spectral combined analysis, EM detection, unsupervised change detection, Hybrid change detection, Artificial neural networks are used. In the above techniques image differencing is the easiest method and it is quite effective as compare with the image rationing. PCA is a better technique as compare to the image differencing, image regression, image rationing. Artificial neural network is independent of noisy effects other techniques are suffer from these effects. The efficiency of neural network is better as comparatively to the other methods, but ANN is quite complicated then algebra methods, transformation methods and other classification methods.

Comparative Analysis of Algebra Methods

- **Image Differencing:** In this technique change detection is determine through subtraction of pixel values of registered images that are captured on different time.

Kartik, Shivakumar BR uses this method on Kuntaregion, Karnataka, India they use support vector machine to implement this method [6]. It is simple and straight forward method and easy to interpret[7]. It can be applied to the study area to detect changes on vegetation health, biomass content etc.[8]. The disadvantage of this method that it not produce a complete change matrix[7]. It is a unsupervised technique.

- **Image Regression:** In this method we have to find out the regression function for determining the pixel values of second image and then subtract the pixel values of one image with the regressed image.

J.A. Moreno-Ruiz, M. Arbelo, J.R. García-Lázaro, D. Riaño-Arribas uses Bayesian network to implement image regression[9]. They uses North American boreal forests using the LTDR dataset. These network are used to determine the probabilities. Reduces impacts of the atmospheric, sensor and environmental differences between two-date images[7]. The main disadvantage of this technique is that identifying the correct regression function. It is unsupervised technique.

- **Image Rationing:** In this method we take the ratios of one image pixel and second image pixel, if ratio is greater than 1 or less than one there is a change area. It reduces reduces impacts of Sun angle, shadow and topography[7]. It is a unsupervised technique.

Minu S and Amba Shetty uses this technique on data set "Yagachi of Belur in Karnataka, India. It lies between latitude 13°8'18.36" and 13°13'15.81" N and longitude 75°41'24.34" and 75°51'16.33" E. The study area covers about 162.26 km²". They conclude that this rationing was unable to define changes effectively in environments such as the study area. It provided limited change information and yielded the lowest accuracy compared to Image Differencing, Image Rationing, Change vector analysis (CVA), Tasseled Cap Transformation (TCT) and Principal Component Analysis (PCA) techniques.[10]

- **Vegetation Index Differencing:** This method is appropriate to detect the greenness, brightness, wetness of the land. There are number of vegetation indexes such as ratio vegetation index, normalized vegetation index, transformed vegetation index.[1]

a) Ratio vegetation index : $\frac{\text{band 4}}{\text{band 2}}$

b) Normalized vegetation index : $\frac{\text{band 4} - \text{band 2}}{\text{band 4} + \text{band 2}}$

c) Transformed vegetation index : $\sqrt{\frac{\text{band 4} - \text{band 2}}{\text{band 4} + \text{band 2}} + 0.5}$

John by John G. Lyon, Ding Yuan, Ross S. Lunetta, and Chris D. Elvidge uses Difference Vegetation Index, Perpendicular Vegetation Index, Ratio Vegetation Index, Soil Adjusted Ratio Vegetation Index, Normalized Difference Vegetation Index, Soil Adjusted Vegetation Index, Transformed Soil Adjusted Vegetation Index[11]. They examine these indexes on the Chiapas area in the Landsat World Reference System-2, path 22 and row 49. images were in the UTM projection within zone 15. Each pixel was resampled into a 50-metre ground resolution, and the datum used was NAD27. The scene size was 1024 by 1024 pixels. Through this research paper we conclude that NDVI difference is least affected by topographic factors in this study and DVI and RVI difference images were affected by topographic factors. The main advantage of this method that it identifies suitable vegetation index and thresholds. The main disadvantage of this method that it enhance the random noise or coherence noise.[7]

- **Change Vector Analysis:** This method computes the change vector which is shows the spectral change in terms of direction and magnitude from the first date to second date.

If the magnitude of the computed spectral change vector exceeds a specified threshold than we decide that the change has occurred. Spectral change vector is a one output of this method the output of is total change magnitude per pixel is computed by determining the Euclidean distance between end points through n-dimensional change space. Through this number of spectral bands can be process to identify the change. Minu S and Amba Shetty take a data set of Yagachi of Belur in Karnataka, India. It lies between latitude 13°8'18.36" and 13°13'15.81" N and longitude 75°41'24.34" and 75°51'16.33" E. The study area covers about 162.26 km² and concludes that CVA produces 84.2% accuracy. In this research paper they compute the change through PCA, image differencing, CVA, image rationing, tasseled cap transformation and find out that CVA is best among others.

Sonam Ross, H.S. Bhadauriare view on Algebra, transformation, Classification Based Post-Classification Comparison, GIS methods of change detection they uses remotely sensed images. In algebraic method of change detection CVA is more accurate than others. In transformation PCA is more accurate. The change detection which is computed through Artificial Neural Network is not affected by the noises.[12] CVA gives the full change information this method able to detect the change in any number of spectral bands, but the disadvantage of this method is through this it is difficult to detect the land cover areas.

- Background Subtraction: Foundation subtraction is a notable methodology for recognizing moving items. To subtract frontal area from foundation, we will ascertain the distinction between the present edge and the foundation outline. This method is used to detect the change in moving objects or video sequencing.

Donovan H. Parks and Sidney S. Fels uses background subtraction algorithms to identify the changes in the vediosequencing. In this research paper diverse set of 7 outdoor and 6 indoor video sequences are used as a data set. They conclude that background subtraction is a good method to identify the changes in the video sequencing.[13],but it has a low accuracy[7].

Conclusion

All the mention methods for change detection that are consider in this research paper are algebraic method, there are six methods among these six methods CVA is a better method. But these methods again affect from the weather conditions, sun angle and other noisy effects. Yan Chu, Guo Cao and Hassan Hayat[14], conclude in there research paper that neural network avoid the radiometric correction procedures for change detection, enhance the difference in change areas remarkably, and suppress the noise effectively compared with traditional methods, but they also conclude that neural network need more samples as compare to the other traditional methods. They take the data from Google Earth with RGB channels.

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HUMAN RESOURCE ACCOUNTING “A NEED OR LUXURY TO ACCOUNTING”

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ABSTRACT

The world has seen the shifting of industrialization from manufacturing to Manufacturing & service. Now those days has passed away when the service industry plays almost insignificant role or even the role of Service is not considered in Manufacturing. The time is now to identify each and every resource whether it is a direct resource or indirect resource, whether a high value resource or low value resource, each need to be the part of recognition in cost sheet and thus to be the part of overall cost of production. Human resource is that part of the Organization which remained unmeasured for a long time. It happened due to non availability of proper accounting methods or standards as well as non consideration of Human factor as assets of the organization. Now the Human resource Accounting is becoming an integral part of the organization's Policy to Accounting and Financial Statements.

KEYWORDS: *Human Resource, Conventional Methods, Cost of Measurement, Return on Capital.*

Introduction

“Our strength is our Human force”.

“Our employees are the most important Assets for us”

“An organization if do not care its employees and workers, than it is not valuing its most important Assets.”

These all or similar tag lines we heard or read many times from the great to greatest industrialists or business houses or sometimes also described in their Objective, Goals and sometimes in there mission. What do really they mean it. Perhaps not or rather we should say that it is not possible for them to measure it and value it in their Balance sheet.

An organization has two categories of Assets generally. One is Tangible Assets like plant & Machinery, Furniture & Fixtures, Building, Stock etc and the other one is Intangible Assets, like trade Mark, Patent, copy rights etc. both finds a place in the balance sheet of the company. But one most important asset which do not take place in balance sheet of the most of the organization is their employees and workers or technically called Human Resource. The reason is very simple. No organization knows how to measure the value of Human Resource. Even who knows the same, has wide differences in their opinion. Those days has passed away when the success of an organization was totally dependent on the mass production and sales. Now the Human resource (or human resource Managers) participates to great extent in the decision making of an organization, specially in such a dynamic changing corporate environment.

The function of Human resource Accounting is to give the true information to the management to take effective decisions in relation to their Human resource, as well as to investors for disclosing the true picture of the organization. This Article is enlighten how we should treat the Human Resource as an Expense or an Assets in Financial Statements, to help in taking decision by management regarding Acquisition, Allocating, Developing Human Resource.

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Concept and Meaning of Human Resource

To understand the concept of Human resource we need to understand the concept of human capital. Human capital is the monetary value of Knowledge, skills, caliber and ability of any person or group of persons. These skills, caliber and ability is when used by any person in production or marketing or in planning or in generating the ideas for an organization, then such organization need to find out the economic value of the same and then it is termed as Human Capital.

With all above discussion, it can be said that Human resource is basically the value of knowledge and skill that an individual acquires during his life cycle and uses the same in generating or producing the goods and services or sometime Idea. **“The American Accounting Association’s Committee on Human Resource Accounting (1973) has defined Human Resource Accounting as “the process of identifying and measuring data about human resources and communicating this information to interested parties”.**

Thus the value of Human resource is not the expenses made by the company in their recruitment, Training, Skill Development but also the economic value of the employees of the organization, which it is expecting to take in the coming future.

Statutory Provisions and Requirements

In India neither the companies Act, 2013 nor any other law demands any furnishing relating to Human resource Accounting. The Institute of Chartered Accountants of India also has not bring into the force any definitive standard or pronouncement or Accounting standard on human resource Accounting or measurement of Human resource Accounting. Even while calculating Cost of Production, how companies shall include the cost of Human resource in their cost sheet, has not been defined by the Institute of Cost Accountants of India. This makes organization to their liberty to include the cost of Human resource in their cost sheet statement as well as to recognise the same as assets in their Balance Sheet. However various companies recognise the value of their Human resource and disclose the same in Financial Statements. Such companies include Infosys Ltd., Engineers Ltd., Madars Refineries Ltd. Even various Governments owned companies also do the same, such as BHEL, SAIL, MMTC and SPIC. However in spite of any Statutory Requirement, why organization are eager to show the Human resource Value in their Financials? The reason is, that the organization are now not limited to their country and the capital investment made in such organization is now not restricted to the family capital. So to attract the investors globally, the organization shall recognise the value of HR and hence there is a genuine need for reliable and comparable information in evaluating the organization with that of Global Entities. It makes their Position truly valuable, and that is the reason why organization is now a day’s depicting the value.

Need and Importance of HRA

The concept of Human Resource Accounting gives value to the Employees of the organization. Such value is important for taking not only the short term decisions but also the long term decisions. The organization need to invest a huge amount of capital in expanding the business or to start a new business. In old days one of the biggest reasons of suffering loss from a project was, entities never counted the human resource cost initially in their project. With the proper Human resource accounting the decision makers will be in a better position to take a decision regarding predictions of total True future cost of project if HRA system is properly designed. The other side of establishing an effective Human resource Accounting is, by accounting employees devotion, loyalty and efforts gives a recognition to employees and in this way it helps them to improve their efficiency (and then increasing efficiency of Organization) and their bargaining Power for a better remuneration. It helps them conscious about their efforts in the Organization. Some of the other benefits of HRA include

- The true calculation of Capital Employed and Return on Capital Employed.
- Helps in finding out the true cost of capital and indicates health and profit making practice.
- Helps in making decision making because of detailed analysis with the records of Cost of Human resources, at the time of Recruitment, Promotion, retention, retrenchment, and of course to extend the benefits to be given to employees.
- It also helps in identification of valuable human resource out of bundle of human resource, and with this helps in misuse or under use of Resource, thoughtless transfers, layoffs or labour unrest.
- Helps in developing a proper hierarchy.

- Due to recognition of efforts of Human resource, Productivity increases. It also boost moral of employees.
- It creates a sense of responsibility in organization, and thus value of organization gains respect in eyes of public.
- It provides a sound and effective control basis for Assets.
- By disclosing the Human resource, Financial Statement fulfills the principle of Full and Complete Disclosure.

Methods of Determination of Cost/ Value of Human Resource

Number of methods for determination of value of Human resource is evolved over a period of time. Out of these methods few are:

Ñ Historical Cost Method

This is the simplest and first method which evolved for determination of cost of Human resource. This method is based on Amortization of cost of Human resource over the time period for which that Human resource will be used in the entity. This is more or less same as to charging cost of an Assets over its useful life, as we do in case of depreciation. The total cost of Recruitment, Training and Skill Development is distributed over the period (expected) for which that Human resource will work. If the resources leaves the organization before the expected period, the whole remaining cost is charged in that year and if it remains in the organization for period more than the expected, the amortization schedule need to be revised.

This is the simplest method as we said, and most important it recognizes the traditional accounting matching concept and simultaneously helps in calculating the return on Human resource Investment. However there are some obstacles in using this method, such as it considers only the cost of recruitment and training and excludes their recurring cost, it is difficult to calculate the potential number of years for which he will work in the organization and the last one the benefit which will accrue from such resource will increase as he will gain experience, hence allocating similar amount over all years is not justified.

Ñ Replacement Method

In this Method instead of taking the cost of recruitment etc. of an employee, the cost of recruitment, Training and Skill Development, for replacing an existing employee with the same skills, experience and knowledge of the work and organization of that employee, with a new employee is taken and recognized over the period of time. This method is more realistic and approached method as it considers the present value of replacement of an employee. However this method too suffers some negative points which is, it ignores the conventional method of accounting of matching concept, it is always difficult to replace a person with of similar capabilities and caliber and replacement of an existing Asset is affected by number of subjective matters.

Ñ Standard Cost Approach

This is again the one conventional approach for taking the value of Human Resource. In this method replacement method is used to develop a standard price or cost of every grade of employee, and than actual cost of Recruitment, Training and skill development is compared with that of standard value and variances are analyzed for the purpose of evaluation. However the setting up of standards is a very difficult process.

Conclusion

From the above mentioned discussion, it can be well said that Human resource Accounting is an area which has not been developed so much, as it should be and because of its ignorance or non possibility of calculation the correct value of Human Resource, the true value of financial position of entity has never came out. Various entities has started using different methods for measuring the value of Human Resource however due to unavailability of any specific standard or pronouncement, it becomes little difficult to do this but yes the era is now changing and presentation is becoming more presentative. A thoughtful effort is also required from Institute of Chartered Accountants of India or various national or international Accounting Association for introducing a standard or pronouncement, so uniformity and consistency can be maintained and it becomes mandatory for all organization to recognize, measure and disclose the value, so users can get the true value of their financial Position.

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UNDERSTANDING THE FRAMEWORK OF BEHAVIORAL FINANCE IN INVESTMENT DECISION

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ABSTRACT

The interest in several businesses has become difficult as people are spending large amounts of money, even if the company changes marginally. Most investors expect to optimize their utility rationally. Nevertheless, behavioral economists argue that market efficiency is not specifically in the short term and individuals do not take rational decisions to maximize profits based on their successful research. People are susceptible to various behavioral patterns which have been detrimental to the principles of wealth optimization which lead to irrational behavior. Decisions can not be reached in a vacuum by using personal resources and dynamic templates which do not take the situation into account. The study of the question factors is driven by the manager's cognitive psychology. A decision-making scenario requires not only the individual's specific problem, but also the environment. Competing financial models also focus on a human investing framework that is prone to assessing and taking decisions. The purpose and significance of behavioral finance and their application in investment decisions are discussed in this article. It includes work which drops conventional expectations about the anticipated potential utility in efficient markets with reasonable investors.

KEYWORDS: *Behavioral Economists, Manager's Cognitive Psychology, Reasonable Investors.*

Introduction

It is a difficult thing to determine. Decisions can never be made in a vacuum utilizing personal resources and dynamic templates that do not take the situation into account. The study of the factors of the question is driven by the manager's cognitive psychology. A decision-making scenario requires not only the individual's specific problem but also the environment. The decision-making method can be described as the selection of a certain alternative among a number of alternatives. After the proper evaluation of all options, this is an exercise. They have to be modernized to meet the required results / objectives in the competitive business world in multi-dimensional fields. According to economic theories, consumers think and behave "rationally" while buying and selling products. To order to determine firms ' worth and the economic health of the economy, creditors are expected to use any information available for the purpose of influencing "fair expectation." Accordingly, stock prices will represent fundamental values and only go up and down if there are unintended positive or negative events. Therefore, economists have assumed that financial markets are resilient and efficient, inventory prices follow a ' random walk. '

According to Shiller (1999) Investors are not rational thinking and acting. Investors gamble about unsustainable highs and lows, then, driven by greed and terror. Therefore, investors preach extreme emotions, emotional thought and the crowd's preferences, constantly shape unrealistic aspirations for business and overall economies ' future outcomes that surpass and slip below fundamental values and follow a somewhat predictable wave-like course. The conduct of investors is part of academic discipline related to as "Behavioral finance," which describes how investors are affected by sentiment and cognitive mistakes. Investor's action has long been in the interest of economists and portfolio managers, but not investors themselves, since the mindset of the stock is sometimes dominant. The behavior of human herding stems from impulsive mental activity by individuals who respond to other people signals (Prechter, 1999).

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This requires better knowledge and understanding of human nature in the present global perspective, plus skill development and innovation best-in-class ability. Investors also need to cultivate positive vision, foresight, resilience and inspiration. In all ways, all investors vary because of a variety of factors, such as demographics, socioeconomic background, schooling, age, race and sex. Investor choices are the most significant obstacle met by investors. The optimal judgment on investments plays the active role and is of major importance. The investors will consider their financial targets, the degree of risk tolerance and other constraints in planning the investment portfolio. Therefore, the performance mean optimization must be estimated. This is best suited for institutional investors; often it is not appropriate for people who are sensitive to behavioral biases.

In the current situation, behavioral financing is now an integral component of decision-making, as it has a direct impact on the performance of borrowers. Through understanding the assumptions and mistakes in the decision we are all inclined to, it can enhance our efficiency. Knowing the Behavioral finance system is going to help investors choose a better investment strategy and avoid expensive mistakes from occurring in the future. The main concerns of this study are how the psychological biases in investment decision-making processes can be reduced or removed.

Behavioral Finance

At one time there seemed to be statistical and scientific proof that traditional financial models worked fairly in forecasting and interpreting certain forms of economic events. However, over time, financial and economic scientists have observed phenomena and activities happening in the real world but that can not be clarified by any explanations accessible. The traditional hypotheses may justify those "idealized," but in fact the real world was much more unpredictable and unorganized, and market players still acted in irrational ways and thus difficult to predict according to those models.

As a consequence, researchers have begun to look into cognitive psychology to compensate for irrational and illogical actions, which modern financial philosophy doesn't clarify. The discipline that arose from this endeavor is behavioral science; it seeks to justify our acts, while conventional finance attempts to explain the behaviors of idealized economic man (*Homo economicus*).

Behavioral economics, a sub-field of behavioral economy, suggests financial anomalies including extreme rises or falling stock values dependent on psychology. The goal is to recognize and explain why certain financial choices are made by individuals. The knowledge framework and behaviors of market participants within behavioral finance are believed to affect both investor investment decisions and market outcomes systematically.

Daniel Kahneman and Amos Tversky are known by many to be the founders of behavioral finance who started to work in the late 1960s. Earlier came Richard Thaler, who merged economy and finance with psychological factors to create ideas such as mental accounts, the influence of Endowment and other preconditions that affect people's behavior.

Definitions

Belsky and Gilovich (1999) He refer to behavioral finance as a behavioral economy and have described it as a synthesis of the double discipline of psychology and economics to understand why and how individuals make unreasonable or non-logical choices regarding saving, investing, buying, and borrowing money.

Swell (2005) He argues that the analysis of social impact on financial practitioners' actions and resulting business effects are components of behavioral financing. He further claimed in 2007 that behavior finance questions business efficiency philosophy by providing insight into why and how the economy could be inefficient due to human activity irrationality.

As research on the impact of psychology on the financial market, Forbes (2009) has described behaviour finance. In these points of view, people are affected instead of being moral and optimizing capital through psychological factors including cultural bias across their decision-making.

Therefore, behavioral finance is the application of scientific research to market participants and market price patterns on the psychological, financial, and emotional contributions. It also examines the psychological and sociological factors which influence individual groups and entities' financial decision-making process

Literature Review

Although the literature on behavioral finance is very comprehensive, it is recommended that some observational case studies be introduced to provide light analysis on behavioral finance and its use in decision making.

Tversky and Kahneman who have been known as the founder of behavioral finance can better be described from their experiences in various phases. In 1979, they published a paper on criticism of Expected Utility Theory that empirically found that people are underweight outcomes that are relatively probable relative to findings that are collected with certainty; also that people generally disregard components that are expressed by all viewpoints under consideration.

Interest is attributed to gains and losses rather than to ultimate properties under prospect theory: likewise uncertainties are substituted by weights of judgment. The hypothesis that they tested by analysis predicts a distinctive fourfold trend of risk behaviors, risk aversion for benefits of moderate to high likelihood and losses of low probability and reward finding gains of low probability and losses of moderate to high probability.

We found that the psychological rules guiding the interpretation of judgment problems and the estimation of risks and outcomes created consistent beneficial changes when the same question is presented in different ways.

Written report by De Bondt and Thaler (1985): "Does the stock market over-react?" In the Finance Record. We argued that citizens are routinely over-reacting to sudden and shocking news that results in stock market inefficiencies in significantly weak form. Mental accounting is a collection of cognitive operations that people and families use to coordinate evaluating and monitoring financial activities.

Simon Gervais (2009) published a literature study on the impact of behavioural prejudice on capital budgeting in "Behavioural Finance; Capital Budgeting and Other Investment Decision." A large body of psychological literature shows in this article that the people tend to be overconfident and overly optimistic. The literature shows that conservative executives over-invest cash flows in their companies, introduce too many fusions, launch more businesses and more innovative ventures, and tend to stick longer to unproductive investment policies.

This is some of the research analyzed in behavioral finance that illustrates the effect of human irrational behavior on investment decision taking.

Principles of Behavioral Finance and its Implication

Under the traditional philosophy of finance, decision-makers are moral. Prevailing theory, by comparison, suggests that financial decision-making for investors is not guided by reasonable factors. We also often take decisions which are contradictory.

The efficient market theory (posited by Samuelson and Mandelbrot in the mid-1960s and popularized by Fama in the 1970s) notes that stock rates fully reflect the information available. The idea is that no one except by luck will beat the market, and that investors should only aim to build a broadly diversified portfolio weighted on the basis of current market prices. According to efficient market theory, the only applicable risk factor is beta—a calculation of the propensity of the price of a security to react to price changes from a broad market index.

Accounting-based risk assessments are not important, because the price of their shares already represents all the details about a business. In comparison, behavioral finance explores how the feelings of individuals influence their investment decisions and results. The main difference from EMH here is that the Social decision-making process works in a different way, human decisions are subject to several cognitive / intuitive ways of thinking rather than rational ones.

Heuristic Decision Process

The decision process through which the investors find things for themselves, typically by trial and error, contributes to the creation of thumb laws. That is to suggest, it applies to thumb laws this humans use to make decisions in dynamic, unpredictable environments⁷. The truth, the decision-making process for investors isn't purely logical. The analysts believed they gathered the relevant information and analyzed it independently, in which the mental and emotional factors are involved. Separating is very tricky. It may be good at times, but many occasions it may result in poorer outcomes for choices. This covers:

- **Representativeness:** The recent success of the investors; often appears to continue into the future. The investors' propensity to make decisions based on past experiences is regarded as prejudice. Debon (1998) claimed that the trait of stereotypical judgments, analyzes was skewed in the context of recent success or failure in its earnings predictions.
- **Overconfidence:** Confidence has several facets to it. It can offer more confidence, and is often seen as a key to success. While confidence is often promoted and praised, achievement is not the only consideration. The conservative and rational investors will flourish and others have to leave. But trust, especially self-confidence, is often seen as a positive trait. The investors often overestimate their statistical ability or believe they have more expertise than they do. It often contributes to unfair trading.
- **Anchoring:** This explains the common human propensity when making decisions to rely too heavily, or 'anchor' on one attribute or piece of information. The buyers continue to be slow to change when presented with new knowledge or the rate of valuation is set or anchored by recent observations. We foresee the earning pattern to remain with historical trend, which may contribute to probability.
- **Gamblers fallacy:** This happens when creditors assume wrongly that the trend would change. It can add to the excitement of good or bad outcome.
- **Availability bias:** The investors place undue weight on the most available information when making decisions. This is quite popular. This contributes to less gain, and also poor results at times.

Behavioral Finance and Investment Decisions Behavioral

Behavioral finance seeks to find out how investment decisions impact the feelings and behavior of the creditors. It's the analysis of how people in general and investors in particular commit common mistakes owing to their feelings in their financial decision. It is nothing but the research of why otherwise rational people take investment decisions that really thumbs anything.

Decision making is a method of selecting the best alternatives among a range of options. This decision came after a proper assessment of all the alternatives. Decision-making is investors' most dynamic and taxing practice.

Due to various factors, such as demographic element, socioeconomic background, educational level, sex, age and race, each investor varies from the other in all ways. The successful investment decision takes the important part and is a major consideration.

Investor is a moral being that will always function to increase its benefit. Yet we're not rational; we're human; the feeling inside us is an integral part of that humanity. In reality, most of our lifetime decisions are made on purely emotional factors. In the financial world, investors often base their decisions on meaningless figures and data, e.g. certain investors may invest in the stock that has seen a significant decline in recent past following a continuous growth. We assume that prices have fallen, which is due solely to short-term market movements, creating an opportunity to buy cheap stock. In fact, though, stocks do decline in value very frequently due to changes in its underlying fundamentals.

Cognitive dissonance is the sense of incompatibility between two cognitions, which may be described as any aspect of information including mood, sentiment, opinion or behaviour. Cognitive dissonance theory holds that conflicting cognition acts as a driving force for the mind to create or invent new ideas or opinions or modify existing views in order to reduce the amount of dissonance (conflict) within cognition. Festinger cognitive dissonance theory states that, in one of the two forms, human tries to minimize internal conflict:

Altering his previous beliefs, emotions or options; and (ii) trying to justify or rationalize his decision. Such hypothesis can extend to stock market investors and traders who seek to rationalize conflicting actions, so that they seem to proceed from personal values or point of view, obviously.

We adjust our investing preferences or creeds of Financial Cognitive Dissonance" to help our financial decisions. For starters, investors who adopted a traditional investment approach (fundamental analysis) by analyzing firms using financial metrics such as, productivity indicators, in specific, profit / earnings ratios, began to change their investment philosophy. Several individual investors bought internet retail companies who were unable to implement such financial controls. Because these firms have no historical track record, very little sales and no net losses.

Such mainstream investors have rationalized the shift in their investing style (past beliefs) in two ways: many investors' first justification is the assumption (reason) that we are now in a "new economy" where the traditional financial laws are no longer in place. Generally this is the stage of economic cycle the stock market reaches its peak in. The second action demonstrating cognitive dissonance contradicts traditional ways of trading by purchasing this internet stock based on market momentum.

Regret theory says a person assesses their intended reactions to a future event or circumstance. Psychologists also shown that when that choice was more unorthodox, individuals who make choices that come out poorly question it more. The principle can also be extended to consumer behavior within the stock market, whether an individual has considered buying a stock or mutual fund that has fallen or not, actually buying the expected investment can trigger an emotional reaction on the buyer.

Investors that avoid selling stocks that have dropped in value to avoid the disappointment of having made a bad investment choice and the hassle of disclosing the loss. Therefore, the investor often finds it easier to buy the "hot or common weekly volume" Essentially the participant only joins "the flow." So, if the equity or mutual fund falls significantly in value, the buyer can more readily rationalize his or her investment decision. Because a number of individual investors have lost money on the same bad investment, the investor may reduce emotional reactions or emotions. The fear of disappointment in investment can either make investors risk averse, or inspire them to take higher risk.

Theory of prospects deals with the idea that people don't always behave rationally. There are various psychological factors which under uncertainty encourage people to make investment decisions. This finds choice to be a "decision weights" feature and claims that these weights do not always suit the probabilities. It further indicates that weights of choice tend to exaggerate low odds and underweigh modest and large risks. Prospect theory suggests that if investors face the prospect of losing money, they often take riskier actions on aversions to losses. They appear to undo their disclosed vulnerability attitude, or substantially change it.

Prospect Theory

Kahneman and Tversky establish the principle. The second classes of delusions that might affect the decision process are listed in the principle of expectations. He addressed many mental states that may affect a decision-making process for investors. The key concepts he worked with are as follows;

- **Loss aversion:** Loss aversion is an important concept in psychology that is gaining growing interest in economic analysis. Once faced with the possibility of risks, the investor is a risk-seeker but is risk-averse once presented with the prospects of benefit. This condition is called aversion to losing. The loss avoidance hypothesis was explored with risk aversion by Ulrich Schmidta and Horst Zankb and he acknowledged the theories of Kahneman and Tversky.
- **Regret Aversion:** This derives from the urge of creditors to escape agony of disappointment due to a poor investment decision. Such reluctance allows creditors to keep poorly performing securities as it also prevents consideration of the resulting risk and bad investment judgment to prevent their selling. Regret avoidance provides a tax negative investment strategy because by recognizing capital losses, creditors may raising their taxable revenue.
- **Mental accounting:** Mental accounting is the collection of cognitive operations that analysts use to coordinate, evaluate, and monitor investment practices. Much attention is paid to three aspects of Behavioral Accounting. It first describes how outcomes are viewed and processed, and how decisions are made and then measured. A second component of mental accounting includes allocating tasks to individual accounts. The origins and applications of the funds are classified both in actual and theoretical accounting systems. The third mental accounting aspect concerns the pace of assessment of accounts and 'option bracketing.' Accounts can be maintained monthly, weekly, annually, and so forth and can be strictly or loosely defined. Each of the theoretical accounting elements contravenes the economic principle of fungibility. Theoretical accounting therefore affects option, that is, it cares.
- **Self Control:** Both creditors are required to avoid the losses and preserve the assets. As mentioned by the investors Thaler and Shefrin are susceptible to pressure and are searching for ways to enhance self-control. Investors should manage their desire to over-consume by internally dividing their financial resources into cash and 'eligible for spending' pools.

Conclusion

Although the aforementioned definitions of delusions are commonly known, Behavioral Finance does not say that all investors will be collectively suffering from the same delusion. An investor's vulnerability to a single perception would certainly be a result of multiple variables. There is persuasive proof, for example, that the investor's background has an explanatory position in its respect with less experienced investors becoming susceptible to extrapolation (representativeness) while more experienced investors are performing gambler fallacy. Behavioral finance offers theories why creditors are taking poor financial decisions. This reveals how feelings and logical mistakes affect the decision-making process of investors. The different causes that lead to behavioral finance are aversions to anchoring, overconfidence, group actions, over and under reaction and failure. In general, an introduction to behavioral finance examines consumer behavioral patterns and tries to understand how those behaviors influence investment decision. Similarly, behavioural considerations play a vital role in the investors' decision-making process. Investors must therefore take the necessary steps to mitigate or eliminate delusions to affect their decision-making process, especially investment decisions.

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INVESTMENT MANAGEMENT AND BEHAVIOUR OF INVESTORS IN MUTUAL FUND AND ITS ROLE IN ECONOMIC DEVELOPMENT

Rachana Kumari*

ABSTRACT

In present global scenario Investors are found to be a key element for the development of economic as a whole. In different field of the economy Investors are those who carry out Investment activities for the formation of capital. The Investor is the person who has the ability to generate, new ideas and services for his business. Generating new ideas indulge problem solving and grab new opportunities and challenges. For productive activity Investment is saving with one's fund and to be used by another. Investment is an activity in which Investors can undertake new opportunities. Investors who have extra cost could invest it in securities or in any other assets like gold or real estate or could set up a new business plan which could create a large number employment. Investment means a claim on future money for a return. This return is for abstaining from present consumption, to be rewarded for waiting for a future consumption. Investment decision involves risk, actual return uncertainty, time of waiting, funds safety, and availability of the return. With the aim of increasing income or capital appreciation Investment is employment of funds on assets. An investor is an innovator or developer who recognizes the opportunities and seizes it and those opportunities is converted into workable ideas, with time, effort, money, or skills. An Investor is vital input of economic growth. My study is an attempt to understand the Investment management and Behaviours of Investors in Mutual Fund and its role in economic development.

KEYWORDS: *Investment Management, Investors Behaviour, Mutual Fund, Economic Development.*

Introduction

Financial investment is in the form of general or extended term. In finance, an investment is an asset which is expressed in terms of money and it is purchased with the idea that in the coming future the asset will generate income or it will be sold for a profit at higher price. Over a period of time, financial investment is the allocation of money to assets that are expected to yield some gain. It means an exchange of financial claims – stock and bonds (collectively termed securities), real estate mortgages etc. Over the years financial investments experience capital growth and increased returns. In the capital market the savings of the individual flow as financial investments, which is to be used in economic investment, therefore the meaning of financial investment and economic investment are related to each other. The investor is a person who is interested in the formation of capital and good rate of return for a longer period of time. An investor in the long run, concerned with the benefits directly provided by the securities. The investor is constantly evaluates the worth of security. The investor is a person who is trying to reduce the risk and increase the return. The risk is the probability of occurring loss in a financial transaction. The investor buys stock only after studying all the factors about the concerned company's stock. The investor likes to invest in the assets or securities where the principal amount of investor would be safe. Investors generally expect higher returns from riskier investments. Investors make an investment where the risk is less and always adopt an investment strategy and diversify their portfolio. To reduce or decrease the overall risk diversification of portfolio is very effective. Investor is one of the important inputs in the development of the economy of a country. An Investor plays a central role in the economic development by establishing firms and making investment in profitable project.

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In general the management of investments procedure for the financial institution or its investors is very important for future growth and capital formation. All activities like management of client portfolios, daily buying and selling of securities, monitoring of portfolio, settlement of transaction, measurement of performance of asset, reporting to client are handled through proper investment management process. The most essential investment activity is managing tasks, roles and responsibilities assigned in the best possible manner. Investment decision is based on strategy which is major action plan which affects the whole or major part of investors future and present.

Objective of the Study

- To study the need of Investment Management.
- To identify business opportunities.
- To explore positive impact or importance of investment management in Economic development.

Literature Review

- **According to Jordan** "Commitment of funds made in the expectation of some positive rate of return. If the investment is properly undertaken the return will attached with the risk the investors assumes."
- **According to F.Amling** "Investment may defined as the purchase by an individual or institutional investors of a financial real assets that produce a return proportional to the rate assumed over some future investment period."
- **According to Mrs. Joan Robinson** "Investment means making an addition to the stock of goods in existence
- **"Investment"** or "Investing" like "Value" is a word of many interpretations. There are basically three concepts of Investment
 - **Economic Investment** - is an economist definition of investment.
 - **Investment** in a more general or extended sense, which is used by "the man on the street".
 - The sense in which we are going to be very much interested, namely, **financial investment**.

Methodology

The study is exploratory by nature, where attempt has been made to explore the positive and negative impact of Investment Management in the development of economic. Study is based on the need of Investment management and behaviours of Investors towards Mutual Fund and the steps involved in the identification of opportunities related to business and its role in the development of economic.

Investors Buying Behaviour

Investor behavior is the study of investor and the process they use to select products and services. A more in depth definition will also include how that process impacts the world. The behavior of Investor is incorporated from the ideas of several sciences which include psychology, biology, chemistry and economics.

The most challenging concept in investment possibly deals with understanding, why investors invest in different securities or assets. This knowledge is critical for marketers since having a strong understanding of buyer behavior will help shed light on what is important to the investor and also suggest the important influences on investor decision-making. Marketers can create marketing programs using this information, that they believe will be of interest to customers. The attitude, beliefs, perception and values influence the investment behavior of investors. Investors' behavior is not a self induced phenomenon, but it is affected by a group, family and the society.

Investors Buying Behaviour of Mutual Fund

Generally the surplus income over expenditure is savings. To generate more money and formation of capital savings are invested is called investment. Traditional investment option is making investment in livestock, land and precious metal. Due to banking system revolution in investment took place. Many investment options like Fixed deposits (FDs), Government bonds, Public Provident Fund (PPF) to its investors is provided by bank. For generating higher returns investment in stocks is a good option. Lack of knowledge and risk is associated with the movement of stock prices. With the Knowledge of expert's professionals Mutual funds emerged as an investment to lessen the risk at low cost. Mutual

Fund acts as a trust and pools the savings of large number of investors. Mutual fund helps investors in sharing common financial goal and makes investors to invest their savings in capital market instruments such as shares, debentures and other financial securities. The income earned and capital appreciations are shared by its unit holders in proportion to the number of units owned by the investors. Thus, it provides an opportunity and offers to common man to become an investor and invest in diversified, professionally managed securities at a relatively low cost and earn a huge return.

Investors Preference of Buying Mutual Funds and its Role in Capital Market Development

Mutual funds have opened new way to various small investors. Generally small investors look for information, which information is helpful in overcoming hedge against inflation and earn good returns from their investment. An investor finds himself to be a nod man out while making investment. Mutual fund helps a lot to these small investors. Fund Manager and investors joined together and made a combined effort for the success of mutual funds. To meet the requirements of investor the need and expectations of investor is analyzed by fund manager, so that the investor is satisfied with their investment. Therefore, it is very important in the present scenario that mutual funds investors requirement, their preference for various schemes and its performance evaluation is properly identified and understand by the fund manager. With the Indian financial markets developments, the important investment avenue for small investors is the mutual funds. Mutual funds provides a better investment alternative to obtain benefits of expertise fund manager, who are professional and provide investor with information to invest in equity based investments to earn a huge return with less risk. So in this scenario where many schemes are flooded in to market, fund manager analyze the needs of consumers and to find out which factors affects consumers' needs the most. Today in household finances mutual funds plays an effective role. The development of economy depends upon the growth of capital market. Capital market is concerned with the long term financial activities. Mutual Fund industries play a major role nowadays in capital market development. Investors prefer to make investment for long term for earning better return in the future.

Role of Investment Management in Economic Development

Investment management is related to the proper management of financial system which led to the formation of capital. An adequate formation of capital is very effective to the development of economic. The main function of investment management is to collect savings and distribute them for investments in industrial purpose stimulate the formation of capital. This will accelerate the process of economic growth. The process of capital formation involves three inter related activities. They are

- The ability of savings is claim for resources which is set aside and is available for other purposeful activities.
- Resource which is assembled from domestic savings or other source is the claim for financial activities, is given to the investors.
- When resources are used for production purpose it is considered as investment.

The intensity and efficiency with which all these activities are carried on is considered as the volume of the formation of capital. Investment management is considered as the financial management which includes anticipating the needs of the investors, acquiring the resources and allocation of these savings into most desirable and productive forms of investment which led to the formation of capital for economic development. For every individual it is essential to keep aside some amount of his income for future to be secured. Investment management is the art of assigning some amount of money into something, which would benefit the investor concerned in the near future. Investment management helps in increasing the value or wealth of investors. Value is represented by market price of the investment that was made in the purchase of securities or asset. Value also signifies the net worth in terms of net present value. Net present value is the difference between Gross present value and the cost of capital investments required for achieving the benefits.

Net Present Value = Gross Present Value of future cash inflows – Initial cost of Investment

Value or worth of the investor is based on the concept of cash flows that means benefits are measured in terms of cash inflows and costs are expressed in terms of cash outflows. Thus in wealth maximization business operations should be conducted in such way to ensure maximum net present value to the investors.

- Value is created when Gross present value > Cost that is Net present value is positive.
- Value remains constant when Gross present value = cost that is Net present value is Zero
- Value is reduced when Gross present value < Cost that is Net present value is negative.

Value maximization is used in the decision criteria of different areas like

- In case of investment decision, the value of investment is maximized when projects with higher positive net present value are accepted.
- In case of financing decision it may be stated that when the return is maximized with the minimum risk, market value per share will be maximized.
- Similarly maximization of the market value for share is the optimum dividend policy.

Investment usually involves making investment into the purchase of assets which in the short run is not marketable. The investment is expected to yield a series of returns. The expectation with which investments are usually made is that in the future a certain sum of income or certain price which has existed will not change. A good financial management system helps investors to become a better macro manager by enabling them to:

- To manage investment proactively rather than reactively.
- Planning ahead for financing needs and borrow money more easily, and share their budget with their banker and fund manager which will help in the process of loan approval and further investment.
- Providing financial information which help investors in planning for future.
- Helps in making every investment profitable and effective and risk free.
- For every financial considerations it act as a great decision making tool.
- Helps in planning ahead for future benefit.

Materials and Method

The methods of data collection used to study the Investment Management and behaviours of Investors in Mutual Fund and its role in economic development is based on Primary and secondary data. The journal, article, web links and books and questionnaire have been used as a source of information.

Results and Discussion

Mutual fund investor behavior is an emerging area of empirical research worldwide. There are various dimensions of mutual fund investor behavior experiments and models of research interest. There is also a wide scope to do cross country and international business and inter – regional studies on various aspects of investor behavior. The limitations of this empirical research should be viewed as opportunities for future research work. The present research work focus on the study of “Investment management and behaviors of investors in mutual fund. The present Study was conducted on a sample of 100 respondents of every age group.

Table 1: Types of End Schemes in which Investors Prefer to Invest

S. No.	End Scheme	Number	% Age
1	Close Ended	18	18%
2	Open Ended	82	82%

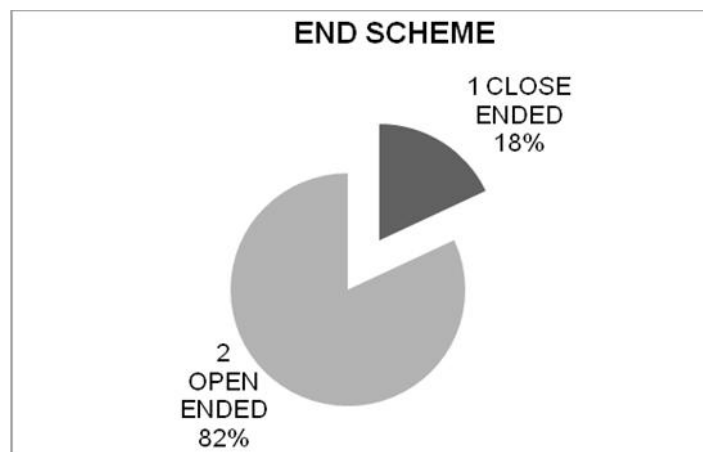


Fig. 1

Interpretation

The table shows different Types of End Scheme which is preferred by the investor while making investment in mutual fund, the data shows that 82% of the investor make investment in open ended scheme of mutual fund, and rest 18% make investment in close ended mutual fund scheme.

Table 2: Types of Mutual Fund Companies in which Investor make Investment

S. No	Mutual Fund Companies	Number	% Age
1	ICICI Prudential MF	16	16%
2	UTI MF	4	4%
3	SBI MF	16	16%
4	LIC MF	47	47%
5	KOTAK Mahindra MF	2	2%
6	Others	15	15%

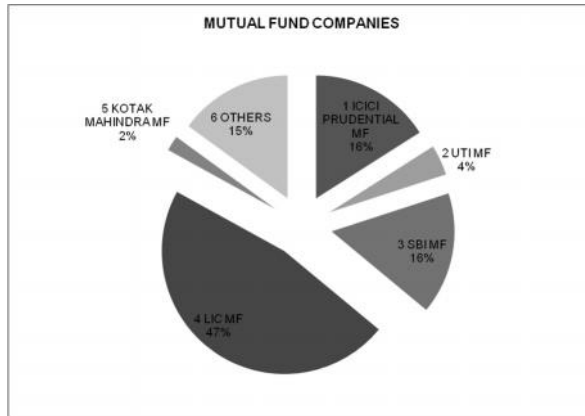


Fig. 2

Interpretation

The table shows the types of Mutual Fund Companies in which Investors make investment. From the data that I have collected the result is that out of 100 investors LIC Mutual Fund was having the highest rate of Investors with 47%, ICICI Prudential Mutual Fund and SBI Mutual Fund have 16% of the respondents have invested, 4% investors make investment UTI Mutual Fund, 2% in Kotak Mahindra Mutual Fund and rest 15% investors in other mutual fund companies.

Table 3: Best Mutual Fund Plan according to Investors

S. No.	Mutual Fund Plan	Number	% Age
1	Balanced Plan	18	18%
2	Equity Plan	14	14%
3	Income Plan	44	44%
4	Other	24	24%

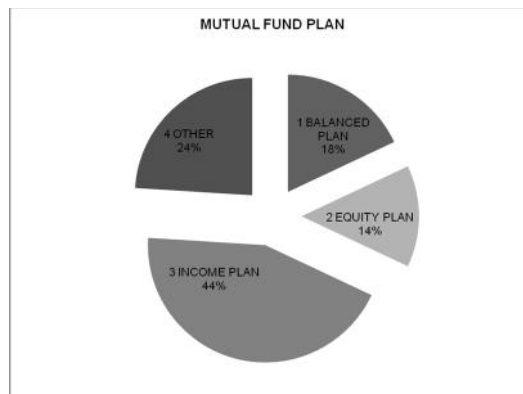


Fig. 3

Interpretation

The above table shows the Mutual Fund plan that out of 100 investors 18% of the respondents have invested in Balanced Plan, 14% have invested in Equity Plan, 44% of the investor invested in income plan and the rest i.e. 24% of the investor invested in other plan.

Conclusion

In my Conclusion, I found that the investment management is an important skill of every small business owner or manager. Every decision that an investors makes has a financial impact on him, and he has to make these decisions within the total context of his operation. Investors behave differently to different stimuli because of multitude of factors. This also explains that how attitude, beliefs, perception and values influence the investment behavior of investors. Investor's behavior is not a self induced phenomenon, but it is affected by a group, family and the society. The best investment decision selected reward the investors with maximum return in future. A wrong decision may harm the investors a lot. Mutual funds are the investment products that are best suited for those who wants to invest in equity but do not have the expertise. In India mutual funds are still a push product. Investors have positive impact on economic development in India as it plays an important role and gear up capital formation, generate huge Capital, improve standard of living of the people of the nation, boost up wealth creation and decentralized distribution of economic resources, increases Gross National Product (GNP) and per capita income, facilitates overall development of the nation. Investors promote the formation of capital by mobilizing the idle savings of his present. Investors can invest their own as well as borrowed resources for further investment and huge return. Such type of activities leads to addition of value and wealth creation, which is essential for the promotion of capital and economic development of the country.

Suggestion

After research in respect to Investment Management and Behaviours of Investors in Mutual Fund, I am giving following suggestion.

- There may be investment in mutual funds in large number if the regulatory authority and the supportive infrastructure are active and provide information regularly.
- Mutual Fund Company has to be prepared for getting the feedback about sales.
- The company has to study the performance indicators about the performance like Net Asset Value.

The Mutual Fund Company has to look after the certificate and send the certificate to the investors timely and pay dividends and other entitlement for the economic development.

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ANALYSIS OF INTERNAL ENVIRONMENT VIA VRIO, CORE AND NON-CORE COMPETENCIES (A CASE STUDY OF TOYOTA MOTOR CORPORATION)

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ABSTRACT

Business cannot run in a vacuum. There are certain factors which affect the functioning and operations of the business. These factors may be internal or external. Usually, corporate houses and management experts remain apprehensive about the factors of external environment as it includes competitors, suppliers, customers, etc. who are significant dynamics of any business. Though, internal environment does not constitute such uncontrollable factors, yet they are vital for the growth of the organization. Internal environment consists of the internal elements of the organization such as management, management practices, corporate culture, organizational structure, vision and mission of the company, machinery and equipment employed employee satisfaction, etc. These factors play a major role in making choice and decisions of the company. Some popular practices to analyze the internal environment of the company are the study of core and non-core competencies, VRIO analysis, PEST analysis and SWOT analysis. These analysis tools give competitive advantage to the business. In this research paper, we will study about the internal environment, special context to VRIO analysis of Toyota Motor Corporation. Analysis table has been made to mark the checklist for better and clearer understanding of the concept.

KEYWORDS: VRIO, SWOT Analysis, PEST Analysis, Vision and Mission.

Introduction

To achieve success in There are enormous ways to attain the spirited advantage in the marketplace. Businesses strive to make a good mix of tried and tested methods and innovative methods to cope up with the competition. Companies have to develop competitive advantage as well as core competencies to excel in the market. Development of non-core competencies is also an essential part to mark the presence in the competitive scenario. Sometimes, companies have to produce certain products which are beyond their culture and core competencies just to mark their presence in particular segment of customers; for example the company producing mainly alcohol makes shoes or office stationary too.

It is imprudent to ignore internal environment and just concentrating on the factors of external environment considering customers as the ultimate goal. Customers would not be attracted or sustainably retain to the organization with poor vision or corporate culture. VRIO framework assists in evaluating the performance of an organization based on its internal dynamics (Camillo, 2015). Correct strategies are vital to achieve the sustainable competitive advantage. The resources of the company are rare and valuable and hence, company must use the resources in a wise manner to attempt to win over customers. Moreover, the company needs to identify the resources which are imitable or substitutable (Peng, 2015). It is important to understand the attributes of VRIO:

- **Valuable:** Creating or adding value to the products for the customers can become the strategic advantage for the company. The value creation would result in minimizing the external threats and provide an opportunity to the companies to exploit the global breaks. Innovative production techniques, products or marketing and distribution strategies may prove to be triumph for the corporate houses. (Pitt, 2012)
- **Rare:** An organization may enjoy the sustainable competitive advantage over its rivals if it has got the rare resource, product or technology which is rare and not available to its competitors. This rarity can prove to be a big breakthrough for the company. This rarity may be in the form of such advancement in technology or innovative products which are in short supply. (Sanchez, 2008)

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- **Imitability:** It may be defined as the ability of the firm to imitate or copy the technique used by the competitors. If the product is easily imitable, the company does not enjoy the market position for a longer period of time. Vice-versa some companies such as Maggi and Parle-G enjoy the benefit of having taste or features which could not have been copied by other companies for years. (Enders, et.al., 2009)
- **Organizational Appropriability:** Larger companies have complex organizational structures. They have to manage the lengthy production or marketing processes without fail to deliver final product to the customer on time. Best and optimum utilization of resources is the key to sustain in the market.

In this paper, we are studying the VRIO framework of Toyota Motors Corporation which is a Japanese multinational automotive company. It ranks second in the world in its sector after Volkswagen and tenth in the world as far as revenue is concerned. It produces more than 10 million vehicles a year. The company is a global market leader in hybrid electric vehicles.

If we analyze the VRIO framework of the company, we are able to find some core competencies in the form of resources and capabilities promoting technological advancements which are essential to compete in the highly competitive international automobile market. The major competitors of Toyota are General Motors, Ford, Honda, Hyundai, Mitsubishi and Nissan. VRIO analysis was designed by Jay B Barney to study the core competencies of the business which provides them competitive and sustainable advantage within the review based view (RBV) of the organization. It is a part of strategic planning process. In the VRIO analysis of Toyota Motors, it was studied that how the company fares relatively to its competitor firms and how its competencies, both core and non-core, provide sustainable competitive advantage to it to stay as the major player in the automobile sector.

VRIO Analysis Checklist of Toyota Motor Corporation

The core competencies of Toyota are based on its yearlong highly advanced and high-efficiency automobiles and parts. The history of Toyota yields long-term competitive advantage. The company has not only survived but thrived in the American and European countries where strict regulatory provisions are there.

Toyota's Organizational Resource and Capabilities	V	R	I	O
Highly efficient manufacturing process	Yes	Yes		
Intelligent driving technology	Yes	Yes		
Strategic networking	Yes	Yes		
Rapid innovation	Yes			
Intelligent technology	Yes			
Technological expertise on base of R&D	Yes	Yes	Yes	Yes
Alliances with other companies	Yes	Yes	Yes	Yes
Brand popularity	Yes	Yes	Yes	Yes
Assistance from Toyota Group	Yes	Yes	Yes	Yes

Source: Toyota Motors Strategic Planning Handbook

Core and Non-core Competencies

The core competencies of the company have been shown in the table above. Core competency is the concept propounded by CK Prahalad and Gary Hamel. It can be defined as a harmonized combination of the resources and skills that distinguish a firm in the marketplace and therefore build a foundation for companies' competitiveness. We can call any quality of the firm as its core competency if it fulfills 3 criteria namely:

- Potential access to wide market
- Significant contribution to the perceived customer benefits
- Difficult to be imitated by the rivalries

For instance, an IT company's core competence may be debugging, software testing, object-oriented design, etc. which are available with other companies too but as general attributes of the company. Toyota Motors, as mentioned in the table above has got almost each required value addition and trait required for an automobile company.

The non-core competencies are those attributed which fulfill no or some requirements of VRIO framework. In the case of Toyota, rapid innovation remains the part of non-core competency as it takes a long time to innovate new product. Had it been FMCG product, innovation would have been simpler and faster. Toyota is at its best where brand presence and research and development are talked about. It yields the benefit of all set on these criteria. Its non-core competency also include global manufacturing probably because the manufacturing of automobiles require a large set up, technical and techno savvy employees and a huge space to store the goods. Though, the company has expanded internationally but the strategic approach in manufacturing network has not resulted in decentralized manufacturing to a great extent.

Company has a great strategy as far as alliance with other companies is concerned. Company has an alliance with Panasonic for batteries for their hybrid electric cars. Thus, it creates competitive equality in the global automobile market. Such fine VRIO framework is the result of the series of R&D and planned strategic implementations since the formation of the company. It has saved the company from the threat of competition from the new players in the industry.

Conclusion and Recommendations

The VRIO table of Toyota Motors indicates its strong control over its research and development, alliance with other companies and brand popularity. While, other automobile players also conduct R&D but the VRIO table depicts that its feature is rare which means the research framework has its own unique attributes. The company is also known for its continuous improvement approach and thus, its technological expertise is a core competency resulted in sustainable competitive advantage to its business. The company may improve on the fronts of rapid innovation and manufacturing networking. Though, the common sense and market trends clearly define the reasons for the same. It is almost impossible for an automobile company to innovate the product frequently or manufacture the product at various spots as it would not be cost and time effective. But, it is recommended that the company may tie up with the local manufacturing units in various countries and furnish them their guidelines of assembling. Moreover, the company may make innovations in different parts altogether as head light beam, gear box efficiency, steering control effectiveness, accident proof features, etc. which can be applied after a certain period of time to show frequent innovation.

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COVID-19 AND IT'S IMPACT ON INDIAN STOCK MARKET (WITH SPECIAL REFERENCE TO NIFTY-50)

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ABSTRACT

India is second highly populated country in the world, and fifth economy. Any countries stock exchange shows its growth and prosperity. In recent time, a sudden arises of invisible and incurable enemy called Covid-19 effected massively Indian economy, which was targeting a 5 trillion economy by 2024. Indian stock market was aiming high with government's positive attitude and many progressive reforms, suddenly looks tumbled. Volatility in stock market is always a matter of worry for any investor, broker, regulator and economy of any country. Stock market volatility influences investment in any country, way of investment and regulatory changes. This study tried to find whether covid-19 impacted Indian stock market or not, if yes then up to which level, which sectors were more impacted and which were less. This research paper also tried to find whether there were any specific sectors which performed better even in this situation. This study is taken the data for the period from 30th January, 2020 to 31st March, 2020 for research purpose and Nifty-50 (Nation stock exchange) benchmark taken for the study. The findings of the research paper show that Indian stock market (Nifty-50) was highly impacted due to Covid-19, impact was clearly visible. Lastly, the finding may be useful for all investors to choose rights stocks and route their hard earned money in right direction.

KEYWORDS: Corona Virus, Pandemic, Covid-19, Nifty-50, Market Capitalization & Volatility.

Introduction

In recent time India was performing very impressive as far as reforms, schemes, vision of Government concern. We were targeting a 5 trillion economy by 2024. At international level also, we were able to show our presence. Suddenly this Corona virus appeared from somewhere and things changed drastically. In India, first case was reported on 30th January from Kerala state. It is dieses which is incurable as on date and that is the reason of worry, especially for a country like India which is highly populated. Indian government reacted proactively and took many steps to control the spread of dieses. One of the toughest steps was total lockdown, after lockdown share market reacted suddenly. Share market became volatile and investors started pulling out their money from market. Nifty 50 also reacted, which is the index on the national stock exchange of the India limited (NSE), owned and managed by India index services and products Limited. It considers 50 of the approximately 1600 companies listed on the NSE, which reflects approximately 65% of its market capitalization and is a true reflection of the Indian stock market. Stock market is the reflection of any countries growth and prosperity. Volatility in stock market is always a concern for every government, investors and regulators. It is clear that share market is going to jump deep downside. Since almost all business stopped functioning and labour movement was also very high.

Objectives of the Study

The study has following objectives:

- To know about the COVID-19 disease.
- To know the impact of COVID-19 on Indian Stock Market.
- To analysis the impact of COVID-19 on shares prices of NIFTY-50 in India.
- To suggest the strategies to Investors regarding their portfolio in this crisis.

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Significance of the Study

This study will generate new knowledge regarding the impact of the COVID - 19 on the Indian Stock Market (Nifty-50). Most importantly the study will be very useful to the Financial applied economics major study and support investors and decision makers in the economy. This study becomes more important as it find out how market reacts on pandemic like Covid-19 and which sectors are highly vulnerable on such happening. Study also helps to find out those sectors which are still not only able to survive but also performed well.

Literature Review

M. Pushpalatha, J. Srinivasan and G. Shanmugapriya (2019) studied on the topic "A Research on Volatility in the Indian Stock Market with Special Reference to Nifty and Selected Companies of financial Service Sector of NSE". Their study was analytical in nature using secondary data for the purpose of empirical evaluation of stock price movements and its Efficiency. They have taken ten companies of Financial Service Sector which are listed in Nifty 50 at the year 2018. The period of research study was from January, 2009 to December, 2018. The study concluded that NSE Selected Companies of Financial Service Sector were fairly weak and follows random walk during the study period. Indian stock market approached towards the state of fairly weak efficient market.

Sansa, N. A. (2020) studied to investigate the impact of the COVID - 19 on the Financial Markets from the period dated 1st March 2020 to 25th March 2020 in China and USA. The study concluded that there is a positive significant relationship between the COVID - 19 confirmed cases and all the financial markets (Shanghai stock exchange and New York Dow Jones) during the period of study in China and USA. So COVID -19 had a significant impact on the financial markets in China and USA.

Research Methodology

The present study is undertaken to investigate the impact of the COVID - 19 on the Indian Stock Market (Nifty-50) for the period from 30th January, 2020 to 31st March, 2020 in India. The study is based on secondary data and some discussion with eminent persons in the field of Stock Market like Professionals, Economists, Investors, Brokers, Banking Managers and Investment Analyst. The data have been collected from different newspapers, online print media, live news Channels, various published reports/research reports from NSE/other financial sites and news of foreign countries for proper study.

What is COVID-19 ?

Coronaviruses are a large family of viruses which may cause illness in animals or humans. Novel coronavirus (2019-nCoV) is a virus identified as the cause of an outbreak of respiratory illness first detected in Wuhan (China) in December 2019. In humans, several coronaviruses are known to cause respiratory infections ranging from the common cold to more severe diseases such as Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS). The most recently discovered coronavirus causes coronavirus disease (COVID-19). A person who gets COVID-19 becomes seriously ill and develops difficulty in breathing. Old age people, who have already medical problems like high blood pressure, heart problems & diabetes, are most likely to develop serious illness of COVID-19. People can catch this illness from others who have the virus. This disease can spread from one person to another person through small droplets from the nose & mouth and by touching the objects or surfaces which are having virus on it.

COVID-19 & Stock Market in India

The first confirmed case of coronavirus in India was reported on 30th January, 2020 in the southern state of Kerala. The patient, a female student at Wuhan University in China, was tested positive for the novel coronavirus after returning to Kerala. After that, the journey of COVID-19 is started to spread in whole India. As on 31st March, 2020, overall all the states of India have been affected by the COVID-19. This disease is spread in China as well as other developed/developing countries across the world wide. The basic measure to stop the COVID-19 is felt social distancing. So that most of the countries has announced the lockdown in their countries for a period. The Prime Minister, Mr. Narendra Modi, has announced an unprecedented three-week lockdown in the country (effective from 25th March, 2020) in a bid to contain the spread of COVID-19. The Finance Minister has also announced several measures to ease the regulatory/compliance burden for taxpayers. Further, the FM has promised an economic relief package, which will be unveiled so on to alleviate the pain of lockdown in the economy.

The Reserve Bank of India (RBI) has likewise joined the central government in providing relief to the Indian economy battered by the Covid-19 pandemic. After earlier announcements by the FM on various welfare/relief measures, the RBI unleashed series of steps to soften interest rates, improve liquidity and offer some immediate relief to borrowers. The RBI's announcements include reducing the policy rate by 75bp, providing liquidity in the system, allowing moratorium of term loans for three months to support the affected sections and increasing credit flow in the economy. Moreover, steps have also been taken to iron out issues in the bond markets. Due to lockdown, the Global Market as well as Indian Stock Market has been badly affected. The Index Price has been reduced because of no working at all. Indian Stock Market Index has reduced around by 25-30 %. There are basically two market in India i.e. i) Primary Market and ii) Secondary Market. Both the market got adverse effect due to COVID-19. Because of COVID-19, all the countries have been announced lockdown in their country to stop spreading of virus. Due to lockdown, all the industries have been stopped their production. All the sector of economy has affected due to lockdown. Stock market indices of the global countries have been reduced. All key global markets - Brazil (-30%), India-Nifty (-23%), Indonesia (-17%), MSCI EM (-16%), Taiwan (-14%), the UK (-14%), the US (-13%), Korea (-12%), Japan (-11%), Russia (-9%) and China (-5%) - closed lower in local currency terms in March, 2020. In India, NSE and BSE Index has also reduced due to COVID-19 Pandemic across the global. The Nifty could not have had a worse finish to FY20. As the Coronavirus (COVID-19) pandemic spread across the world, the Nifty nosedived 23% in Mar'20 to close at 8,598 (-26% YoY), the worst since Oct'08. But this research paper attempt to analysis the Nifty-50 from the date on which the first case of noble Corona virus reported in Kerala, India (i.e. 30/01/2020) to the day on end of the financial year 2019-20 (i.e. 31/03/2020)

Data Analysis

Table 1: Prices of NIFTY-50 on 30.01.2020 & 31.03.2020, Changes in Prices and 52 Week Low Price with date during the Period of Study

Sr. No.	Company	Closing Price of Share on 30.01.2020 (₹)	Closing Price of Share on 31.03.2020 (₹)	Difference between Prices of Share (₹)	Change in Percentage (%)	52 Week Low Prices (₹)	52 Week Low Price Date
1	IndusInd Bank	1231.5	351.3	880.2	-71.5	235.55	24-03-20
2	Tata Motors	186.2	71.1	115.1	-61.8	63.5	24-03-20
3	Vedanta	141	64.7	76.3	-54.1	61.65	23-03-20
4	Zee Enter	267.9	124	143.9	-53.7	114	25-03-20
5	Bajaj Finsrv	9639.7	4591.2	5048.5	-52.4	4160.25	24-03-20
6	Hindalco	193.5	95.7	97.8	-50.5	84.9	23-03-20
7	M&M	567.9	285	282.9	-49.8	245.4	25-03-20
8	Bajaj Fin	4364.3	2215.8	2148.5	-49.2	2104.65	24-03-20
9	Axis Bank	730.9	379	351.9	-48.1	286	25-03-20
10	JSW Steel	257	146.3	110.7	-43.1	136.1	23-03-20
11	L&T	1370.2	808.5	561.7	-41.0	661	25-03-20
12	ONGC	115.6	68.3	47.3	-40.9	50	13-03-20
13	UPL	544.2	326.5	217.7	-40.0	240.15	23-03-20
14	Tata Steel	448.6	269.6	179.0	-39.9	253.55	23-03-20
15	Grasim Ind	791.3	476.1	315.2	-39.8	385.05	25-03-20
16	ICICI Bank	532.2	323.8	208.4	-39.2	268.3	24-03-20
17	Maruti Suzuki	7020.5	4288.3	2732.2	-38.9	4030	24-03-20
18	GAIL	123.4	76.6	46.8	-37.9	65	13-03-20
19	SBI	310.7	196.9	113.8	-36.6	173.55	24-03-20
20	Bajaj Auto	3145.5	2022.4	1123.1	-35.7	1788.65	24-03-20
21	Hero MotoCorp	2482.3	1596.5	885.8	-35.7	1475	24-03-20
22	Eicher Motors	20340.3	13095.9	7244.4	-35.6	13326.7	23-03-20
23	Bharti Infratel	246.2	160	86.2	-35.0	120.05	19-03-20
24	Adani Port	378	251.3	126.7	-33.5	203	23-03-20
25	BPCL	469.7	316.9	152.8	-32.5	252	24-03-20
26	HDFC	2415	1633.1	781.9	-32.4	1473.45	24-03-20
27	IOC	117.2	81.7	35.5	-30.3	74.65	26-03-20
28	HDFC Bank	1226.1	861.9	364.2	-29.7	738.75	24-03-20
29	Tech Mahindra	791.4	565.5	225.9	-28.5	471.4	23-03-20
30	HCL Techno	607.9	436.4	171.5	-28.2	375.25	19-03-20
31	Ultra Tech	4486	3244.9	1241.1	-27.7	2910	25-03-20
32	ITC	234.1	171.7	62.4	-26.7	134.6	13-03-20
33	NTPC	113.7	84.2	29.5	-25.9	73.2	23-03-20
34	Coal India	188	140.1	47.9	-25.5	119.2	26-03-20
35	Shree Cement	23485.3	17546.4	5938.9	-25.3	16068.15	23-03-20

36	Reliance Industries	1443.8	1113.8	330.0	-22.9	875.65	23-03-20
37	Titan Company	1179.3	933.7	245.6	-20.8	720.9	24-03-20
38	Kotak Mah Bank	1628.3	1296.1	332.2	-20.4	1001	19-03-20
39	Sun Pharma	442.1	352.3	89.8	-20.3	315.05	23-03-20
40	Wipro	240.7	196.7	44.0	-18.3	159.4	19-03-20
41	Power Grid	194.4	159.1	35.3	-18.2	122.15	18-03-20
42	Infosys	780.7	641.5	139.2	-17.8	509.25	19-03-20
43	Britannia	3210.7	2689	521.7	-16.2	2100	23-03-20
44	TCS	2137.9	1826.1	311.8	-14.6	1506.05	13-03-20
45	Bharti Airtel	489.8	440.9	48.9	-10.0	312.6	18-04-19
46	Asian Paints	1805	1666.5	138.5	-7.7	1291.25	09-07-19
47	Cipla	451	422.9	28.1	-6.2	355.3	13-03-20
48	Dr Reddys	3154.9	3120.8	34.1	-1.1	2351.2	14-08-19
49	Nestle India	15520.8	16300.6	-779.8	+5.0	10120.05	14-05-19
50	HUL	2058.1	2298.5	-240.4	+11.7	1650	05-04-19
Average					-31.1		
NIFTY		12035.8	8597.8	3438.0	-28.6	7511.1	24-03-20

(Source: Compiled from www.nseindia.com & other websites and all the stock of Nifty-50 taken as on 31.03.2020)

As per the analysis of the above Table 1, Nifty-50 Index has been reduced by 28.6% during the study period. The average change in price of all shares of Nifty is -31.1% which is more as compared to Nifty-50 Index change rate of -28.6%. It is also found that 48 company's share price have been reduced out of Nifty-50 Shares during the period of study. The Prices of 96% Companies of the NIFTY-50 have been reduced after the date on which first case of COVID-19 reported in India.

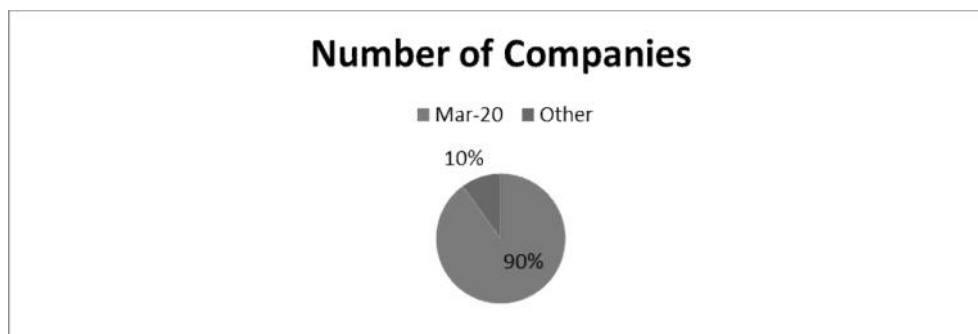
Table 2: Range of Change in Prices (%) and Number of Companies

Range of Change in Prices (%)	No. of Companies
0 to -10	3
-10 to -20	6
-20 to -30	12
-30 to -40	14
-40 to -50	7
-50 to -60	4
-60 to -70	1
-70 to -80	1
Prices increased/Prices not reduced	2
Total	50

On the Analysis of the above Table 2, it concludes that share prices of 48 companies out of Nifty-50 have been reduced during the period of study. It is also found that the Share prices of the 14 companies have been reduced in range of 30% to 40%. Further, 12 companies share prices also reduced in the range of 20% to 30%. The Share price of the two companies (Nestle India and HUL) is not reduced during the period of study. It may be concluded that the change in prices of 96% companies of NIFTY-50 have been reduced due to COVID-19.

Table 3: Month in which companies touched their 52 Week Low

Month of 52 Week Low Touched	Number of Companies
March-2020	45
Other	5
Total	50



The above Table 1 & Table 3 and above chart shows that 90% companies of the Nifty-50 have been touched the level of their 52 week low in the month of March, 2020. These low levels were in the range of the date between 13-03-2020 to 26-03-2020.

Table 4: Sector-wise Change in Prices of Nifty-50

Sr. No.	Sector	Average Change in Price of Shares (%)
1	Metals	-46.9
2	Auto	-42.9
3	Bank-Private	-41.8
4	Bank-NBFC	-40.8
5	Others	-40.2
6	Bank-PSU	-36.6
7	Oil & Gas	-32.9
8	Cement	-30.9
9	Utilities	-23.2
10	Telecom	-22.5
11	Technology	-21.5
12	Healthcare	-9.2
13	Consumer	-6.8
Average		-30.48

(Source: Calculated from the data)

The above Table-4 shows the sector wise average prices fall during the period of study. It clears that Metal, Auto, Bank-Private and Bank-NBFC has recorded the prices of shares fall by more than 40%. The Prices of Shares of the Bank-PSU, Oil & Gas & Cement Industry also fallen by 30% to 40 %. Utilities, Telecom and Technology sector also fall by 20% to 30 %. The Other Sector includes Financial Services, Capital Goods, Media, Port & Logistic; Retail & Agribusiness Chemicals were also recorded the average fall in prices by 40.2%. The table shows that the Prices of Healthcare & Consumer Sector Companies is not reduced more than 10%. It is clear that the impact of COVID-19 not affected the price of healthcare & Consumer based companies under Nifty-50.

Overall Impact of COVID-19 on NIFTY-50 and Indian Stock Market

The sentiments around the world were gloomy. This reflected as crashes and high volatility in share market. Share market across large, mid and small caps have corrected sharply. Although previously also share market have seen many sharp falls during Harshad Mehta Scam (1992), Asian Crisis (1996), Tech Bubble (2000) and Real estate- Lehman Crisis (2008). Our study shows it clearly that share market was highly impacted due to COVID19. Only two companies moved positive during the study period. Few sectors were highly impacted like metal, auto and banking but on the other side few sectors tried to fight at level best with this situation, like telecom (as far as data usages concern), technology and healthcare. Here one thing was very clear that consumer related products sector were least impacted or performed well like Nestle, Britannia and Hindustan Unilever (HUL).

Suggestions for Retail Investors

A retail investor is someone who buys and sells equity shares through traditional or online brokerage firms or other types of investment accounts. SEBI law defines retail individual investor as an investor who applies or bids for securities of or for a value of not more than '2, 00,000 in an IPO. In other words we can say retail investors are those who invest smaller amount in shares. One thing which moves simultaneously with amount is knowledge, retail investors also are less updated and lacking deep knowledge on share market movement. During such moment when share market is highly volatile and movement is unpredictable, investors need to be very conscious and aware. Retail investors can also opt for gold or silver which generally turn a safe investment for investors while share market is volatile and uncertain. Recovery of share market also depends on government relief package to many sectors. Retail investors need to be updated about these packages and they must invest accordingly. At the same time consumer goods, pharmaceutical and IT companies looks like good option for investment.

One of the suggestions which are also reflected on NSE website is "In time of volatility, take informed decisions". Soch kar samajh kar invest kar.

Limitations of the Study

The present study also carries some limitations as below:

- The study considered only Nifty-50 companies for the findings.
- The study is based on short period from the date on which the first case of noble Corona virus reported in Kerala, India (i.e. 30/01/2020) to the day on end of the financial year 2019-20 (i.e. 31/03/2020). It is the opportunity for further studies to accommodate big samples and for the long period for investigation.
- The changes in share prices of companies are mainly observed with context to COVID-19 effects, other factors are not considered.

Conclusion

Overall the study shows that share market was highly impacted because of COID-19. Finding of the study document shows that the majority of stocks were downgraded during taken period for the study. The finding, thus, suggested small investors to stay conscious about share market volatility. The observed number of trade in share market shows that investors took money out of share marked amid high volatility. The study reveals that investors rely to invest in share market only when it is less volatile and stable. Lastly, the finding of this paper would also help the investors to understand about those sectors which are performing well and which sector is a safe investment for investors and which one is not the safe side of investment. This study will enhance the awareness among the investors and various stakeholders on share markets.

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FACTORS INFLUENCING REDESIGN AND DEVELOPMENT OF PRODUCTS FROM THEIR LEGACY: A STUDY ON PORTABLE DESKTOP SOFTWARE APPLICATIONS

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ABSTRACT

There is a growing need for technology upgradations for various legacy software products, but this up-gradation is going to incur a lot of costs, resources, and time and also increases the adoption issues from the users. There is an unprecedented opportunity for technology up-gradation for legacy software products. In this paper, we offer a deeper understanding of factors significant for the technical up-gradation of the desktop software products. Further, this study will help software organizations to leverage technologies that would provide a competitive advantage for business and sustainability in the industry. Overall, it will help to explore the re-designing factors categorized into technical, quality, and competition of legacy products considering the type of project.

KEYWORDS: *Legacy Software Product, Software Quality, Technology Advancements.*

Introduction

Most of the software companies which have developed products a decade back are looking into re-designing and re-development of them. This re-designing involves a lot of costs, time, and resources. Also, it is important to be futuristic, so the developed new product sustains for a visible long term.

Because of technological advancements, market demand, user expectations it is getting very important for the organizations to develop a new product with enhanced features, flexibility, quality, and usability. There is a push from the customers demanding the upgraded software product compatible with the software and hardware environment. There is also a big leap on the customers looking for a web and mobility-based products. SaaS and Cloud-based advancements are allowing the customer to think – Anywhere at any time and on any device. The current study is to analyze what all are the influencing factors which is making the user develop the upgraded product and what quality parameters organizations need to consider while they are investing in this redesigning.

The main objective of any software that is being enhanced or upgraded is to ensure that it is better than its legacy in terms of quality, reliability & user experience. Most of the organizations developing such new software are aware of this but it is extremely important to quantify, measure, and track these parameters. Doing a comparative analysis will be a good criterion to start this process. Some of the parameters which define the quality of the product from its legacy include – defect-free product and its conformance to business and user's requirements, portability, performance, efficiency, usability (UI), modularity, maintainability, reliability, readability, and scalability. Some of these parameters are visible to the users who are working with the software and some of them are intrinsic to the code. It is important to measure these parameters and develop KPI's around this. Before even proceeding with this we need to understand what kind of project/product we are developing – compulsory project, not a profit project, evolving project, or customer-supplier project. Understanding the type of project and marking quality parameters around it would help in developing a better and sustainable product. On the other hand, if a product is developed without considering these factors then there is a higher chance that it will not meet its objectives of re-designing and will not provide proper justification for cost, resources, or time thus increasing the risk.

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Research Problem

A good amount of literature is available on software quality and quality parameters. It is as well important to understand what are the motivating and critical parameters which need to be considered by the organization, while moving to the new version of the product from its legacy. The following would be the research questions

- What are dominant “External factors” that influence the redesign of software from its legacy?
- Which User Experience (UX) parameters influence Product Quality?
- Quality parameters can influence users?
- Are reliability and robustness important from an end-user perspective?
- What kind of project does the current product fall into?
- Are “performance and efficiency” important for the newly developed product?
- Is portability an issue if we are developing a new product?
- How does code quality parameters like – modularity, maintainability, scalability, readability, re-usability affect code quality?

Literature Review

To measure the quality of the software product, it is important to understand what all are the critical X's need to be considered. Most of the critical X's revolve around the Lines of Code (LOC), Number of Methods, McCabe Complexity, etc., S Counsell et. al., (2009) proposed that tightness, overlap, and NHD are three sliced based metrics that talk about. Qing Cao (2012) mentioned that Software productivity has become a critical issue for nearly every organization. Conventional wisdom suggests that increasing the productivity of software projects in the organization should take place at the beginning.

Giulio Concas (2012) mentioned that during the development, we systematically performed measurements on the source code, using software metrics that have been proved to be correlated with software quality, such as the Chidamber and Kemerersuite and Lines of Code Metrics. Software quality metrics aim to measure how much software is “good” – especially from being error-free and easy to modify and maintain. Software quality metrics tend to measure whether the software is well structured, not too simple and not too complex, with cohesive modules that minimize their coupling. The CK metrics are Number of Children (NOC) and Depth of Inheritance Tree (DIT), Weighted Methods per Class (WMC) and Lack of Cohesion in Methods (LCOM), about internal class structure; Coupling Between Objects (CBO) and Response For a Class (RFC), that are related to relationships among classes. WMC and CBO are those that are most correlated with software quality. Fan-In of a class is the number of edges directed toward the class; the in-degree is a measure of how much the class used to other classes in the system. The Fan-out of a class is the number of edges directed from the class; it counts how many other classes of the system are used by the class. Class LOC metric should be kept low in a “good” system

Alessandro Margherita (2007) mentioned that Metrics based redesign (analysis and Optimization), What-if Analysis (prediction and Optimization), Extended Process Maps (analysis, monitoring, and optimization) for Business processes. Metrics – Dimension oriented metrics (Reusability, replicability, concurrency) and cost-oriented metrics cost per resource, expectations, etc., Re-design tasks are common design scenarios and are characterized by the re-working or re-use of whole

According to Mustafa Al-Hajjaji (2012), there are many metrics which are around lines of Code they include Coupling between objects (CBO), Depth of inheritance tree (DIT), Number of Children, Lack of Cohesion in Methods (LCOM), Response for a Class (RFC), Weight Methods per class(WMC) and there are various tools to compute these metrics based on the technology we are working on. Jintae Lee & Claude Stricker (1997) found that building a process model as a function lattice typically starts by first gathering information about the objectives. This information can be gathered by interviewing the process participants, collecting questionnaires, and by analyzing meetings. Top-down strategy or bottom-up strategy can be used for this”. Rachel Jones (2007) mentioned that one of the important factors for redesigning the software is UCD (User-centric design) and the data for this is collected using semi-structured interviews, Data logging, Field observation, Diary studies, and usability testing. Obtained data thus gathered need to be analyzed properly and design need to prepare accordingly

Hongwei Tao & Yixiagn Chen (2012) mentioned that another important parameter for the software is that it should be trustworthy. This means the software should give correct results always and this is important for mission-critical applications. However, criticality attributes may vary from software to

software and from time to time. Taghi M Khoshgoftaar (2010) mentioned that Seven filter-based feature ranking techniques to choose subsets of features. Chi-squared(CS), information gain (IG), gain ratio (GR), symmetrical uncertainty (SU), and relief (RF and RFW) and signal to noise ratio (SNR) - Reliability is considered to be an important factor while re-designing a new software. Explained about Faults, Faults which fail and faults which fail in the field. All these faults can be addressed if we follow some techniques in coding.

There is an ISO standard that defines Software quality - ISO/ IEC 9126 and that has been moved to ISO/ IEC 25010 (Systems and software engineering – Systems and software Quality Requirements and Evaluation (SQuaRE) – System and Software Quality Models. The essence of Software quality while upgrading to a new product can be taken from the international standard however customizations need to be done to the operational definitions and the meanings as the current research objective is software re-design from its legacy. ISO / IEC 25010 defines software quality with the following parameters

- **Defect-free product:** Ensure that product is fit to use. No showstoppers or high priority defects in the product.
- **Conformance to functional requirements:** Ensure that all agreed requirements are covered and addressed into features
- **Portability:** A set of attributes that bear on the ability of software to be transferred from one environment to another.
- **Performance and Efficiency:** A set of attributes that bear on the relationship between the level of performance of the software and the number of resources used, under stated conditions. It includes - time behavior (response & processing times), resource utilization (CPU and Memory utilization) and efficiency
- **Good look and feel & Usability:** Ensure that product maps to the end-users want and needs and users would love to use it. A set of attributes that bear on the effort needed for use, and on the individual assessment of such use, by a stated or implied set of users. It includes - understandability, learnability, operability, attractiveness, usability compliance
- **Re-Usability:** No redundant code. Using the same code multiple times. Make the commonly used modules generic and can be used wherever required.
- **Modularity:** Logical division of code into classes/functions that to map to other quality parameters
- **Maintainability:** A set of attributes that bear on the effort needed to make specified modifications. Analyzability, changeability, stability, testability, maintainability compliance.
- **Reliability and Robustness:** Ensure that all errors and unexpected cases are addressed in a proper and safer way. A set of attributes that bear on the capability of software to maintain its level of performance under stated conditions for a stated period. It includes - maturity, fault tolerance, recoverability, reliability compliance. Robustness is the ability of a product to cope with errors during execution
- **Readability and comments:** Parameters that make the code easily understandable to new programmers
- **Scalability:** Ensure that new feature is as simple as "plug & play" and adheres to all quality parameters

Software Re-Design Constructs and Implementation

Organizations re-design/ upgrade their existing Software Products because of the external factors like **Technological advancements**. Technological advancements can be categorized as – Technology push or Technology pull. Examples of Technology push include OS upgrades, moving from local storage to cloud, desktop to the web or mobile platforms, or deploying applications into portable devices. The users migrate to new technology as old technology does not exist or not recommended. On the other hand, we have a technology pull where users love new technology compared with old technology. Old technology still exists but users do not want to use it. Examples can include something like usage of number keypad in phones to touch screen panel. In either of these cases, users incline to use new products instead of legacy. Technology push and pull are two dependent variables and they fall into the category of external factors.

Organizations as well want to make their products better compared with their legacy products and the reason for this is to be **competitive** and to stay in the market. Such factors are internal factors that include User Experience, performance & efficiency, portability, reliability, and robustness. These are some more dependent variables that fall into the category of Internal (quality) factors. No Matter What software product organizations develop, it needs to be futuristic so that organizations need not invest in cost, time, or resources again in the short term. These parameters include modularity, maintainability, scalability, reusability, and readability. Figure 1 illustrates factors influencing re-design considering technology advancements, competition, and quality.

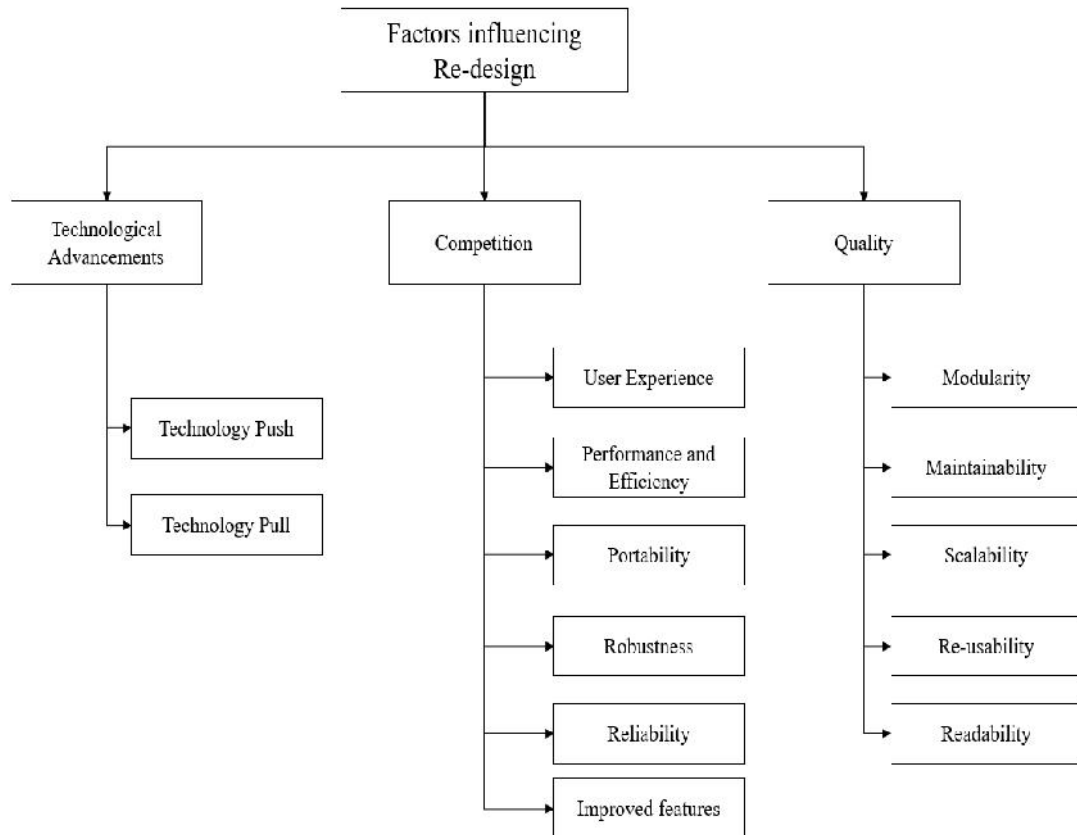


Figure 1: Factors influencing re-design

Irrespective of the parametric categories' organization need to initially understand what kind of project does the current product category fall into. This helps in evaluating the importance and urgency of re-designing. A compulsory project is mostly a statutory project which may have to be implemented urgently to avoid legal obligations or to make the product usable. The example would be incorporating a new tax system into the product or making sure that the product works on the desired platform or environment. This kind of project normally has an high influence. The second category of the project is an evolving project where the product is an MVP (Minimum Viable Product) and new features need to be added to overcome the competition and this also has high influence. The third category of the project is Not a profit project, this is like creating an API for some users who do not get us business or giving software to an organization for free. This has a very low influence. Mostly these are trail projects which are taken up for adding a little value and the final category of the project is customer/ supplier project where the customer is willing to pay for re-design. This has got moderate influence comparatively as it requires a proper business justification from the supplier perspective. Figure 2 illustrates the factors that influence the re-design of the product considering the category of the product.

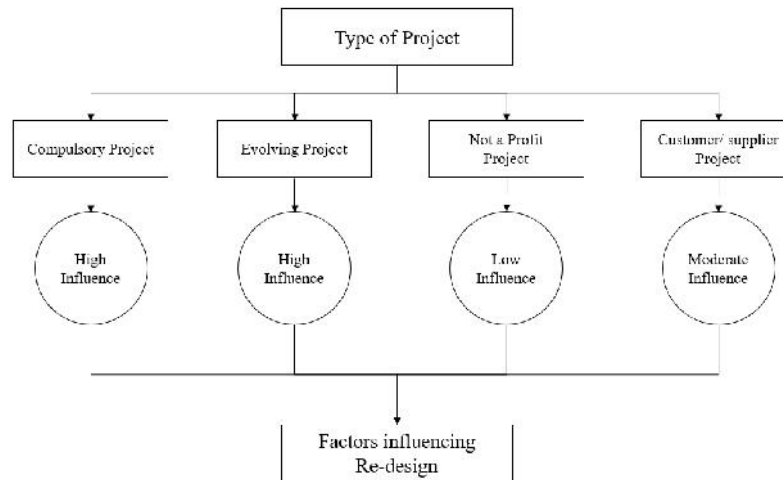


Figure 2: Influence on re-design on type of project

Conclusion

Organizations that are willing to re-design the legacy products, then they need to evaluate the proposal considering several influencing factors. One categorization is understanding the type of project to evaluate the urgency and another categorization is based on technology, Competition, and Quality. Ideally, if these parameters are evaluated, then re-design is justified.

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IMPORTANCE OF MSME AND EMPLOYMENT GENERATION AGENDA FOR GROWTH

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ABSTRACT

Across the world the MSME segment development has shown mixed results depending on various policies and initiatives undertaken by developing and developed economies during their critical economic lifecycle across the world. Many developed and developing Countries have demonstrated that the MSME segment constitutes the backbone for maintaining growth rates as well employment generation rate and provides stability growth during economic downturns.

KEYWORDS: MSME, GDP, Make in India, Digital India, Export contribution, Funding.

Introduction

In India, MSME are very large in numbers, diverse in type of business and are spread across remote geographies of a vast country. A large portion of the MSMEs are informal and not registered with the formal eco system of MSME. It will require significant changes in philosophy and approach to be able to develop and deliver a new wave eco system which facilitates their development and seize the emerging domestic and global opportunities. At a minimum, any hindrances and hurdles in doing business are to be removed. Growth in Indian Economy and GDP Increase MSME contribution from current 8 per cent to 15 per cent by the year 2020 Growth of the new wave MSME led by entrepreneurship focused on innovation and technologies, creating opportunities for women entrepreneurs and developing skilled resources across the following opportunity areas.

Make in India

Promote an ecosystem for 'Make in India' for foreign companies to invest in manufacturing, service and agricultural and agri processing related segments for meeting the domestic as well as global demand.

Digital India

Promote MSMEs' manufacturing and service capabilities in the ICT sector in line with the government vision.

Export Contribution

Promote Export contribution by supporting and developing MSME segment to be globally competitive and adopt research and development, innovation and global technologies. Provide MSME with global market access by entering into bilateral trade agreements and set off arrangements.

Public Procurement Policy

Promote an ecosystem for supplies to defense and public sector enterprises so as to achieve at least 25 per cent portion of total procurement by defense and public sector enterprises from MSME.

Funding

Open environment and incentives for investments by HNWI and funds into MSME business as well incentivize debt funding in MSME segment. Develop MSME equity exchange and "two chance" approach for entrepreneurs, and fast close winding up where necessary.

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Performance Incentives

Direct incentives in form of direct taxes rebates and set offs, weighted deductions and reliefs in indirect taxes combined with low cost funding and credit access for stakeholders in MSME eco system who make investments in desired areas and achievement of desired growth results in developing MSME funding and infrastructure skills, technology, innovation, global market access, indigenization, public procurement and vendor development, traditional and heritage industry developments.

Skill India

Rewarding MSME for initiatives towards skill development and employment generation, particularly for women and special classes, by way of direct incentives, weighted deductions and reliefs in indirect taxes combined with low cost funding and credit access for stakeholders.

Traditional and Heritage Industries

Incentivize and support any stakeholder that invests in development, growth and opening global markets for India's traditional and heritage industries for goods, services and agricultural and natural medicines and therapy related products and services.

Share of MSME in the Economy

There are approximately 46 million Micro, Small and Medium Enterprise sector enterprises across various industries, employing 106 million people⁵. Overall, the MSME sector accounts for 45 percent of Indian industrial output and 40 percent of exports⁶. While most of the sector is un-organised (approximately 94 per cent)⁶, informal and un-registered, initiatives to have more enterprises registered are well underway. The contribution of the MSME sector to India's GDP currently stands at ~8 per cent for 2011-12⁵, and is growing at a rate higher than the projected GDP growth rate. The contribution of MSME segment to the GDP in some of the global economies is in the 25-60 per cent range. MSME in India has the potential to increase the share of contribution to GDP from the current 8 per cent to about 15 per cent by the year 2020.

Employment Opportunities

India needs to create 10 to 15 million job opportunities per year over the next decade to provide gainful employment to its population. Current MSME employment is at 28 per cent of the overall employment. MSMEs can contribute significantly to employment generation and development of the Indian economy. The MSME sector is one of the key drivers for India's transition from an agrarian to an industrialized economy. MSMEs account for a large share of industrial units. The total number of enterprises in MSME sector was 46 million with total employment of 106 million. It is also critical to see that adequate growth is met across services, manufacturing and agriculture segments to ensure holistic and stable overall economic growth. The current growth of MSME is non-uniform and there exists a significant gap in growth of enterprises across services and manufacturing sectors. Steps to lower this gap must be taken for a balanced growth outlook.

Export Potential

The contribution of the services, manufacturing and agricultural to the overall exports from India is fairly skewed. While export of services led by IT and ITeS sectors have grown significantly in the last decade, the contribution to exports from manufacturing output has been largely stagnant. India's share of services exports in world exports of services was 3.3 per cent in 2011 and has been increasing faster than the share of Indian merchandise exports in world exports. During 2012-13, Indian merchandise exports showed a slight negative growth rate of around 2 per cent as compared to a positive growth of 21.9 per cent during the financial year 2011-12.

The share of MSMEs in India's total exports was estimated to be around 40 percent in 2011-12. The share of the top four commodities account for about 60 per cent of total MSME exports. While globalization presented a number of challenges for the manufacturing MSMEs, it also opened up ample opportunities to shore up the growth of the manufacturing sector.

Value Added Products

The average technology value-addition in manufactured products exported by the Indian industry is around 8 per cent, significantly low when compared to that of other emerging developing nations. There is a clear opportunity white space in terms of global demand for value added products and services. One example of positive movement to address this gap is the setting up of the Technology Upgradation Fund for the plastic processing sector.

Building Brand India

With efforts in the direction of promoting and creating international awareness of the 'Made in India' label in markets overseas well underway, demand for goods and services is likely to increase over the next decade. Schemes to market Indian products / brands in international trade fairs are in place for the MSME to avail. Participation in global markets will not only help MSME grow their business, but also become globally competitive enterprises.

E-Commerce

Availability of online trade platforms is also emerging as a key enabler for MSME exports. Traditional handicraft clusters and independent artisans, entrepreneurs are today connected to the world and operate in the global market via e-commerce platforms. The penetration of e-commerce in trade to the urban, rural MSMEs is increasing and is expected to boost exports further.

India Imperatives

Given the current economic scenario, some of the key national imperatives to propel India into the next wave of growth include:

- Creating employment opportunities for special segments such as women workforce, physically challenged, traditional industries, etc.;
- Financial inclusive growth to its lower income class across rural, urban and urban economies
- Developing capabilities for reducing import burden and dependence on overseas for local demand fulfillment;
- Enhancing and widening export capabilities and becoming globally competitive, developing global technologies and innovation;
- 'Make in India' – Ease of doing business; and
- Developing infrastructure for improving standards of living for wider population as well as for improving business environment and capabilities.

Some of the following MSME imperatives will also require consideration:

- **Skills Development**

MSME largely comprise first-generation entrepreneurs and the managerial competence requires mentoring and support mechanism.

- **Business Environment to Support and Nurture Startups**

India needs an entrepreneurial ecosystem that encourages innovative startups. Risk taking should be encouraged and entrepreneurs should be supported to overcome roadblocks.

- **Global Competitiveness and Access to Technology**

India should create an environment for MSME joint ventures to enable Indian MSMEs to partner with their global businesses and evolve to global levels on innovation, adapting to new technologies and attention to quality

Women Entrepreneurship

Women entrepreneurs make a significant contribution to the Indian economy and should be encouraged to participate in the MSME growth story. There are nearly three million MSME's with full or partial female ownership. Collectively, these women-owned enterprises contribute 3.09 percent of industrial output and employ over 8 million people. Approximately, 78 percent of women enterprises belong to the services sector. Women entrepreneurship is largely skewed towards smaller sized firms, as almost 98 percent of women-owned businesses are currently micro-enterprises.

Enabling Opportunity Framework

The new wave Opportunity framework will have to consider and the following elements in a cohesive and synergistic manner. At different stages of growth, enterprises need support and assistance in various aspects. Opportunity framework should be designed based on maturity stage and scale of enterprise i.e. start-up, growth, developing and should encompass all aspects of support for MSMEs. The opportunity framework can be built around five growth enabling pillars. The new wave initiatives consider potential opportunities for creating significant support for the MSME sector to develop over the next decade and facilitate partnering approach by the various stakeholders by way of incentives, rather than compliance, thereby channelizing the much needed resources and infrastructure.

Conclusion

India is expected to emerge as one of the leading economies in the world over the next decade in the light of a positive political and economic scenario. The Micro, Small & Medium Enterprises (MSME) segment is expected to play a significant role in the emergence of the Indian economy. The development of this segment is extremely critical to meet the national imperatives of financial inclusion and generation of significant levels of employment across urban, urban and rural areas across the country. Further, it can nurture and support development of new age entrepreneurs who have the potential to create globally competitive businesses from India. MSME can be the backbone for the existing and future high growth businesses with both domestic and foreign companies investing in the 'Make in India' initiative and make significant impact in the area of indigenization. 'Make in India with zero defect and zero effect', is a significant opportunity. The new wave MSME should enable the development of a business eco system that enables and continuously support business that are gearing to deliver the right product, the right quality, the right solution and the right service at a competitive price, both in domestic and international markets. The 'Digital India' revolution also provides a great opportunity to promote MSME participation in the Information, Communication and Telecommunication (ICT) sector, in line with the government vision. It is equally important that the MSME segment develops in all areas of agriculture, manufacturing and services sectors because each of these sectors will continue to be very relevant to the overall GDP growth as well as employment generation. The MSME sector will act as a catalyst to bring about this socio-economic transformation.

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COVID-19: IMPACT ON MANUFACTURING (SECONDARY) SECTOR

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ABSTRACT

The study will amplify adverse impact on manufacturing sector in India due to underlying pandemic Covid-19. Manufacturing (secondary) sector also known as industry or production sector includes branches of human activities that transform raw material into product or goods. In 2018-19, this sector contributed 29.6% to Indian GDP. The research focuses on distress of leading secondary sectors which are affected due to lockdown enforced by government as a caution for civilians. Indian organizations are expecting moderate to large negative impact on their businesses within the period of 6 months. The paper focuses on clumsiness of manufacturing sector after outbreak of corona virus.

KEYWORDS: Covid-19, Manufacturing Sector, FMCG, MSMEs, WHO.

Introduction

In an era of global peace, the novel pandemic corona virus has resulted in rare loss to whole economy. The covid-19 has escalated in India and rapidly deteriorating the conditions of various industry sectors. *COVID-19 is an infectious disease caused by a newly discovered corona virus which has been declared pandemic by World Health Organization (WHO) in March 2020.* The disease is quickly transmitted among humans and till now no vaccine has been revealed. PM Narendra Modi, mentioned social distancing is the only way to break the chain of virus. He imposed 21 days lockdown from 25 March 2020, in his second address after imposing janta curfew on 22 March 2020. The period of lockdown is being extended which has severely impacted growth of manufacturing sector.

- **Manufacturing (industry) sector** consists of various industries cleft into automobile, food and beverage, chemical, machinery, electronics, metal, aviation, pharmaceuticals and others. Indian business sector plays a versatile role in uplifting Indian economy but whole economy fears for deep recession due to corona virus lockdown imposed by government as safeguard. The impact of corona lockdown is provoked and clearly detected in financial markets. Businesses in every sector and human cost have been overwhelming since dissemination of the virus. Those with access to shelter and food with meager savings have managed to albeit with crisis.
- **Automobile industry:** This industry faces global recession, lack of demand and falling income levels. This sector is facing complete lockdown and impact is so relentless that several automakers are facing financial mishap. Non-domestic automotive parts like fuel injection pump, EGR modules, electronic components, turbochargers, airbag components etc are imported in India. According to ICRA, limit of these crucial parts can affect further production of two-wheeler, commercial and passengers' vehicles.
- **Electronic industry:** This industry in India fears supply disruptions, restriction on production having negative impact on prices, revenue, product launches and local manufacturing. India imports a major part of critical components such as printed circuit boards, mobile displays, LED chips and capacitors from China which has significantly affected due to Covid-19. Indian electronic industry is highly depended on China for components, sub-assemblies and even full products with a sense of apprehension.

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- **Textile and Retail Industry:** Apparel retailers and producers have completely halted amid lockdown. Interruption in labour supply, unavailability of raw material, working capital constraints and demand restrictions due to limited people and purchasing ability has adversely affected this industry. Only 5% of such industries can manage their cash-flow without government support. As 90% of these stores are physically entrenched their remains no chances for manufacturing as the stores are lockdown said Clothing Manufactures Association of India (CMAI). CMAI includes Raymond, Future Group, Shoppers Stop and other 24000 clothing manufacturers. Malls and retail stores are shut down which may lead to unsustainability of companies and major unemployment.
- **FMCG Industry:** Fast moving consumer goods (FMCG) companies have resumed production at limited capacities as an approval for essential products has been provided by governments. These companies are facing major challenges of transport and man power supply. In order to ensure safety of employees and customers every retailers are endorsing necessary preventive actions. In such vigorous situation, the suppliers of essential food and grocery products are engaged in ensuring easy and uninterrupted availability to lower panic among peoples.
- **Hospitality Industry:** This includes restaurants, bar and pubs has 7.3 million employees across the country. Employees in this sector will face job losses and salary cuts. Even if this sector returns to normal, people will not prefer this areas as no social distancing can be made in such typically crowded areas.
- **MSMEs:** The Micro, Small and Medium Enterprises (MSMEs) are one of the key drivers which contribute 30% of India's GDP. MSMEs are unable to pay their employees as they are dormant due to lockdown. Relief packages are announced by government in this sector.
- **Infrastructure Industry:** Building and construction business need to face bi-fold threat of high interest payments and lack of sales. These businesses are highly leveraged and include a lot of man-power.

Even tourism, aviation, pharmaceuticals and real estate need urgent help to overcome this difficulty.

Immediate Challenges Faced by Government

As lockdown initiated all over the nation, our government faced threat of ensuring vulnerable population accessible to food grains, fruits, vegetables and other essential items. The government agencies were challenged to effectively monitor guidelines and protocol and provide all the services to its outspread citizens.

According to Retail Association of India (RAI), National Restaurant Association of India (NRAI), and Clothing Manufactures Association of India (CMAI) industries like Textile, Hotels and restaurants, grocery suppliers and retailers will recoup nearly in about a year from Covid-19 lockdown. Further the top associations mentioned as 25-30% of impact can be seen with multiplier effect on unemployment and subsidiary industries a survival plan is required. Unlike demonetization, disruption on consumer income including pay cuts and hit on daily wagers across companies seems to have wide impact.

Objective of Conducting Research

The main objective of this research emphasizes impact on manufacturing (secondary) sector due to leading pandemic covid-19. This research is conducted to show negative effect on various industries which has severely affected the growth of manufacturing sector.

Data Collection

This research contains data collected from secondary sources. No primary collection of data has been made to conduct the research.

Literature Review

According to Samita Sengupta,“ impact of covid-19 on Indian economy” The Indian Economy is expected to lose over Rs. 32,000 Crore (US\$4.5 billion) every day during the first 21 days complete lockdown which was declared on corona virus outbreak. Up to 53% of business in the country is significantly affected .Restrictions and shutdowns were imposed by the government to avoid the critical circumstances. Whole manufacturing sector are cutting salaries and laying off their employees which have highly affected its growth.

According to Kavya S, “A Study on The Impact of Covid -19 on Indian Economy” there is a great fluctuation in the stock prices for the products of listed companies. Every industry in manufacturing sectors is facing various crisis of shutdown, finance and labour. Reduction in foreign exchange and no demand of various commodities have highly affected export and other industries.

In my view, the pandemic covid-19 has shown its negative result to manufacturing sectors and its leading industries. PM Modi addressed the nation with a motto of “Jaan hai toh Jahan hai” meaning if you have health, you have wealth which was later changed to “Jaan Bhi Jahan Bhi”. After this statement few concessions were provided by the government to bring economic condition on track.

Conclusion

In order to overcome this precarious situation, PM Modi speaks for being self-reliant promoting Make in India products. The Make In India program was launched in 2015. He announced 20 lakh crore packages for “Atmanirbhar Abhiyan”. The objective to be self-reliant is concern of whole world’s happiness, cooperation and peace. Even MANREGA is providing daily wages employment in lockdown period. Many relief funds and schemes are ensured by government in manufacturing sector providing assistance to MSMEs, automobiles, electronic, textile and other industry. To conquer the impacts of this countering situation central as well as state are looking towards manufacturing sector.

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MOMENTUM AND CONTRARIAN INVESTMENT STRATEGIES: A STUDY WITH REFERENCE TO SELECTED EXCHANGE TRADED FUNDS TRADED IN NSE INDIA

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ABSTRACT

This study empirically examines the contrarian and momentum investment strategies of selected Exchange Traded Funds listed on national stock exchange in India. A sample of twelve ETFs consisting of equity, gold and indices exchange traded fund was listed on the National Stock Exchange in India. The study have been analyzed as winners fund, loser funds, contrarian effect and momentum effect of selected ETFs with the help of mean return beta and abnormal return, over a period of six years ranging classified as short term, formation and holding period from 2018 and 2019, respectively. Similarly, long term, formation and holding period is from January 2014-17 to 2017-19, respectively.

KEYWORDS: *Investment Strategy, Formation Period, Holding Period, Winner Stock, Loser Stock.*

Introduction

Exchange Traded Funds (ETFs) was first created in the year 1993. After nearly a decade, in 2001, India saw its first ETF, the Nifty ETF Fund or Nifty BeEs, launched by Benchmark Mutual Fund. Benchmark Mutual Fund continued to be the pioneer of ETFs in India and launched the first debt exchange-traded fund in 2004 called Liquid BeEs. This was a Fixed Income ETF. In fact, it was the first money market; ETF that gave India the privilege of being the first country to launch an ETF catering to the needs of risk-averse investors. Subsequently, in 2007, the fund house launched the first gold exchange-traded fund called Gold BeEs. While Goldman Sachs bought benchmark mutual fund in 2011 and Reliance mutual fund bought Goldman Sachs in 2015, these ETFs are still operational. As on end of 2019, there were 71 ETFs that track various debt and equity indices with total assets under management of around INR 1.47 trillion.

Since its launch in the early nineties, the global ETF markets have experienced phenomenal growth. As end of 2019, there were around 7,797 ETFs or Exchange Traded Product in the world with total assets under management crossing USD 5.78 trillion. Globally, the US market dominates the ETF segment with a 70% share with the Asia Pacific market holding an 11% share. Also, equity ETFs account for nearly 76% of the global ETF markets while fixed income ETFs at 20%.

A fundamental and initial part of any investment decision-making process should be the evaluation of investment strategies an investor forms his portfolio based on past fund price trend by assuming that price trends will continue in the same direction or reverse direction. A contrarian investment strategy is based on assumption that best time to buy when the majority of investors are most bearish, whereas, best time to sell when majority investors are bullish. A price momentum strategy seeks out to purchase those stocks that have recently risen significantly in price on the belief that they will continue to owning to an upward vice versa.

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Literature Review

Kaur (2014) investigated the relationship between contrarian/ momentum effects for that sample selected from 500 companies forming part of the S&P CNX 500 index. From the study, it was found that investors could earn abnormal returns by formulating a contrarian strategy with the manufacturing and service industry in the Indian stock market. Higher contrarian profits can be earned in manufacturing sector industries than in the service-oriented industry.

Arvind M (2016) examined the existence of momentum and contrarian effect on selected sectoral portfolios of NSE for a period of six years from April 2009 and March 2015. Results confirmed the short-term contrarian effect exists in Metals, Auto, and Banking and Energy sectors. In addition to these observations, short term momentum effect signals lesser instability of returns in the said sectors. Such directions are helpful for an investor to shape his decisions; the test results produced evidence on the subsistence of momentum effect in the Indian stock market.

Supriya Maheshwari and Raj S. Dhankar(2016) evaluated the momentum and long-term reversal effect in the Indian stock market over the sample period from January 1997 to March 2013, the results from the study presents convincing evidence that statistically significant short-term momentum and long-term overreaction effect existed in the Indian stock market. The investment companies, mutual fund managers and retail investors could improve their investments by using momentum strategy in short-term while contrarian strategy in the long-term in the Indian stock market. However, fewer things remained to be explored.

Abdur Rafikand Syifa Primaratri Marizka (2017) studied the relative performance of contrarian and momentum strategies for mid-term and long-term horizons in the Indonesian capital market. The test was performed for constituents of the Kompas 100 index for the period 2009-2014. From the study, it was found that superior performance of the momentum strategy in the intermediate term is sensitive to formation horizons. In the long-term (over 24 months), the contrarian strategy is more profitable than the momentum strategy.

Anshu Singh (2018) examined the presence of contrarian and momentum effect of 50 large cap stocks traded on NSE; India over a period of eight years from 1st Jan 2010 to 31st Dec 2017. In general, most of the large cap stock returns seem to follow a momentum effect. Further, substantiated by the fact that almost 72% of the Nifty50 stocks have exhibited a momentum effect in the short-term as well as long-term while rest of stocks show contrarian effect. Both these strategies are working for some sectors where mixed results are obtained. Sectors like Pharmaceuticals, Financial Services, Information Technology, Telecom, Automobile and Metals have shown the presence of both, the effects can be either short-term or long-term. Even though many stock returns may be following the momentum effect, contrarian pockets are available dependent upon the investor's risk tolerance and time horizon.

Objectives of the Research

- To identify winners and losers funds of selected ETFs
- To identify presence of contrarian and momentum effect on selected ETFs.
- To understand the impact of these strategies (contrarian and momentum) on selected ETFs returns in the short-term as well as long-term period.

Research Methodology

Data

The study is based on secondary data, which was collected from various sources; include websites, newspapers, SEBI manuals and textbooks. There are 12 ETFs consisting of equity, gold and indices exchange traded funds traded on NSE in India for a period of six years from 2014 to 2019. The whole study has been conducted within two-time frames consists of short-term and long-term, every time horizon was further classified into formation and holding periods for the purpose of calculating mean return, beta and abnormal return. Funds, which generated positive abnormal returns in formation period, were categorized as "winner funds" and funds, which were negative returns, were categorized as "loser funds". If the winner portfolio generated significant positive abnormal return and the loser portfolio a significant negative return in the holding period, use of momentum strategy is applicable. However, if there is a significant trend reversal in the form of winners becoming losers or losers becoming winners in the holding period, a contrarian strategy is applicable.

Sample Size

A sample of 12 ETFs consists of equity, gold and indices exchange traded fund listed on the National Stock Exchange in India were chosen to analyze winners fund, loser funds, contrarian effect and momentum effect. The details of the sample are given below.

S.No	Exchange Traded Fund	Underlying Asset	Launch Date	AUM(In Cr)
1	ICICI Prudential Nifty ETF	Equity	20-03-2013	1379.46
2	Goldman Satche CNX nifty	Equity	18-03-2009	2.88
3	Nippon India ETF Nifty BeES	Equity	28-12-2001	1672.53
4	Kotak Nifty Exchange Traded Fund	Equity	02-02-2010	862.57
5	SBI ETF Gold	Gold	18-05-2009	817.36
6	ICICI Gold ETF	Gold	30-06-2010	1237.79
7	HDFC Gold ETF	Gold	13-08-2010	615.09
8	Kotak gold Exchange Traded Fund	Gold	08-08-2007	757.58
9	ICICI Prudential Nifty 100	Indices	20-08-2013	9.92
10	MotilalOswal Nifty 100	Indices	24-02-2014	1177.25
11	Nippon India PSU Bank	Indices	25-10-2007	102.35
12	Reliance Nifty 100 ETF	Indices	22-03-2013	7.40

Time Horizon

The time horizon for computation of short-term and long-term funds performance along with formation and holding period is given in the table below

Time Horizon	Formation Period	Holding Period
Short Term	01 - 01 -2018 to 31 - 12 -2018	01 - 01 - 2019 to 31 -12 – 2019
Long Term	01 - 01 -2014 to 31- 12 - 2016	01 - 01 - 2017 to 31- 12 – 2019

Tools Used for Study

S. No.	Tools	Formula	Description
1	Return	$R_p = (P_1 - P_0) / P_0 * 100$	Return is what an investor realizes from the investment activity. The return may be positive or negative depends on price volatility in the market.
2	Mean Return	R_p / n	Average or mean return is total return divided by the number of months in a study period.
3	Beta	$\beta = (R_i - R_i) * (R_m - R_m) / \text{variance}$	The beta measure of systematic risk and a performance measure. The market is described as having a beta of 1. The beta for funds describes how much the fund's price moves in relation to the market. Beta measures fund return sensitivity as compared to overall market returns
4	Abnormal return	$p = R_p - (* R_m)$	Abnormal return arises on account of the extraordinary event concerning performance of fund. When these events are favouring the effect is positive otherwise it is negative.

Data Analysis and Interpretation

Table 1: Table Showing Return, Abnormal Return & Beta for Short-Term Formation and Holding Pd.

Funds	Formation Period (2018)			Holding Period (2019)		
	Average Return	Abnormal Gain/Loss	Beta	Average Return	Abnormal Gain/Loss	Beta
Nifty 50	0.130	---	1	0.858	----	1
ICICI PRUDENTIAL NIFTY ETF	0.462	0.331	1.009	0.497	-0.304	0.934
Goldman Satche CNX nifty	-1.561	-1.620	0.454	-0.412	-1.034	0.725
Nippon India ETF Nifty BeES	0.457	0.324	1.023	0.951	0.140	0.945
Kotak Nifty ETF	0.427	0.294	1.022	1.727	0.868	1.001
SBI ETF Gold	0.552	0.586	-0.266	1.914	2.537	-0.725
ICICI Gold	0.655	0.670	-0.114	1.615	0.870	0.793
HDFC Gold ETF	0.677	0.703	-0.201	1.836	3.422	-0.728
Kotak Gold ETF	0.513	0.531	-0.140	2.317	2.974	-0.766
ICICI Prudential Nifty 100	-0.102	-0.240	1.059	0.903	0.100	0.937
MotilalOswal Nifty 100	-0.777	-0.801	0.181	3.043	3.368	-0.378
Nippon India PSU Bank	-0.953	-1.101	1.138	-1.651	-3.620	2.294
Reliance Nifty 100 ETF	-0.003	-0.134	1.006	0.911	0.177	0.855

(Source: Analysis of Secondary Data)

From the above table 1, it was found that in the short-term formation period, HDFC Gold ETF had the highest annual return and Reliance Nifty 100 ETF had the least return. Similarly, in the short-term holding period highest return by Kotak gold ETF and Nippon India PSU Bank had negative return. Abnormal return or alpha is an excess of return over index return, which is generated, on an account of random factors in the short-term formation period HDFC Gold ETF generated highest abnormal return and in the short-term holding period Motilal Oswal Nifty 100 generated highest return. Systematic risk of each fund was measured by beta. From the above table 1, it was found that in the short-term formation period and holding period Nippon India PSU Bank implying highest beta value.

Table 2: Table showing Return, Abnormal Return & Beta for Long-Term Formation & Holding Pd.

Funds	Formation Period (2014-16)			Holding Period (2017-19)		
	Average Return	Abnormal Return	Beta	Average Return	Abnormal Return	Beta
Nifty 50	0.703	---	1	0.919	---	1
ICICI Prudential Nifty ETF	0.945	0.109	1.190	0.966	0.078	0.966
Goldman Satche CNX nifty	0.563	0.186	0.537	-0.248	-0.840	0.644
Nippon India ETF Nifty BeES	0.461	-0.254	1.017	1.078	0.161	0.998
Kotak Nifty ETF	0.602	-0.070	0.956	1.245	0.317	1.010
SBI ETF Gold	-0.185	0.079	-0.375	0.910	1.174	-0.287
ICICI Gold	-2.381	-1.969	-0.586	0.850	1.148	-0.325
HDFC Gold ETF	-0.256	0.017	-0.389	0.940	1.245	-0.332
Kotak Gold ETF	-0.143	0.097	-0.341	1.001	1.061	-0.320
ICICI Prudential Nifty 100	0.330	-0.071	0.997	0.962	0.020	1.026
MotilalOswal Nifty 100	0.991	1.002	-0.061	1.739	1.667	0.377
Nippon India PSU Bank	0.329	-0.784	1.584	-0.337	-0.668	1.734
Reliance Nifty 100 ETF	0.786	0.164	0.884	0.953	0.058	0.975

(Source: Analysis of Secondary Data)

From the above table 2, it was found that in the long-term formation period, Motilal Oswal Nifty 100 generated highest average return and ICICI ETF generated highest negative return. Similarly, in the short-term holding period, highest return was generated by Motilal Oswal Nifty 100 and Nippon India PSU Bank generated highest negative return. In terms of abnormal return, Motilal Oswal Nifty 100 generated highest return for both formation and holding period ICICI gold ETF and Goldman Satche CNX nifty generated highest negative return for formation and holding period, respectively. Further, in terms of beta, in the formation period ICICI Prudential nifty ETF, Nippon India ETF Nifty BeES and Nippon India PSU Bank ETF beats benchmark beta. In holding period, Kotak Nifty ETF, ICICI Prudential Nifty 100 and Nippon India PSU Bank ETFs beats benchmark beta.

Table 3: Table showing Short-Term Return, Abnormal Gain/Loss and Investment Strategy

Funds	Average Return		Abnormal Gain/Loss		Strategy
	Formation (2018)	Holding (2019)	Formation (2018)	Holding (2019)	
Winners Funds					
ICICI Prudential Nifty ETF	0.462	0.497	0.331	-0.304	Contrarian
Nippon India ETF Nifty BeES	0.457	0.951	0.324	0.140	Momentum
Kotak Nifty ETF	0.427	1.727	0.294	0.868	Momentum
SBI ETF Gold	0.552	1.914	0.586	2.537	Momentum
ICICI Gold	0.655	1.615	0.670	0.870	Momentum
HDFC Gold ETF	0.677	1.836	0.703	3.422	Momentum
Kotak Gold ETF	0.513	2.317	0.531	2.974	Momentum
Loser fund					
Goldman Satche CNX nifty	-1.561	-0.412	-1.620	-1.034	Momentum
ICICI Prudential Nifty 100	-0.102	0.903	-0.240	0.100	Contrarian
Motilal Oswal Nifty 100	-0.777	3.043	-0.801	3.368	Contrarian
Nippon India PSU Bank	-0.953	-1.651	-1.101	-3.620	Momentum
Reliance Nifty 100 ETF	-0.003	0.911	-0.134	0.177	Contrarian

(Source: Analysis of Secondary Data)

A period of two years has been considered for analyzing the short-term trends and each of this, one year was equally apportioned as formation (2018) and testing periods (2019). After computing the abnormal returns for the selected 12 ETFs in the formation period, it was found that seven ETFs were winner funds and five were loser funds. Further, the result shows that from winner portfolios, except ICICI Prudential Nifty ETF all other funds successfully maintained the momentum effect. From loser funds, Goldman Satche CNX nifty and Nippon India PSU Bank maintained momentum effect and rest of the funds was occupied contrarian effect.

Table 4: Table showing Long-Term Return, Abnormal Gain/Loss and Investment Strategy

Funds	Average Return		Abnormal Gain/Loss		Strategy
	Formation (2014-16)	Holding (2017-19)	Formation (2014-16)	Holding (2017-19)	
Winner Funds					
ICICI Prudential Nifty ETF	0.945	0.966	0.109	0.078	Momentum
Goldman Satche CNX Nifty	0.563	-0.248	0.186	-0.840	Contrarian
SBI ETF Gold	-0.185	0.910	0.079	1.174	Momentum
HDFC Gold ETF	-0.256	0.940	0.017	1.245	Momentum
Kotak Gold ETF	-0.143	1.001	0.097	1.061	Momentum
MotilalOswal Nifty 100	0.991	1.739	1.002	1.667	Momentum
Reliance Nifty 100 ETF	0.786	0.953	0.164	0.058	Momentum
Loser Funds					
Nippon India ETF Nifty BeES	0.461	1.078	-0.254	0.161	Contrarian
Kotak Nifty ETF	0.602	1.245	-0.070	0.317	Contrarian
ICICI Gold ETF	-2.381	0.850	-1.969	1.148	Contrarian
ICICI Prudential Nifty 100	0.330	0.962	-0.071	0.020	Contrarian
Nippon India PSU Bank	0.329	-0.337	-0.784	-0.668	Momentum

(Source: Analysis of Secondary Data)

A period of six years were considered for analyzing the long-term trends and each of these three years was equally apportioned as formation (2014-16) and holding periods (2017-19). After computing the abnormal returns for the selected 12 ETFs in the formation period, it was found that seven ETFs were winner funds and five were loser funds. Further, the result shows that from winner portfolios, except Goldman Satche CNX Nifty all other funds successfully maintained the momentum effect. From loser funds, Nippon India PSU Bank maintained momentum effect and rest of the funds were occupied contrarian effect.

Findings

Table 5: Table showing overall Result for Short-Term and Long-Term on Formation and Holding Period

Under Lying Funds	No	Short-term						Long-term						
		Formation Period			Holding Period			Formation Period			Holding Period			
		M.R	A.R	Beta	M.R	A.R	Beta	M.R	A.R	Beta	M.R	A.R	Beta	
Equity	4	+	3	3	4	3	2	4	4	2	4	3	3	4
		-	1	1	0	1	2	0	0	2	0	1	1	0
Gold	4	+	4	4	0	4	4	1	0	3	0	4	4	0
		-	0	0	4	0	0	3	4	1	4	0	0	4
Indices	4	+	0	0	4	3	3	3	4	2	3	3	3	4
		-	4	4	0	1	1	1	0	2	1	1	1	0
Total	12		12	12	12	12	12	12	12	12	12	12	12	12

Table 6: Table showing Total no of Winner and Loser Fund in Momentum and Contrarian Strategy

Funds Underlying	No of Funds	Short-term				Long-term			
		Winners Funds-7		Loser Funds-5		Winners Funds-7		Loser Funds-5	
		M	C	M	C	M	C	M	C
Equity	4	2	1	1	0	1	1	0	2
Gold	4	4	0	0	0	3	0	0	1
Indices	4	0	0	1	3	2	0	1	1
Total	12	6	1	2	3	6	1	1	4
Percentage	100	50	8	17	25	50	8	8	34

Total momentum effect over short-term and long-term, 62.6% and total contrarian effect over short-term and long-term 37.4%.

- **Equity ETF:** Among selected equity ETFs in long-term period, maximum ETFs generated positive returns compared to short-term period. Momentum effect dominant in short-term and contrarian effect dominant in long-term.
- **Gold ETFs:** All four selected gold ETFs generated positive mean and abnormal returns for short-term period and in long-term period, it was a mixed result. Similarly, in short-term, all four funds were winner's funds with momentum effect and in long-term period, mixed result of winner and loser funds with momentum and contrarian effect. Investment strategy clearly indicates investments on gold ETFs are suitable for short-term period. Further, in short-term contrarian, effect was dominant and for long-term period it was a mixed result of two funds were momentum and rest of two funds were contrarian effect. In case of indices, ETFs, it is clearly indicates long-term investment is better than short-term.
- **Indices:** among selected indices, ETFs, in short-term period, all four funds provided negative mean and abnormal return but in long run, it was a mixed result. As negative return was generated in short-term period, all four funds were loser funds and in long-term period, two funds were winner funds and rest of the two were loser funds. In short-term period contrarian effect was dominated, whereas, long-term period momentum effect was dominated.

Conclusion

In this study, twelve ETFs traded in NSE India and Nifty 50 as benchmark were selected to analyze contrarian and momentum strategy over a period of six years with the help of return, average return, abnormal return and beta through collecting secondary data was extracted from various sources. In general, majority of equity and gold ETFs follow momentum effect in short-term time horizon, whereas, indices ETFs follow momentum effect in long-term time horizon. Total percentage of momentum effect over short-term and long-term was 62.6% and rest of 37.4% was contrarian effect over short-term and long-term time period.

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IMPACT OF COVID-19 ON INDIAN SOCIETY

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ABSTRACT

Coronavirus (COVID-19) got affected day by day which slowed down the Indian economy considerably. The pandemic dominates millions of people who are either ill and have died from the disease, a new virus born who affecting the human body for the first time in the year 2019-2020, due to an outbreak of coronavirus. Till now there is no medicine for the prevention of this disease, but scientists are busy making medicines and some countries have made different types of medicine, which is under trial. The virus is spreading rapidly in every state and territory of India and all over the world. To prevent this virus, there has been a complete lockout in India and a lockout abroad. Due to this virus, the agriculture sector, employment sector, education, every urban and rural area have been completely affected financially.

KEYWORDS: COVID-19, Coronavirus, Agriculture, Education, Employment.

Introduction

Coronavirus has emerged in a large group that can cause disease in animals or humans. Coronavirus in humans is believed to be the cause of respiratory infections from common cold to more serious diseases such as the Middle East respiratory syndrome and severe acute respiratory syndrome etc. The most recently discovered coronavirus disease is also known as COVID 19.

Coronavirus is an infectious disease caused by the recently discovered coronavirus. Because of this new type of virus originating from Wuhan province of China in December 2019, not only China is spreading all over the world. Coronavirus is now a worldwide pandemic affecting many countries. Coronavirus seems to be slowing down the speed of the economy affecting almost everyone's routine, this disease has engulfed almost all humans and animals. This disease causes sore throat, fever, dry cough and pain and heaviness in the head and feels as if the winter coughs but the cough is wet but there is a lot of happiness in this disease due to which the whole body sometimes. Sometimes there is pain and difficulty in breathing. Like a common disease, it has symptoms that take time to identify whether it is a coronavirus or a common disease. Coronaviruses are very large spread viruses which may cause illness in animals or humans. In human, several coronaviruses are known as to cause respiratory infections ranging from the common cold to more severe diseases such as the Middle East respiratory syndrome and severe acute respiratory syndrome. This disease is such that if we come in contact with someone, it is more likely to spread the disease, which affects a person of any age, whether children or old. If an animal succumbs to this disease, it can also get the disease. If a person has any type of disease such as high blood pressure, cancer, lungs, etc., if a person is first, that person or animal may be more likely to be infected. The outbreak of this disease can also lead to death. If a person or animal does not already have any type of disease, it is likely to survive.

The disease is spreading rapidly not only in India but all over the world, which is destroying the economy in every way. Due to coronavirus affecting the health of human beings, life's difficult watches of crises. The government is giving priority as responsible for saving the lives of the people suffering due to this disease. The priority of the government is to keep everyone healthy. When people are healthy, then only they will be able to do their work smoothly. The epidemic has led to cuts in agriculture, health,

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education sector, unemployment sector, industry and private industry trade. The government is doing its best to protect them, including all the people living at home, wearing masks, maintaining social distance and constantly washing hands with hot water, hot tea, decoction, soap and hygiene. Measures to avoid, etc. Its programs such as webinars, television medium, mobile, news, banner media, advertisements, etc. are awakening everyone, through his television, the Prime Minister repeatedly says that if life is all there is, if there is no life there is nothing. In his speech, according to his priorities, he is repeatedly warning everyone that until a vaccine is produced, the rules set by the World Health Organization and the Indian Council of Medical Research will be followed.

However, the Indian Council of Medical Research and foreign companies are working on the vaccine to make the vaccine. Somewhere a vaccine has been made, somewhere the vaccine is being used in a phased manner. The Indian Council of Medical Research and other companies state that it takes a lot of time to take a good vaccine and take into account its side effects and after all the tests are done, it is the first time the animal is tested on whether it is successful. Therefore, it is then tested according to the age of humans. If success is found on humans and no results are produced, the government and the Indian Council of Medical Research distribute it to the public in its way. This expression has been expressed through news by the Government of India. This statement given by the Prime Minister of India, Shri Narendra Modi, is very important and two yards distance mask is necessary.

Effect on Agriculture

Due to this epidemic, it has had a very bad effect on the agricultural sector as far as the yield of farmers has increased. Due to the increase in agricultural yield, it has been said that the people who went to the city for livelihood and went to the city and got jobs, due to this disease, were given more attention to their agriculture sector. Due to this, a huge increase in agricultural yield was seen, but there was a lot of growth in the agricultural sector, but farmers do not get their crop in the market according to their price and it is not possible to take it to market because of this epidemic. Not only farmers but animals also suffer. Because the government has just kept the traffic open a little bit because of this, the farmers are unable to take their crop to mandi and when the crop of the farmer is ready all the farmers together to sell the crop Cannot sell and it is not possible to stop the crop for a long time. The farmer only has the capacity to keep it for his own use. The farmer does not have the means to keep more goods. The means are also very limited. The government also has limited means to keep the goods in the warehouse, only those farmers who can take any kind of agricultural financial assistance from the government can keep their crop. And those farmers who have not taken any kind of agricultural assistance, the situation of their goods gets worse. Due to this disease, this effect is being seen not only in the agricultural sector but also in the market. As far as it is concerned, due to the non-availability of food in the market, there is a surge in their price, yet the Government of India has tried to keep it under its control.

The Epidemic has a Bad Effect on Unemployment

The outbreak of this epidemic has not only occurred on the agricultural sector but also on unemployment, in companies, factories, under the state government or central government, who were working on daily wages or contracts, due to the shutdown of work, all of them in their homes. Sitting in somewhere, due to lack of work or lack of supplies or lack of production in a company, it shows unemployment. Unemployment ratio of educated people has increased due to closure from small industries to big industries. Along with this, unemployment figures have increased due to construction work, shop closures, market closures, movement of goods, and own industry shutdown and so on. Those who were running their own businesses have also stood in the queue of unemployment, who were working on daily wages. Those people have suffered the most because of unemployment because they are unable to take care of themselves and their children and their entire family. Today such a situation has arisen more for those who do not have farming. If farming was there, you could cultivate yourself and your family, and such people mostly live in a place where the population density is high and the agricultural area is low. This is an effect on unemployment.

Impact of Epidemic on Education Sector

This is a virus that cannot be seen with very subtle and naked eyes. Schools, colleges, institutes and coaching centers have all had to be closed due to this virus. Due to the closure of the institutions, the study puree has not been affected. The studies that go to school and college cannot be done online. There is no problem for teachers in schools and colleges who are regular and for teachers or teachers who are not regular, the problem is that public schools and private institutions have been keeping (or not

sure) for some time because since school, college and other institutions are closed. During those bandhs, no one is ready to pay any leave salary even if they are giving, then they are giving a third or half because the teacher does not have any other means other than teaching school or college which is his own and his own To make a living of the family. Schools and colleges can pay salaries to their teachers only when the parents of the students can deposit the fees. You can collect school fees only when the parents of students are employed. The thinking of the parents of the students is that when the schools and colleges are open and the children go, then only they will be able to pay the fees before that. Parents simply mean that when we have a job, then we will be able to pay fees otherwise. Due to this virus, they are unable to prepare for the competition along with studies. In this way, not only schools, colleges and other institutions, the state government and the central government are also being financially disadvantaged.

Precautionary Steps against COVID-19

- Avoid coming close to such people who are suffering from this disease. Keep at least a reasonable distance between you and those who cough or sneeze.
- Do not touch your eyes, nose, mouth and face too often.
- Cover your face with a cloth while coughing.
- Stay in your home in case you get sick.
- Your hands should be washed for at least 20 seconds with soap, water or hand washing fluids.
- Regular cleaning should be done with spray and wipes in their respective homes.
- If you have any kind of fever and difficulty in breathing, contact your nearest doctor and hospital immediately.
- Follow the suggestions issued from time to time by the Ministry of Health and Welfare.

Conclusion

This article, coronavirus infection, first started in Wuhan province, but now the virus has taken the form of a very fast pandemic in more than 180 countries and urban and rural areas of the world. Health officials and ministries in the United States, India, and around the world publicly administer health measures such as disorganization, tactile monitoring, testing, isolating and stopping travel, and a team of clinics and health ministry scientific medicine to prevent the spread of the virus. Engaged in making. The new coronavirus was first detected in December 2019 in Wuhan, China province. Thousands of humans and animals were affected by this virus, this virus spread easily from person to person in many provinces of China.

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THE FRUITFUL ROLE OF HUMAN RESOURCE INFORMATION SYSTEM IN SERVICE SECTOR COMPANIES

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ABSTRACT

In this competitive globalised world, upgradation of human resources & role to fit in the organization & fight is essential for the challenges. Human Resource Information System is one of the software which integrates the human resources and information technology. It increases a major transformation of human resource to gather the importance of HRIS in service sector companies. Data collected through Google scholar, peer reviewed journals, EBSCO, HR websites.

KEYWORDS: Human Resource Information System, Importance and HRIS Software.

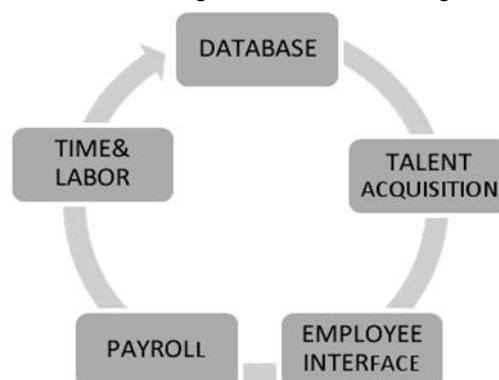
Introduction

Developing markets, industries & services requires enterprises culture capacity of constant updating of technology with new innovative thinking & completion of task in lesser time. Human Resource Information System performs multiple functions i.e. storing information of diverse companies, applicant tracking system, administrative and strategic task. Information system plays a great role in data processing & decision making with the accurate timely information organization can improve his strategic decision making. For example data can gather of different departments i.e. accounts department, transport department, administration department of any company with just click on a mouse.

According to Kleynhans 2006 HRIS is a computerized system that enables human resource managers' to gather, organize, store, update & retrieve the information needed for managing employees.

According to Noor & Razil 2011 HRIS must align & satisfy the needs of the organization & its user in order to be successful.

Therefore HRIS manage all employee information, analyze, report and integrate all the functions at one place. It is very useful software in this digitalized world as data get easily access.



Source: Hrtechnologist.com

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Need of Human Resource Information System

With a digitalized world maintenance of technology is a great challenge to fight in competitive world. HRIS is one of the right adoptions of software to maintain winning solution in the organization.

- In large companies number of employer is working to track those HRIS is very helpful software.
- Top managers can focus on strategic task as administrative task get completed by time managers and get accurate & timely information about their employees.
- There is a hub of job seekers so to find the talented and skillful employee's recruitment with lesser cost on time HRIS provide an applicant tracking system, on boarding, employee demographics and performance management and much more.
- Diverse culture, workforce environment so there is need of ease of communication, orientation of organization, training, retrieve and integration of data.

Review of Literature

According to Harekrishna Mishra (2006) Role of Human Resource in Information Technology alignment in organization. A metric Based Strategic Framework." In this paper author revealed that Human Resource are the most important in order to fulfill pre and post acquisition of stages i.e Planning and Policy, strategic decision making, perception of users & attainment of objectives.

According to M.N. Periysamy & A.Amsa (2014) Human Resource Information System in Modern Business: This paper talks about the good impact by using HRIS in modern industry i.e. A Spinning Industry, Poultry Industry, Rubber factory, Iron and Steel Industry & Egg Manufacturing Industry. Result shows that 100% all level of management & all organizations adopting HRIS for recruitment & monitoring employees. HRIS makes the organization successful & helpful to compete in digitalized world.

According to Santosh K Mohanty & K.M. Sahoo (2012) Human Resource Development Climate in IT industry." This paper reveals that OCTAPAC (Openness, Confrontation, trust, autonomy, proactivity, authenticity & collaboration) culture prevails in IT industry. Human Resource are very important resource for the success of goal in the organization so there is need to develop & spend a good time on them because without development of human resource objective of enterprise cannot be accomplished as they only make raw material into finished goods.

According to Khusboo Arora (2013) Importance of HRIS: A Critical Study on Service Sector." In this paper author states that Human Resource plays a crucial role in the organization as he only perform HRIS functions so there is need of proper knowledge & training to be given about software. It is very effective tool because of its easy application, timely and accurate information.

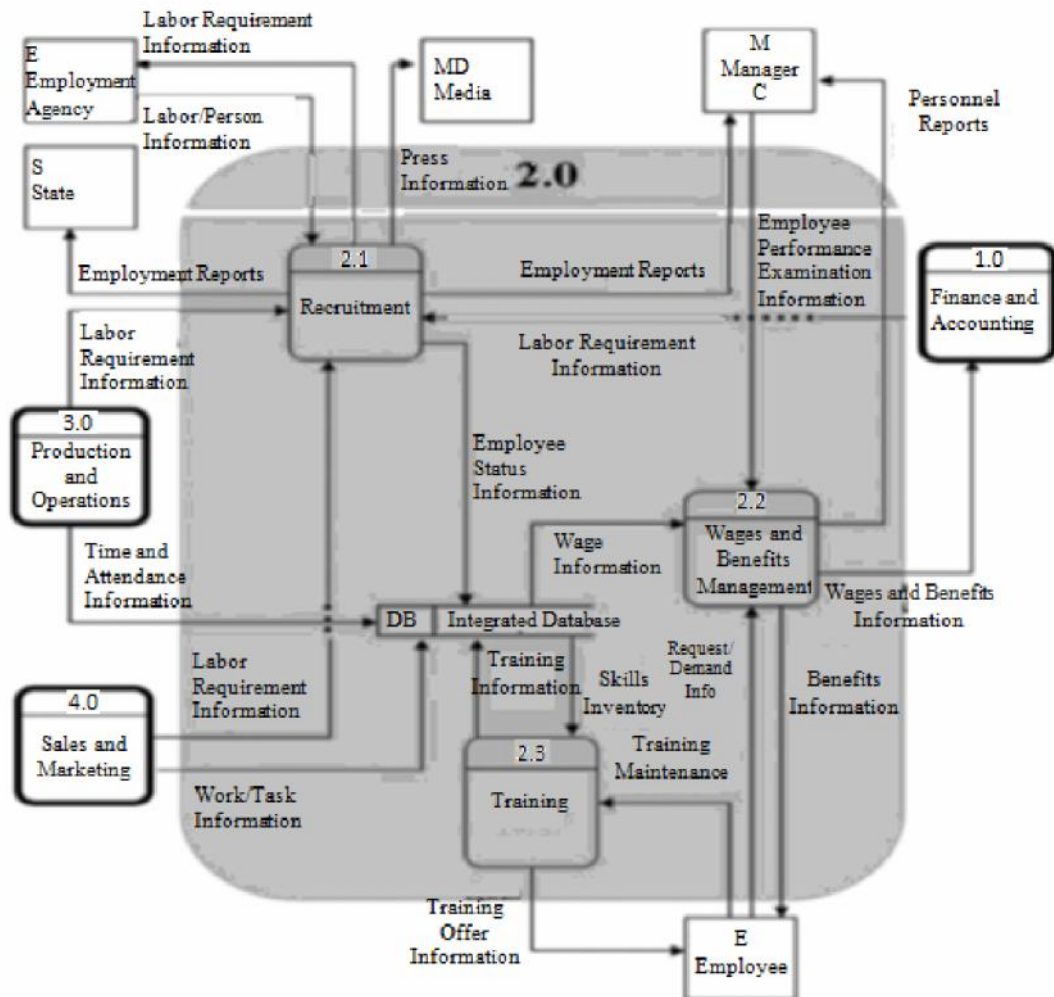
According to Barkha Gupta (2013) Human Resource Information System (HRIS): Important Element of Current Scenario." This paper reveals about importance of HRIS & its role play in company HR function. HRIS is a key to maintain accurate data in less time & also helping in making plan, policies, people, procedure & data required in establishing organization goal.

Objectives of the Study

- To find out the importance of Human Resource Information System in Service Sector.
- To know about HRIS.

Usage of HRIS in Service Sector

In this figure general use of HRIS in organization is given. It shows about its relevance and effectiveness increasing scenario. Different kinds of HRIS software is available its depend on company which they adopt according to their needs and objective of their organization.

Figure 1. Human Resources Information System Data Flow Diagram

Source: Semantic scholar.org/organisation.com

Benefits of Human Resource Information System

HRIS provides number of benefits to companies irrespective of its size. Depend on the type of system company choose as it ranges from cost & time savings. Some of the benefits company sees when it chooses HRIS software are as:

- **Speedy On boarding**

For hiring employees on a constant basis it helps in a new hire with organizational policies, employee's job role, organizational culture, facilitate training & maintaining social relationship with their colleagues. Its result is positive employee engagement & higher productivity and performance.

- **Easy Access to Information**

Retrieve of data easily by anyone with authorization & safely as information is stored at one place & easy to access. HRIS system also deducts paper work.

- **Enhanced Employee Tracking**

This application track their employees location in working hours which help the employer to monitor in systematic way which enhance security, efficiency & reduce operating cost. For example Ezelix software supported on all web, android & iphone app.

- **Employee Self-Service**

This tool allow employee to change in schedule or any changes with their personal smart device at anywhere anytime. For eg if a employee wants to take leave than he can give leave application at home itself.

- **Enhanced Communication**

HRIS software helps the employee in effective communication which helps in consistence in the workflow, quick in problem solving, more productivity, strong decision making & better control.

- **Improving HR Productivity**

Higher productivity means higher profit in organization. HRIS helps in measuring employee satisfaction, employee self service & streamline workflow and task.

- **Reduction of Error & Paper Work**

HRIS system helps in accuracy of data as all the data is automated. Every work is done digitally like recruitment, training, payroll & on boarding which reduce paper work, human error & labour cost.

Role of Human Resource Information System

Human Resource is very important asset in the organization. Four elements of any organization i.e. Men, Material, Machinery & management plays a great role as they integrate all the things to produce in effective manner.

- HRIS helps in effective recruitment, selection, communication, performance appraisal, payroll & compensation benefits, training & career development.
- Cost effective software as labour cost is reduced, time save, accuracy of data & reduction in paper work.
- Retrieve of data with higher speed & accuracy on time about employees in the organization.
- Modern HRIS software provides both strategic and administrative task compliance in companies.

However we can say that HRIS is very useful tool in automated process for completion of accuracy providing efficient result for decision making in fulfilling goal of the organization.

Latest Software used in Service Sector

- **ERP Software:** This software provides tracking profitability, managing customer expectation & resource planning e.t.c. benefits of ERP Software are as:
 - Third party integration
 - Centralized customer data
 - Invoice, Billing, order process management
 - Finance & accounting
 - Meet customer expectation

- **Applicant Tracking System**

It is software which handles recruitment & hiring process in companies. It simplifies the process by using automated intelligence to screen for the best. it is easy to use. Using this software time, cost & quality of candidate is improved.

- **Anegima HR Mates**

This software fully integrate HRMS Software i.e. Talent management, performance management, training management, time & attendance, Absence & holiday management, Expense management, Assets management, project management, Client & Invoice Management, Online questionnaire & Surveys, Document management, Help Desk, Analytics & Report etc in simplified process.

- **Oracle Software**

It is a multi model database management system for implementing online transaction processing, data warehousing & mixed database workloads. For eg Amazon use oracle software as it have multiproduct multidepartment.

Conclusion

HRIS is an important tool with a requirement of increasing technology in this globalised era. It is very cost effective & time saving software which increases productivity & set with company goals, objective, mission and value. Mainly this research concludes that HRIS plays a vital role in the organization as diversity of work get integrate at one place which can be access at anywhere anytime. Retrieve, tracking & storing of data . It also comply statutory laws, rules & regulations and amalgamate the different departments of organization i.e. payroll, compensation, succession, training, performance appraisal and Integration of data. This system is also known as Human Resource Management System.

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FROM CASH TO CASHLESS: BENEFITS AND CHALLENGES

Dr. Neelam Sethi*

ABSTRACT

The cashless economy is the essential tool for the development of the nation. It is the first step in the development field. In this system, there is not much requirement of physical cash present in the wallet of human beings. It does not mean that no cash transaction took place in the market. It means use least cash transaction to support digitization. Cashless economy is also known as electronic payment system. It is the condition where a flow of cash is very little in the market or society. The tools of electronic payments are ATMs, internet banking, mobile banking, and electronic fund transfer and so on. This economy mainly runs by through the digital money or plastic money. There is a minimal use of physical money in the economy.

KEYWORDS: *Cashless Economy, Digitization, Electronic Fund Transfer, Plastic Money.*

Introduction

Many countries are going towards the cashless economy. This is not a single country concern it is work on the worldwide level. Instead of several countries are completely follow the cashless economy model. Cashless economy means where no physical transactions take place in the market or there is no need to take large cash amount into wallet such as coins, physical cash amount and currency notes. In the old age barter system had been followed in which no money was needed to exchange goods and services. They mainly did transaction through food crops, milk and other goods. Cashless transaction is the new notion to build cashless economy. In this system, electronic money or digital payment methods has been used for exchange goods and services. Through this system everyone can make records of their transaction in digital form. Cashless economy has many benefits as well as challenges faced by the government to fully implement this system. Our government takes many initiatives to aware people about the cashless economy and its benefits. But it is not a simple activity as it sounds. It is very difficult to spread awareness about this system.

Digital Program of Indian Government

This program is plays a vital role in the nation as it is a main program of the introduced by the Indian government. It is a big initiative of the government to make India as a cashless economy. The main objective of this program is to digitally empower India & spread awareness about the cashless economy. The main role of digital India is to made perfect cashless or paperless to country.

“According to the Government of India, while making transactions through cashless mode, the citizens of India get many opportunities to make them comfortable”.

Thereafter, Indian government introduce digital payment system to aware the citizen about electronic transactions and create trust that this payment method can shrink the physical transactions of money. There are many digital payment methods are available in the market in which some of them are given below:

- **Banking Card:** “Banking cards offer consumers more security, convenience, and control than any other payment method. The wide variety of cards available – including credit, debit and prepaid – offers enormous flexibility, as well”.

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- **Unstructured Supplementary Service Data (USSD):** "This service allows mobile banking transactions using basic feature mobile phone, there is no need to have mobile internet data facility for using USSD based mobile banking".
- **Aadhaar Enabled Payment System (AEPS):** "AEPS is a bank led model which allows online interoperable financial transaction at PoS (Point of Sale / Micro ATM) through the Business Correspondent (BC)/Bank Mitra of any bank using the Aadhaar authentication".
- **Unified Payments Interface (UPI):** "Unified Payments Interface (UPI) is a system that powers multiple bank accounts into a single mobile application (of any participating bank), merging several banking features, seamless fund routing & merchant payments into one hood".
- **Mobile Wallets:** "A mobile wallet is a way to carry cash in digital format. You can link your credit card or debit card information in mobile device to mobile wallet application or you can transfer money online to mobile wallet".
- **Point of Sale:** "A point of sale (PoS) is the place where sales are made. On a macro level, a PoS may be a mall, a market or a city. On a micro level, retailers consider a PoS to be the area where a customer completes a transaction, such as a checkout counter. It is also known as a point of purchase".
- **Internet Banking:** "Internet banking, also known as online banking, e-banking or virtual banking, is an electronic payment system that enables customers of a bank or other financial institution to conduct a range of financial transactions through the financial institution's website".
- **Mobile Banking:** "Mobile banking is a service provided by a bank or other financial institution that allows its customers to conduct different types of financial transactions remotely using a mobile device such as a mobile phone or tablet. It uses software, usually called an app, provided by the banks or financial institution for the purpose. Each Bank provides its own mobile banking App for Android, Windows and iOS mobile platform(s)".
- **Micro ATMs:** "Micro ATM meant to be a device that is used by a million Business Correspondents (BC) to deliver basic banking services. The platform will enable Business Correspondents (who could be a local kirana shop owner and will act as 'micro ATM') to conduct instant transactions".

Review of Literature

Kaur, 2019, studied "Cash to Cashless Economy: Challenges & Opportunities" and found that India was mainly dependent on physical transaction of money and it is common method used by people to exchange goods and services. On the other hand in cashless economy system there is minimum use of physical cash such as currency notes, coins, etc. it is mainly based on the digital payments like debit cards, credit cards, electronic fund transfer, e-wallets and other payment methods. Electronic fund transfer includes NEFT, USSD, UPI, ECS, RTGS, AADHAR based payment system for transactions. "The ratio of cash to gross domestic product is one of the highest in the world. In Financial year 2015, RBI spent Rs. 27 billion on just the activity of currency issuance and management. India faces many challenges in setting up a cashless economy like lack of digital and banking infrastructure, cyber security and financial literacy, high cash dependency etc". In the year 2016, our finance minister speaks about the idea of making India as cashless economy.

Jayalakshmi, n.d., Studied "Cashless Economy in India: Challenges And Benefits" and found that only five percent transactions are done through digitally and major part done their activities through cash. "Minister of Finance, in the 2016 budget speech, spoke about the idea of making India a moneyless society, with the aim of curbing the flow of black money. A non-monetary partnership is defined as an economic state in which financial transactions are not shown with money in the form of banknotes or physical currencies, but reasonably the transfer of digital information (usually electronic representations of money) between the parties performing the transaction. Although society is generally spoken without cash, most countries are increasing their money supply". In India major part is taken by retailers. The use of digital payment can save the huge amount currency as it can reduce the cost of making currency. The aim of this research was to identify the benefits and challenges of cashless economy and put light on different methods of payment. The objective of implement cashless economy was to reduce cash or remove black money.

Khurana, 2017, studied “DREAM OF CASHLESS INDIA: BENEFITS & CHALLENGES” and found that the notion of cashless society was that no physical cash transaction took place in the market or very little transaction were used for the payments. This study disserted the hard work of Indian government in the field to encourage digital transactions. All the efforts taken by Indian government open the way toward making digital India. This effort gives the path to fulfill the dream of making cashless economy in our nation. Central and state both the government took many initiatives to complete the dream of digital India. The benefits of cashless economy had been defined to the general public to encourage people for use of digital payment rather than cash transactions. In the study the benefits and obstacles had been defined which faced by the government to implement this program.

Sheerin, 2019, studied “Cashless Economy in India: Challenges and Opportunities” and found that India took many initiatives to bring cashless system in the country through reducing activities of cash transactions. The purpose of this research was to show the existing status of India with the use of electronic payment as compare to developed nations. This study also finds out the opportunities and obstacles of cashless society. In 2016, a very big initiative had been introduced which was demonetization which play a crucial part to move towards cashless economy. To introduce cashless economy government face many hurdles in their path.

Goel, Sahai, Vinaik, & Garg, 2019, studied “Moving from cash to cashless economy: - A study of consumer perception towards digital transactions” and found that now a days the mode of payment was continuously changed. The transaction of goods and services took place through digital payment methods. There were several methods are available in the market as country was rapidly changing policies and technologies. “Cashless economy is the future of Indian economy where there will be no physical flow of cash. All the payments will be made and received in the virtual world. Cashless economy got popular after demonetization where plastic money was widely used. The study is aimed towards studying the level of awareness among the citizens about cashless economy”. This research reveals the different aspects which affect individuals to move towards cashless transactions and many advantages had been shown to avail different mode of payments.

Sahai Kumawat & Kumar Goyal, 2018. studied “Moving from Cash to Cashless Economy: Challenges and Opportunities for India” and found that India had made their maximum transaction through cash payments which highest in the globe. In 2015, Reserve Bank of India spends approx Rs. 27 billion on money management and issuance of new currency. “India faces many challenges in setting up a cashless economy like: lack of digital and banking infrastructure, cyber security and financial literacy, high cash dependency etc. The major benefits of cashless economy in India are: reduced tax avoidance and money laundering, reduced costs of printing money etc. Secondary data has been used for study which is collected from different newspapers, websites, journals etc. In Dec., 2016 total value transaction done using E-wallet was 97.70 (Rs. in Billion) and in Jan., 2017 it is increased upto 108.69”. In the year 2022, the target of Indian digital payments industry was to achieve approx \$700 billion in payments.

Benefits of a Cashless Economy

Cashless economy plays a crucial part in development of the nation. There are many benefits are available to use cashless payments. Which are as follows?

- **Less Crime:** “With cash, it's easy to steal money, whether the amount is large or small. Also, illegal transactions (drug trade, for example) typically take place with cash so that there's no record of the transaction and so that the seller can be certain about getting paid”.
- **Paper Trails:** “Financial crime should also dry up. It is harder to hide income and evade taxes when there's a record of every payment you receive. Money laundering becomes much harder if the source of funds is always available”.
- **No Cash Management:** “It costs money to print bills and coins. Businesses need to store the money, get more when they run out, and deposit cash when they have too much on hand. Moving money around and protecting large sums of cash could become a thing of the past”.
- **International Payments:** “When you visit a foreign country, you may need to buy local currency. But payments are easy if both nations can handle cashless transactions. Instead of figuring out another currency, your mobile device handles everything for you”.

Challenges with Cashless Economy

In the implementation of digital India program many difficulties were faced by government of people. Which are given below?

- “Most of the people in India are unaware of benefits of transaction through digital mode”.
- “Lack of proper infrastructure in form of internet connections, ATM machines, POS machines etc”.
- “People don’t know how to use their debit or credit cards, mobile wallets etc. well in e-commerce transactions”.
- “Big business men who have their interest in promoting cash transactions hinder the promotion of digitalization of Indian economy”.
- “Large part of Indian population does not even have accounts in bank”.
- “People are still afraid of fraud due to lack of cyber security”.
- “New schemes for promoting cashless transactions are not advertised properly”.

Conclusion

Nowadays, people did not have time to wait for hours or days to sent memo or wait in queues to pull out money for paying bills. India was rapidly going towards the change. Females were also moving from their houses to earn penny and did not have time to purchase grocery or other goods. To cope up with this problem Indian government took initiative and introduces cashless payment. The necessity of digital India had been realized in this time. No one has time to wait for a long time to do payment. Indian government takes many initiatives to ease to process of digitalization and several programs had been introduced. All these efforts were not sufficient to attain the objective of digital India. The use of electronic payments is easy, handy and superior even first people should aware about the working process of work otherwise it damage the whole balance of account.

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AN EMPIRICAL STUDY ON INFLUENCE OF DIGITALISATION ON HIGHER EDUCATION

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ABSTRACT

Education is a very basic need for each Individual to survive in life. It is very important in fast growing technology to have e learning or digitalization in the Higher Education sector to increases once knowledge and be well versed and updated with respect to current Scenario. Digital Education enables one to enhance his/her knowledge in less time and at their convenient time and place. One of the great opportunities we have with Technology is Social Networking through which Education could be shared with different cadres of People, unlike Traditional methods where students were totally dependent on Textbooks and classroom Lecturer. But as of now any Textbooks or Research Articles can be viewed through Digital tools. The Author has conducted a Survey among Teachers to analyse the Influence of Digitalization on Higher Education. The Statistical tools such as Chi Squares, ANOVA have been deployed.

KEYWORDS: *Digitalization, Higher Education, e-Learning, Social Networking.*

Introduction

Higher education being the paramount in the education system is being influenced by the world of digitization. It was found that Indian higher education system is considered as the third largest education system in the world apart from United States and China. Indian higher education system is growing or expanding rapidly. Accreditation of the higher education institution plays a major role in the development of the higher education system. It is Rightly said that Education builds the society and helps in overall development of Economy. Higher Education Institutes are continuously trying to strive in the Market by adapting new and innovative Teaching Methods to meet Student Expectations. (Cisco, 2017) Some people even predicted an end to conventional higher education institutions (Hochschulforum Digitalisierung, 2017).

Review of Literature

Gupta et al (2015) examined the trends and challenges as he explains stating people resist changing or implementing the digital education in India and was suggestive to have more new innovative ideas for learning the subjects in classroom. However, Croxto (2014) felt that online courses can be more interactive as students will be motivated to clarify their doubts as and when required which would give satisfaction and motivation among student fraternity Gond et al (2017) pointed that there are challenges with regard to Resources in connectivity problems and digital educations Briz-Ponce & Juanes-Méndez(2015) was in the opinion of challenges in using mobile devices and online services provided by the college to Medical students he stressed on Application could be more beneficial rather than online resources. Bowen, (2013) elaborated on the cost effectiveness of the implementation of digitalization at University level on how it would help the system as well as students Darghametal(2013) felt the delivery of information and interactive nature, of digitalisation and the main benefit behind using the ELearning instead of the traditional way is that Learners develop communication as well as personal skills such as autonomy, analytical perception, abstraction etc. Pardemean and Suparyanto (2014), in their study, showed that the students' computer skills had a strong correlation with their achievements.

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Objectives of the Study

To study the influence of digitization in higher education

Methodology

The analysis was conducted using a Simple Random Sampling method was used. A total of 30 Sample was collected from Teachers through Questionnaire and the Methodology used was descriptive statistics and chi-square analysis.

Results

In order to analyse the level of satisfaction towards influence level of digitalization on higher education of the respondents, the following Descriptive statistics and Chi-square analysis have been applied by the researcher in an effective manner.

Gender and Level of Satisfaction towards Influence Level of Digitalization on Higher Education

The distribution of the sample respondents are classified according to their gender and level of satisfaction towards influence level of digitalization on higher education are presented under the Table1.

Table 1: Gender and Level of Satisfaction

S. No.	Gender	Frequency	%	Range		Mean	S.D
				Min	Max		
1	Male	20	66.67	15	44	31.70	9.96
2	Female	10	33.33	15	39	27.40	10.22
	Total	30	100				

Source: Primary data

It is inferred from Table 1.1 that the level of satisfaction of the male respondents ranges between 15 and 44 with a mean score of 31.70 and the standard deviation is 9.96 and the respondents belongs to female ranges between 15 and 39 with a mean score of 27.40 and the standard deviation is 10.22.

Hence, the male respondents are satisfied at highest level.

Gender and Level of Satisfaction (Two- Way Table)

With a view to study the association between the gender and level of satisfaction towards influence level of digitalization on higher education, the two- way table has been prepared and presented as under.

Table 2: Gender and Level of Satisfaction (Two- Way Table)

S.No	Gender	Level of Satisfaction			Total
		High	Medium	Low	
1	Male	11 (73.3%)	7 (70.0%)	2 (40%)	20 (66.7%)
2	Female	4 (26.7%)	3 (30.0%)	3 (60.0%)	10 (33.33%)
	Total	15	10	5	30

Source: Primary data

It is concluded from table 2 that the percentage of high level of satisfaction of the respondents is the highest 73.3 percentage among the respondents are male and the lowest 26.7 percentage among the respondents are female.

The percentage of medium level of satisfaction is the highest 70.0 percentage among the respondents are male and the lowest 30.0 percentage among the respondents are female.

The percentage of low level of satisfaction is the highest 60 percentage among the respondents are female and the lowest 40 percentage among the respondents are male.

Hence, higher 73.3 percentage constitute that the category of male respondents and are satisfied at high level on influence level of digitalization on higher education.

Chi-Square Test

In order to study the relationship between gender and level of satisfaction towards influence level of digitalization on higher education, a Chi-square test has been applied and the result of the test is given below.

- **Null Hypothesis (H₀):** "There is no significant relationship between gender and level of satisfaction towards influence level of digitalization on higher education".
- **Alternative Hypothesis (H₁):** "There is a close significant relationship between gender and level of satisfaction towards influence level of digitalization on higher education".

Table 3: Gender and Level of Satisfaction (Chi – Square Test)

Factor	Calculated Value	Table Value	D.F	Remarks
Gender	1.950	5.991	2	Not Significant at 5% Level

Source: Compiled from Primary data

It is disclosed from the above analysis that the calculated value of chi-square (1.950) is less than the table value (5.991). Hence the null hypothesis is accepted.

Hence, there is a no significant relationship between Gender and Level of satisfaction towards influence level of digitalization on higher education.

Age and Level of Satisfaction towards Influence Level of Digitalization on Higher Education

The sample respondents are classified according to their Age and level of Satisfaction towards influence level of digitalization on higher education are exhibited under the table 4.

Table 4: Age and Level of Satisfaction

S.No	Age	Frequency	%	Range		Mean	SD
				Min	Max		
1	26-35	7	23.33	21	37	26.71	5.85
2	36-45	17	56.67	15	44	29.71	10.88
3	46-55	4	13.33	39	42	41.25	1.50
4	Above 55	2	6.67	15	36	25.50	14.85
	Total	30	100.0				

Source: Primary data

It is noted from table 1.4 that level of satisfaction towards influence level of digitalization on higher education are under the age group of 26-35 ranges between 21 and 37 with a mean score of 26.71 and the standard deviation is 5.85 and the respondents under the age group of 36-45 years ranges between 15 and 44 with a mean score of 29.71 and the standard deviation is 10.88 and the respondents under the age group of 46-55 years ranges between 39 and 42 with a mean score of 41.25 and the standard deviation is 1.50 and the respondents under the age group of above 55 years ranges between 15 and 36 with a mean score of 25.50 and the standard deviation is 14.85.

Hence, the maximum age group of 46-55 years respondents is satisfied at highest level.

Age and Level of Satisfaction (Two- Way Table)

With a view to study the association between the Age and level of satisfaction towards influence level of digitalization on higher education, the two- way table has been prepared and presented as under.

Table 5: Age and Level of Satisfaction (Two- Way Table)

S.No.	Age	Level of Satisfaction			Total
		High	Medium	Low	
1	26-35	1 (6.7%)	6 (60.0%)	0 (0%)	7 (23.3%)
2	36-45	9 (60.0%)	4 (40.0%)	4 (80.0%)	17 (56.7%)
3	46-55	4 (26.7%)	0 (.0%)	0 (.0%)	4 (13.3)
4	Above 55	1 (6.7%)	0 (.0%)	1 (20%)	2 (6.7)
	Total	15	10	5	30

Source: Primary data

It is learnt from table 1.5 that the percentage of high level of satisfaction of the respondent is the highest 60.0 percentage among the respondents are 36-45 years and the lowest 6.7 percentage among the respondents are 26-35 and above 55 years.

The percentage of medium level of satisfaction is the highest 60.0 percentage among the respondents are 26-35 years and the lowest 0 percentage among the respondents are 46-55 and above 55 years. The percentage of low level of satisfaction is the highest 80.0 percentage among the respondents are 36-45 years and the lowest 0 percentage among the respondents are under the category of 26-35 years and 46-55.

Hence, higher 80 percentage constitute that the category of 36-45 years age group of the respondents are satisfied at low level.

Chi-Square Test

In order to examine the relationship between Age and Level of Satisfaction of the respondents towards influence level of digitalization on higher education, a Chi-square test is used and the result of the test is given below.

- **Null Hypothesis (H₀):** "There is no significant relationship between Age and Level of satisfaction towards influence level of digitalization on higher education".
- **Alternative Hypothesis (H₁):** "There is a close significant relationship between Age and Level of satisfaction towards influence level of digitalization on higher education".

Table 6: Age and Level of Satisfaction (Chi – Square Test)

Factor	Calculated Value	Table Value	D.F	Remarks
Age	15.714	12.6	6	Significant at 5% Level

Source: Compiled from Primary data

From the above analysis, it is understood that the calculated value of chi-square (15.714) is more than the table value (12.6). Hence the null hypothesis is rejected.

Hence, there is a close significant relationship between Age and Level of satisfaction towards influence level of digitalization on higher education.

Conclusion

Indian Higher education can implement more technological changes in the system as compared to the other developed countries, our country is lacking behind in terms of technology and innovation. The higher education shall concentrate more on reducing the usage of the papers and the evaluation process shall be through the help of computers and technology rather than doing it manually. The faculties and the student can easily adapt to the modernization and shall implement them effectively in the teaching methods than the traditional methods. There is significant relationship between the gender and level of satisfaction on innovation and skills enhancement and on the advantages of digitalization. And there is also significant difference on Age and level of satisfaction with reference to Implementation and importance of digitalization on Higher education.

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NPA'S IN NON BANKING FINANCE COMPANIES "OTHER CURVE OUT IN BANKING STRUCTURE"

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ABSTRACT

When we talk about the Banking Structure, the first concept which comes in our mind is of Banks. Probably the Bank has become the second name of Banking. People do not even know that a small form of Banks also exist which is known as Non banking finance companies, with which people at large deals. Non banking Finance Companies do provide those almost all services which are provided by the banks. Except few services which are reserved for Banks only such as foreign currency services. With the emerge of digital technology, internet Banking and after demonetization, the importance and need of non banking Finance companies has increased and expanded. Their attractive finance schemes, better interest rates on deposits and door step services has put them in front in the competition with Banks. Even Reserve Bank of India has provided various benefits to Non Banking Finance Companies just to put them in front of the competition with Banks. However the Prudential norms which are set out by Reserve Bank of India for control mechanism are also set out for Non Banking Finance Companies but in a different manner. Few people are still not clear with the fact that same prudential norms are not followed for Non Banking Finance Companies, which are applicable for Banks. Hence in this article we would have a detailed discussion of this aspect of Non banking Finance Companies.

KEYWORDS: *Non Banking Finance Companies, Prudential Norms, Non Performing Assets, Provisions.*

Introduction

Lets first start with meaning of Non Banking Finance Companies. As per Reserve Bank of India (Amendment) Act, 1997, a Non Banking Finance company means a financial Institution which is a company and a non banking institution which is a company with principal business of receiving of deposits, under any scheme or arrangement or in any other manner, or lending in any manner and Such other non-banking institution or category of institutions which has been notified by the Reserve Bank of India as Non Banking Finance Company, with the previous approval of Central Government. Here one question arises which is what is a financial activity. Financial activity is treated as principal business when a company's financial assets constitute more than 50 % of the total assets and income from financial assets constitute more than 50 % of the gross income. A company which fulfils both these criteria shall qualify as an NBFC and would require to be registered as NBFC by RBI. The other aspect of meaning of Non Banking Finance Company relating to Acceptance of Deposits NBFC means only the non-banking institution which is a –"Loan company, Investment company, Hire purchase finance company, Equipment leasing company and Mutual benefit financial company".

Basic Difference in Banks and Non Banking Finance Companies are:

- Non Banking Finance Companies cannot accept demand deposits like Banks but it can accept time Deposits in form of Fixed Deposits or Recurring Deposits,
- Non Banking Finance Companies are not the part of the payment and settlement system as it do not accept demand deposits, hence Saving or Current Accounts cannot be opened and no cheque book is issued, and also cannot issue cheques drawn on itself,
- Like in banks, Insurance facility on Deposits as provided by Deposit Insurance and Credit Guarantee Corporation is not available to depositors of Non Banking Finance Companies.

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Types of NBFC's

As per Reserve Bank of India Guidelines various categories of Non Banking Finance Companies has been prescribed, which include various categories as follows:

- **Asset Finance Company (AFC):** The main activity of an Asset Finance Company is to finance any nature of physical assets which supports any production activity. These may be in the areas such as automobiles, tractors, lathe machines, generator sets, earth moving and material handling equipments and general purpose industrial machines.
- **Investment and Credit Company (ICC):** Investment and Credit Company means any company which is a financial institution carrying on as its principal business - Asset Finance, the providing of finance facility like other financial institution for any kind of activity but not for its own, and also engaged in acquisition of securities. It should also not fall in any other category of Non Banking Finance Company.
- **Investment Company (IC):** Such companies mainly deal in acquisition of shares and securities of other companies. Any Investment company which acquires only securities especially shares of its group companies, are known as Core Investment Company.
- **Loan Company (LC):** Loan companies primarily provide finance (whether by making loans or advances or otherwise for any activity), other than its own activity.
- **Infrastructure Finance Companies:** This category of NBFCs deploys a minimum of 3/4th of their total assets in infrastructure loans. In such companies the net owned funds are more than 300 crores and they should have a minimum credit rating of 'A' or equivalent and the Capital to Risk-Weighted Assets Ratio is 15% along minimum 10% of Tier I Capital.
- **Systemically Important Core Investment Company:** Core Investment Companies (CIC) having total assets of not less than Rs. 100 crores either individually or in aggregate along with other CICs in the group and which raises or holds public funds are called as Systemically Important Core Investment Companies (CICs-ND-SI).
- **Core Investment Company (CIC):** These are NBFCs which carry on the business of acquisition of shares and securities in group companies and satisfies 4 conditions stated in the regulatory framework for Core Investment Companies issued by RBI, which are as follows:
 - Which has at least 90% of its total investment Asset in equity shares or preference shares or debt instruments or loans in group companies, and
 - It has invested at least 60% of its total Investment Assets in Equity shares of group companies, including compulsory convertible instruments which are convertible in next 10 years from issue date,
 - It has no plan to sale securities in Group Company for the purpose of dilution or disinvestment except through block sale only.
 - It does not have any other financial activity referred in section 451 and 45F of reserve bank of India act.
- **Infrastructure Debt Fund (IDF-NBFC):** IDF-NBFC means a non-deposit taking Non Banking Financial Company that has Net owned funds of Rs. 300 crore or more, and Which invests only in Public Private Partnerships (PPP) and post commencement operations date (COD) infrastructure projects which have completed at least one year of satisfactory operation commercially and has been a party to a Tripartite Agreement.
- **Infrastructure Debt Fund- Non- Banking Financial Company (IDF-NBFC):** Infrastructure Debt Funds (IDFs) are funds set up to facilitate the flow of long-term debt into infrastructure projects. The Infrastructure Debt Fund is either in form of a trust or as a company. An Infrastructure Debt Fund which is a Trust will be a Mutual Fund while an Infrastructure Debt Fund which is a company is a Non Banking Finance Company.
- **NBFC - Micro Finance Institution (NBFC-MFI):** NBFC-MFI is a non-deposit taking NBFC
 - Which has at least 85% of its assets in the form of microfinance.
 - Such microfinance should be in the form of loan given to those who have annual income of Rs.1,00,000 in rural areas and Rs. 160,000 in urban or semi urban areas.

- Such loans should not exceed Rs.1,00,000 and its tenure should not be less than 24 months.
- Further, the loan has to be given without collateral.
- Loan repayment is done on weekly, fortnightly or monthly installments at the choice of the borrower.
- **Housing Finance Companies:** National Housing Board set up by the Government of India is the Apex authority regulating the housing finance companies. The Housing Finance Companies (NHB) Directions, 2010 deals with matters to be observed by the housing finance companies and matters to be Included in the auditor's report by the auditors of such housing finance companies.
- **Non-Banking Financial Company – Factors (NBFC-Factors):** Factoring business refers to the acquisition of receivables by way of assignment of such receivables or financing, there against either by way of finance or by security interest creation over such receivables but totally different from lending normally made by a bank against security receivables. Non-Banking Financial Company Factors do not accept deposits, and its principle business is of factoring. One most important requirement of being a factor Non Banking Finance company is that it should have at least fifty percent of its total finance assets from factoring business as well as at least fifty percent of total income from factoring business.
- **NBFC- Non-Operative Financial Holding Company (NOFHC):** NOFHC is financial institution through which promoter / promoter groups will be permitted to set up a new bank. It is a Non Operative Financial Holding Company which is wholly owned, which is doing functions of Banks as well as all other financial services regulated by Reserve Bank of India, to the extent permitted by regulatory rules.
- **Mortgage Guarantee Company:** A company registered with the RBI under the scheme for registration of Mortgage Guarantee Companies notified by the Bank in this regard, will be treated as Non-Banking Financial Company under the provisions of the Act.”

Registration and Regulation of NBFC

Under Section 45–IA of the Reserve Bank of India (Amendment) Act, 1997, any non-banking financial company cannot commence or carry on the business of a non-banking financial institution without Obtaining a certificate of registration issued by the Reserve Bank of India and Having a net owned fund (NOF) of Rs. 2 crore but which can never exceed 100 crores. (Upper limit in relation to net owned fund requirement for commencing NBFC business has been increased from Rs. 2 crores to Rs. 100 crores as per Finance (No.2) Bill 2019).

However, certain categories of NBFCs which are regulated by other regulators are exempted from the requirement of registration with RBI viz. Venture Capital Fund/Merchant Banking companies/Stock broking companies registered with SEBI, Insurance Company holding a valid Certificate of Registration issued by IRDA, Nidhi companies as notified under Section 406 of the Companies Act, 2013, Chit companies or Housing Finance Companies.

Types of Advances and Rules of NPA in Non Banking Finance Companies

A Banking company has following types of Advances

Standard Assets	This does not disclose any problems and does not carry more than normal risk.
Sub-standard Asset	<ul style="list-style-type: none"> • Classified as NPA for a period not exceeding 18 months (in case of NBFCs covered in Non-Banking Financial Company – Non-Systemically Important Non-Deposit taking Company (Reserve Bank) Directions, 2016). • The period 'not exceeding 18 months' shall be 'not exceeding 12 months' for the financial year ended March 31, 2018 and thereafter for NBFCs covered in Non-Banking Financial Company - Systemically Important NDC and DC (Reserve Bank) Directions, 2016. • An Asset where the terms of the agreement regarding interest and / or principal have been renegotiated or rescheduled or restructured and 1 year has not elapsed from the date of such renegotiated or rescheduled or restructured terms.

Doubtful assets	Which remains a sub-standard asset for a period 'exceeding 18 months' (in case of NBFCs covered in Non-Banking Financial Company – Non-Systemically Important Non-Deposit taking Company (Reserve Bank) Directions, 2016). The period 'exceeding 18 months' stipulated in this sub-clause shall be 'exceeding 12 months' for the financial year ended March 31, 2018 and thereafter for NBFCs covered in Non-Banking Financial Company - SINDC and DC (Reserve Bank) Directions, 2016.
Loss assets	Where loss has been identified by bank or by the internal or external auditors or by the RBI Inspection, but the amount has not been written off, wholly or partly Or An Advance which has a threat of potential non recovery due to any reason that could be erosion in value of Security or security not available or due to any fraud on the part of borrower.

After discussing the types of Advances, the second matter which comes into path of discussion is, whether the rules of Non Performing Assets for Non Banking Finance Companies is same as in case of Banks. The answer is no. the rules in case of Non Banking Performing Asset is different from that of Banks. The rules are as follows

Type of Loan	Overdue period required to convert the Debt into NPA	
	NBFC Non-Systemically Important Non-Deposit taking Company	NBFC Systemically Important Non-Deposit taking Company
Term Loan	Interest and/or principal remain overdue for a period of more than 6 months or more.	Above Period of '6 months or more' as stipulated above shall be '3 months or more', for the financial year ended March 31, 2018 and thereafter
Demand or call Loan	Which remained overdue for a period \geq 6 months or more from the date of demand or call or On which interest amount remained overdue for a period of at least six months.	
Bills purchased and discounted	Bill remains overdue for a period of more than 6 months or more.	
Short Term Loans & Advances	If facility remained overdue for a period of 6 months or more.	
Any dues on account of sale of assets or services rendered or reimbursement of expenses incurred	Remained overdue for a period of 6 months or more.	
lease rental and hire purchase	Installment becomes overdue for a period of 12 months or more.	Above Period of '12 months or more' as stipulated above shall be '3 months or more', for the financial year ended March 31, 2018 and thereafter
Any other Asset	Any amount to be received remains overdue for a period of more than 6 months.	Above Period of '6 months or more' as stipulated above shall be '3 months or more', for the financial year ended March 31, 2018 and thereafter
Other	In respect of loans, advances and other credit facilities (including bills purchased and discounted), the balance outstanding under the credit facilities made available to the same borrower/beneficiary when any of the above credit facilities becomes NPA.	

Provisioning for Loans and Advances

The provisioning requirements as given below shall apply to every applicable Non Banking Finance Companies (except Non Banking Finance Companies -MFIs)

- **Loss Assets:** Should be written off or 100% provision should be made for the amount outstanding.
- **Doubtful Assets:**
 - Hundred percent provision shall be made on unsecured portion. The Realizable value of the security available should be determined on realistic basis.
 - In regard to the secured portion, no provision needs to be made towards the guaranteed portion by DICGC (Deposit Insurance And Credit Guarantee Corporation) or ECGC (Export Credit Guarantee Corporation). over & above guaranteed portion should be provided for as per the period for which asset has remained doubtful:

Period for which Advance has been considered as doubtful	% of Provision
Up to 1 years	20
More than 1 year and up to 3 years	30
More than 3 years	50

- **Sub-standard Assets:** A provision on total Outstanding shall be made @ 10%.
- **Standard Assets:** A provision on total Outstanding shall be made @ 0.40% by NBFC-Systemically Important Non-Deposit taking Company and Deposit taking Company.

A provision on total Outstanding shall be made @ 0.25% by NBFC-Non Systemically Important Non-Deposit taking Company and Deposit taking Company.

Conclusion

This is all clear that like Banks Non Banking Finance Companies are too a very important part of the Banking Structure of India. Both plays a vital role in the economy of the country. The lacking point of the Banks is they cannot serve to that population of India where Banking structure is difficult to establish due to high operation cost and low revenue. In this filed the Non Banking Finance Companies has significantly put its attendance and helped the economy to develop these area with similar pace of Banking in all the areas. Those people don't have enough money and education, for being a part of the Banking system also been benefitted through Non Banking Financial System. However on the part of Reserve Bank of India, it justified with the policy framework of controlling the Banking Structure by Making Prudential norms for both, Banks as well as for Non Banking Finance Companies, at the same time giving a little relaxation to Non Banking Finance Companies in the mode of leniency in the rules, so it is not making stringent and harsh for public at large who just associated with Non Banking Finance Companies due to the strict, stringent and harsh policies of Banks.

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CASHLESS ECONOMY IN INDIA- PRESENT SCENARIO, PROSPECT POTENTIAL AND CHALLENGES

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Dipti Pareek**

ABSTRACT

In India almost 98% of the economic transaction was cash based. This is too high percentage. Cashless India has been adopted by the Indian Govt. to face a huge change in the country's economy. Digital India has transformed the country's cash economy into cashless. The key objective of the study is to present the current status of the India in usage of digital currency, prospect, potential, and challenges which are associated with the cashless transaction in India. The data is gathered by using secondary data. Secondary data has been collected through article and books. There have been many benefits from adopting cashless economy. Use of credit cards has reduced the amount of cash that people have to carry. Which reduce risk and associated cost?

KEYWORDS: *Cashless Economy, Indian Economy, Digital Payments.*

Introduction

On 8th November 2016, the Hon. P.M of INDIA, Shree Narendra Modi a surprise move declared the implementation of demonetization of 500 & 1000 Rs. This move executed with the aim to curb the circulation of black money in the country and push India towards cashless future. Cashless economy is when the run of cash within an economy is known existent & all the transactions have to be by electronic network such as direct debit, electronic clearing, credit cards, and debit cards. Payments system such as NEFT (National Electronic Funds Transfer), Real Time Gross Settlements (RTGS), Immediate Payment Service (IMPS) in India. With this there was little scope for flow of cash in economy.

The RBI has also recently shown a manuscript "payments and settlement system in India vision 2018" - setting out a plan to inspire electronic payments and effective India to shift around a cashless community in the medium and long term. The Indian economy keeps up to be operating by the use of cashless then 5% of all payments occur electronically. Electronic based Transaction explore to inspire the expansion and renovation of India payment system. India has 12.42% of the GDP in cash which is the highest in the world. India had 76.47 billion currency note in circulation in 2012-2019 compared with 34.5 billion in the USA. (According to the Ministry of Electronics and IT the infrastructure of electronics payment in India is expected to be three fold by the end of 2017 with approximately 5 million electronic points of sale machines). To encourage cashless economy it is important to introduce the habit of making e-payments. Government encourage cashless transaction like mobile banking, Ru-Pay cards, UPI, USSD. Govt. encourage means of digital payments.

Present Scenario

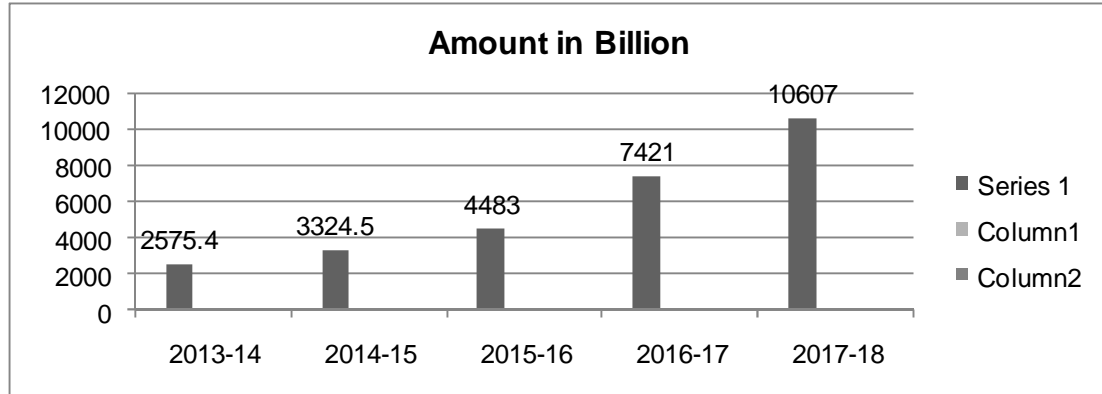
This study is an attempt made to evaluate the status of (cashless economy) programme which launched in 2015 in Indian scenario. The study based on secondary data. Secondary data collected from the different annual reports of reserve bank of India from 2013 to 2018. The study has conducted. Different electronic settlement like: Unified Payment Interface (UPI), Total Immediate Payment Service (IMPS), Total Debit Cards Payment.

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• **Total Card Transaction**

Series 1 disclose the aggregate uses of electronic cards for monetary affairs. The total cards payments were 2,575.40 billion only in 2013-14. The total financial Transaction through cards were rupees 10,607 billion in 2018.



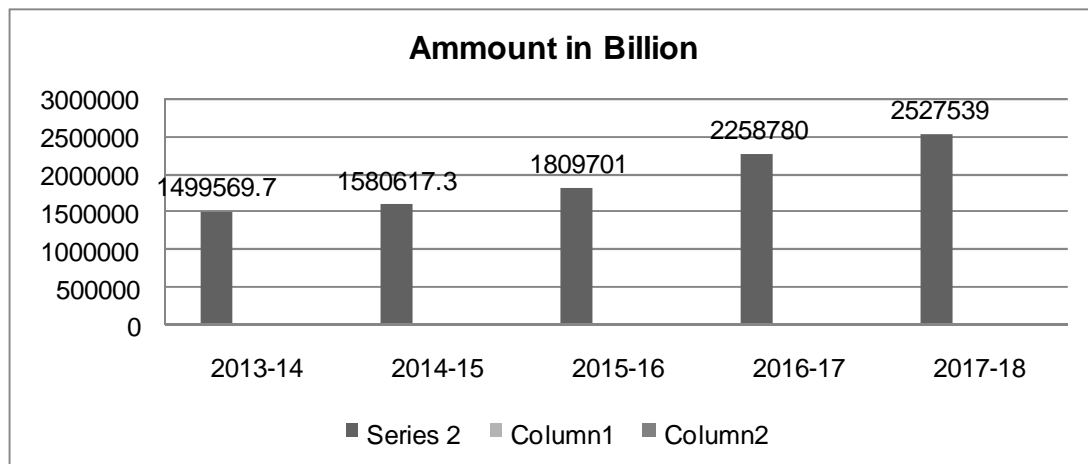
• **Unified Payment Interface**

A unified payment interface (UPI) is a smart phone application which allows users to transfer money between bank accounts. It eliminates the requirement to enter bank details or other sensitive details each time a customer initiates a transaction. It is a single-window mobile payment system developed by the National Payment Corporation of India (NPCI). The utility was made available to the public since 2016-17 and 69 Billion rupees were transacted in the starting year. UPI facilities crossed 1098 Billion rupees of operation.

Year	Amount in Billion
2013-14	**
2014-15	**
2015-16	**
2016-17	69
2017-18	1098

• **Total Electronic Settlement**

Series 2 discloses the total electronic settlement of India. Recently in 2017-18, the total turnover crossed 25 Billion rupees. It was only 1499569.70 Billion in 2013-14. It has proved that after 2015, the cashless economy has undergone a rapid change in electronic payment.



The study concluded after the analysis of various e- payment settlements that the "cashless economy" concept in Indian scenario has been success. Different productive result of those e-payments effectiveness show the acceptance the concept of cashless economy in India.

Prospect of the Cashless Economy

Government's demonetization drive has been successful. Cashless economy also benefitting from the success of this campaign. The economy is getting a new direction from the cashless economy.

- The JAM infrastructure can encourage digital Transaction culture. The JAM infrastructure is spreading to reach each remote corner of the country as well as to every citizen. Almost 24 - 26 Jan Dhan Yojna Accounts, 124-130 Aadhar cards and nearly 92-95 crore mobile phones. Alike, 33 million Indians are using internet in India. this means cashless Transaction promote by the JAM infrastructure.
- A huge number of Govt. transfers are made through JAM mode. This will help public to get digital Transaction awareness.
- The growth in volume and value of Transaction using prepaid payment instrument (PPI) issued by banks and authorized non-bank entities has also been significant.
- NPCI promoted Aadhar enabled payment system, IMPS etc and they have registered big turnover in Transactions. Newly launched UPI is expected to give a big boost to cashless transaction.
- Number of credit and debit cards is increased to 25.4 million and 691.1 million, respectively. The demonetization drive may encourage people to learn and settle Transaction using online.
- RTGS and NEFT volumes increased almost three fold between 2013 and 2016 reflecting greater adoption of the system by all segments users.
- As more people start using Rupay debit card and Aadhar for digital payments. It will facilitate a less cash economy.
- With increasing mobile banking service, growth in e- commerce and use of mobile payment application, the use of cash will decrease.
- The RBI has made several effort to promote digital settlements. Most important of them are launch of a regulatory set up for prepaid instruments (PPI). Similarly encouragement to mobile banking and internet banking will help to reduce the use of physical cash.

Potential

Cashless economy has been boosted by citizens having smart phones. According TRAI, 80% of population out of 100% has their mobile phones on September 30 2016. The reduction in the prices of smart phones by the telecom eco system has pushed the country's economy towards the cashless due to decrease in call and data rates. The Govt. of India wants to push the country towards a cashless economy and for this the Govt. of country is making every efforts. With vital initiatives such as demonetization, direct benefit transfer, BHIM and much more. The main objective of the Govt. behind the transformation of the country into a cashless economy is to curb corruption and to streamline and equip the economy of the country.

The government approved for a proposal, under which there would be no charge for BHIM, UPI and debit card Transaction up to rupees 2000.

One million: numbers of newly saved credit and debit cards within two days of demonetization announcement. 30% increase in app usage and 50 % increase in download of wallets backed by leading banks.

The smart phone revolution has led to the emergence of e-commerce, m-commerce and other service, including app based cab aggregators, who encourage digital payments for use of various service. The value added services such as cash back, bill payment facilities, loyalty points, rewards and ease of use have resulted in surge of such digital platforms. These developments has given rise to a modern payment model.

Challenges

- **Currency Dominated Economy:** High level of cash circulation in India. Cash in circulation amount to around 13% of India's GDP.

- **Transactions are Mainly in Cash:** Nearly 95% of transaction takes place in cash. Large size of unorganized sector entities and workers prefer cash based transaction. They don't have required digital literacy.
- **ATM use is Mainly for Cash Withdrawals and Not for Settling online Transaction:** There is large number of ATM cards including around 21 crore Rupay cards. But nearly 92% of ATM cards are used for cash withdrawals. Only low level of digital payments using ATM cards. Multiple holding of cards in urban and semi-urban area's show no rural penetration.
- **Limited Availability of Point of Sale Terminals and Poor Transaction Culture in POS:** According to RBI, there are 1.44 million POS terminals in-stalled by various banks across locations at the end of July 2016. But most of them remain in urban areas.
- **Mobile Internet Penetration Remains Weak in Rural India:** In rural India mobile internet access remain weak for this internet connection is needed for digital Transaction in rural India. But in India internet connectivity so poor in rural areas. In rural areas of India literacy level is poor that's why plastic money uses on wider scale is more common as compare todigital Transaction.

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MUTUAL FUND “REAL GROWTH OR JUST A MYTH”

Dr. Kiran Kumari*

ABSTRACT

The people attracts towards the stock Market by seeing the glossy and attractive returns earned in short span of time, sometimes just in a day. However when they actually invest their fund, they come out with some loss or sometimes they lost their entire money. What is the reason? Why it happened when the entire stock market is earning the growth why the retail incurred loss. The answer is very simple. We invested simply looking into the earnings only and without considering the amount of investment made by big investors, the risk profile they managed and history of their investment. The fact which most of the reteam investors do not know is the key of success in the stock market is Bulk and Huge Investment. The portfolio management is the soul of Stock Market growth, which is possible only if the huge investments are made. Since for retail investors it is not possible hence the Mutual Fund is the best option for the same. In this study it has been tested that how Mutual Fund maximize the wealth of a retail Investor and how does it has increased the share in the stock market in the last four decades of the era. Along with it, it has also been discussed how mutual fund differs from each other in terms of Growth. For the purpose of study seven mutual funds has been selected out of around forty five Mutual Funds working in India presently. These seven Mutual Funds consist of around Seventy Percent of total Assets under Management of all Mutual Funds in India. Stratified Random Sampling Techniques has been used to analyse the data. On the basis of the study conducted, researcher has reached a conclusion that return alone is not the criteria for the evaluating the performance of a Mutual Fund, rather Risk Associated shall also be considered.

KEYWORDS: *Mutual Funds, Growth, Performance, Assets under Management, Risk Analysis.*

Introduction

Mutual fund is the best as well as safest way to invest in stock Market by the retail Investor as it gives a benefit and advantages as secured by large investments, in the stock Market. Mutual fund is a collective Investment of retail investors who in trust give their money to the Trust called Mutual Fund, which invest the same in the stock market as common goal of all investors and all appreciations i.e. Gain whether it is dividend or capital appreciation, as well as all losses, are shared among the all investors. Mutual Fund issues units to investors as token of their invested money in the mutual fund. As we said it gives benefit of large investment to retail investors such as diversification, Portfolio Management, expert analysis, well educated and experienced research team, professionally managed stock, lower risk, Low cost of transaction as bulk investment is made in stock market, easy liquidity as user can get their units redeemed at any time, Flexibility, various options of investment such debt scheme or equity scheme or others, transparency as details of all investments are shared with investors by mutual fund, and last but not the least, safety to some extent. However it also suffers some disadvantages such as cost cannot be controlled by investors, and he cannot have customized scheme according to his choice. However in spite of disadvantages, the benefit which accrue, makes it perfect for the retail investor specially when it is a new to the market and the amount which he wants to invest is quite low.

Review of Literature

Mane, P. (2016) The researcher has conducted a study to know the perception and knowledge of investors towards mutual fund. It also set out an objective to know how investors give preference to various options of the investments. On going through with chi square test of data selected on 30 investors, researcher reached at conclusion that still investor prefer the historical investment options which are less risky, such as fixed deposits, especially investors above the age of 55. They are also not ready to new age investments. However study has not included investors below the age of thirty.

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Shukla S. (2015) In his study of comparative analysis of selected Mutual Funds he set the objective to know that whether Mutual Funds are giving returns to investors up to their expectation, and to know whether mutual fund provide secured return to same level as of market return. With using of standard Deviation and alpha, beta techniques of statistics, researcher has found that almost all mutual funds are having correlation with that of Nifty.

Ramanujan V. and Bhuvaneshwari, A. (2015) the researcher has conducted a study to find out the growth and performance of Indian Mutual fund during the last decade. The prime objective of the study was to find out the growth level of Asset under the management of Asset Management companies, and to examine sale and redemption of units under different sectors of mutual funds. However no statistical techniques has been used by the researcher and based on their descriptive study they concluded that Assets under management of Asset Management Company has shown growth, almost in all sectors.

Bhutada, M. (2015) the researcher has conducted a comparative study between two leading mutual funds with the object to find out the factors that effects the growth or performance of Mutual funds and to find out the best scheme for investors with the reason of difference in their performance. By using secondary data with help of statistical techniques such as convenience sampling, Standard Deviation, Sharp Ratio and beta, he concluded that election results, crisis inflation, Budget and other big events effects majorly the performance of Mutual Funds along with the level of risk assumed by each Mutual Fund.

Objective of Study

The Study has been undertaken with numerous objectives such as:

- To find out the trend of Growth and volume of mutual funds in india,
- To find out how mutual Funds performs in terms of returns and risk,
- To find out how Mutual fund perform differently in different schemes,
- To find out the Reason of having Investment in Mutual Funds,
- To find out Growth Expectations in Mutual Fund Earnings,
- To recommend the various methods and strategies for taking decision for investment in Mutual Funds.

Rational of Study

Now a days a number of Mutual Find Schemes are available in the market. Being as a simple and non professional investor, it become quite difficult or sometimes impossible to take a rational decision about selection of the right Mutual Fund scheme. He cannot evaluate the performance as well as it is also difficult to know whether they are working within the regulatory Mechanism or not. Hence it is essential that a study is available which is enlighten the factors to be considered before selection of Mutual Fund and giving an idea how performance of different mutual fund can be evaluated.

Hypothesis for Study

Ho₁: There is no significant difference in the Growth level of selected mutual fund schemes in India.

Ho₂: There is no significant difference in the performance of different mutual funds schemes on the basis of return and Risk.

Research Methodology

Research Methodology is a logical way to find out the solution of pre set problem which is set out for the purpose of finding answer of certain questions using some systematic techniques and selecting a sample.

- **Nature of Study**

The Study undertaken is basically Exploratory in nature. (Explanatory study means a study which is undertaken to explore an area where no much research has been undertaken till date or to investigate the possibilities of undertaking further research).

- **Sampling Technique**

Among the number of Sampling Techniques available, for the above study Stratified random sampling is found as the most connivance Technique. In this Sampling Technique the whole population is divided into small subgroups or strata and sample is selected from each of them.

- **Sampling Design**

To achieve the object of the study, sample has been taken after taking into consideration, the number of mutual funds, Assets under management, and various Mutual Fund schemes operating in India. Out of around 45 mutual funds operating in India, seven Mutual Funds has been selected which are having around seventy percent of total Assets under Management of all Mutual Funds in India. These schemes will be divided under 4 broad categories – Equity funds, Debt Funds, Hybrid funds and Liquid funds. The researcher has not undertaken the schemes launched after 31'Mar'2015 will not be considered.

Data Collection

For the purpose of the study the data has been collected from both Primary Sources and Secondary Sources. The Secondary sources include capital Market Data, Annual Reports of Various Mutual Funds, Reserve Bank of India Bulletin, Economic and Political Weekly publishes, and some other data available on internet. The data relating to growth of mutual fund industry and regulatory framework of mutual fund will be collected from www.sebi.gov.in. Various websites such as www.amfiindia.com, www.mutualfundindia.com also has been used for the purpose of this study.

Results and Analysis

The data collected from primary and secondary sources have been evaluated using methods of Average Rate of return, Standard Deviation, Sharpe Ratio and Treynor Ratio and Jensen's Ratio method. As we said earlier as well as we saw in literature review that many researcher is of view that return cannot be considered as the only basis performance of any Mutual Fund. Risk Associated which is risk of fluctuation in return is also a considerable part. Both have positive relationship between each other.

The risk is analysed using Standard deviation which allows us to evaluate the volatility of the fund. It measures the risk by measuring the degree with which the fund fluctuates. Beta is also used to measure the volatility of return of fund. Coefficient of determination (R_2) is a number which indicates the proportion of variance of dependent variables which are predicted from independent variables. Same as returns are analysed using average rate of return method.

Performance is analysed using:

- **Treynor's index** which is reflected by $(R_p - R_f) \div \rho$. Where higher value indicates better performance of portfolio and same as lower value indicates lower performance.
- **Sharpe's Index** which is reflected by $(R_p - R_f) \div \sigma$. Where higher value indicates better performance of portfolio and same as lower value indicates lower performance.
- **Jensen's Index** which is reflected by $P = r_P - [r_f + \rho (r_M - r_f)]$. If the value found to be positive, it indicates that portfolio is earning excess returns.

Table 1

S. No	Scheme Average Return	Monthly	Total Risk (S.D)	Beta	R2
1.	Invesco India PSU Equity Fund(D)- Direct Plan	52.5345	5.58766	1.09333	0.052331
2.	Birla SL India GenNext Fund(D)- Direct Plan	24.84045	4.68522	0.97597	0.529332
3.	Franklin India Flexi Cap Fund(D)- Direct Plan	15.26347	5.02336	0.974883	0.507557
4.	LIC MF Growth Fund(D)-Direct Plan	24.05023	4.06587	0.925575	0.765520
5.	ICICI Pru Dynamic Plan(D)-Direct Plan	32.04256	3.94656	0.68256	0.526565
6.	Reliance Equity Opportunities Fund(D) Direct Plan	22.02665	4.52652	0.895656	0.542645
7.	L&T India Value Fund(D)-Direct Plan	60.75656	4.71895	1.036562	0.664554

On analysis of above table it is found that out of all equity schemes, two out of seven funds have earned higher returns (based on average returns and average annual returns) in comparison to their benchmark portfolio returns. These are L&T India Value Fund (D)-Direct Plan, Invesco India. The remaining five funds have shown lesser returns than the market returns and hence not up to market return level. If we go on the basis of sharpe ratio and Treynor's ratio, the analysis is litte different.

Table 2

S. No.	Scheme Average Return	Sharpe Ratio	Treynor Ratio
1.	Invesco India PSU Equity Fund(D)- Direct Plan	7.4022	41.90365
2.	Birla SL India GenNext Fund(D)- Direct Plan	3.5856	20.06656
3.	Franklin India Flexi Cap Fund(D)- Direct Plan	1.1726	08.23666
4.	LIC MF Growth Fund(D)-Direct Plan	5.0236	21.06678
5.	ICICI Pru Dynamic Plan(D)-Direct Plan	7.7151	42.06656
6.	Reliance Equity Opportunities Fund(D)-Direct Plan	3.0323	16.03325
7.	L&T India Value Fund(D)-Direct Plan	09.6226	51.22592

Only L&T India Value Fund (D)-Direct Plan has greater value than the Sharpe ratio benchmark, which indicates its superior performance. In most of the mutual funds the performance based on the sharpe ratio is not satisfactory and performed below the market index. Two out of seven mutual Funds are higher than the benchmark comparison which means the those funds have performed well compare to the market and indicates the superior risk- adjusted performance. But the total portfolio has not performed well.

Conclusion and Recommendations Conclusion

On the basis of above mentioned discussion, the ultimate result which comes is that around thirty five percent of the mutual funds has performed well and has shown outstanding performance compare to the bench mark. However other mutual funds have shown very average performance or even some of them are not even equal to Bench mark. The portfolio composition has been found as the major reason for not performing well. The wrong selection of securities by Mutual Fund for their portfolio is the biggest reason of failure.

Recommendation

As we said, numbers of Mutual Funds are available in India for the investment purpose. An investor has to take a rational decision for investing in Mutual Fund. Before investing, investor shall look into the Composition of Portfolio of the mutual Fund, their weekly performance in terms of the return for the last 6 weeks and their dividend payout ratio. However this will not be the end of efforts on the part of investor, they need to consistently keep a watch on the performance of their mutual fund to ensure their consistent return.

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ANTECEDENTS OF B2B E-MARKETPLACE ADOPTION INTENTION: AN EMPIRICAL STUDY OF MICRO ENTERPRISES

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ABSTRACT

The micro, small and medium enterprises are dynamic and vibrant, the government of India envision a progressive MSME sector in India. The emergence of web-based marketplace popularly called 'e-marketplace' has the potential to offer enormous opportunities to these enterprises by providing a wider market reach and customer base where they can transact globally. The B2B e-marketplace provides a big platform to micro enterprises where they assume the role of sellers and buyers at times to meet each other business needs and experience growth and development. The paper examines the key determinants grounded in TOE framework which impact the e-marketplace adoption intention in manufacturing micro enterprises. Data was collected from 189 manufacturing units located in Delhi NCR. Structural Equation modelling was used to analyse the data. The findings identified relative advantage, compatibility, owner IT knowledge and trading partner pressure as the major determinants influencing e-marketplace adoption intention of micro enterprises. The research has implications both for government and the e-marketplace vendors that what factors can accelerate e-marketplace adoption in micro enterprises.

KEYWORDS: e-Marketplace, B2B, Adoption Intention, MSME, TOE Framework.

Introduction

The emergence of internet has not only changed the way people communicate and transact in their day to day life but it has also changed how business transactions take place. Electronic marketplace or popularly known as e-marketplaces are internet enabled new business channels which supports buying and selling or the exchange activities by allowing interaction between number of buyers and sellers. As pointed out by Yu (2006) e-marketplace have the capacity to revolutionize the supply chain processes. Stockdale & Standing (2004) defined e-marketplace as, "an inter-organisational information system that allows multiple buyers and sellers, and other stakeholders, to communicate and transact through a dynamic central market space, supported by additional services". The other definition highlighting the important characteristics of e-marketplace found in the literature is "e-marketplaces are web-based system which enable automated transactions, trading or collaboration between business partners" (Daniel, Hoxmeier, White, & Smart, 2004).

B2B e-marketplace is a web enabled platform where number of buyers and sellers engage in digital commerce or popularly called e-commerce. It provides a platform to manufacturers and distributors to connect with other business enterprises who can be their potential buyers. While B2C e-marketplaces are specially designed for individual consumers who order goods and services for fulfilment of their own needs, B2B marketplaces supports business enterprises by providing a medium for bulk ordering, auctions, custom pricing and negotiation from anywhere around the globe. It is well recognised by the government of India that MSMEs are the catalyst of socio-economic development. As the internet is revolutionising the world digital connections are becoming wider and faster, people are navigating more around the web and as the customers are moving rapidly toward digitalisation the need for digitalisation of business enterprise arises. With the availability of resources large enterprises can easily transform themselves but the MSMEs due to their limited resources find it difficult to adopt the digital e-commerce technologies. In such a situation E-marketplace is an effective solution which provides an effective support system to these enterprises by providing a in-built digital platform to engage in e-commerce.

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Micro Enterprises and e-Marketplace

The micro, small and medium enterprises are important segment of the Indian economy. They provide employment to 111 million of people and contributes towards more than 40% in exports and over 28% of the GDP (Report of the Expert Committee on Micro, Small and Medium Enterprises, 2019). According to NSS 73rd Round survey (2015-16) there are 633.88 lakhs registered MSMEs in India, under which 630.52 lakh units (99 %) are micro enterprises, 3.31 lakh units (0.52%) belongs to small enterprises and 0.05 lakh units (0.01%) falls under medium enterprises; with 196.65 units working under manufacturing sector (MSME Annual Report, 2019). The government of India defines MSME sector on the basis of investment in plant and machinery and by the amendment with effective from 1st July, 2020 they are being classified on the basis of their annual turnover and the same criteria will be applied to manufacturing as well as to the service sector.

Enterprise Category	Manufacturing Enterprises and Service Enterprises
Micro	Investment in plant and machinery not more than Rs.1 crore and Annual Turnover not more than Rs.5 crore.
Small	Investment in plant and machinery not more than Rs.10 crore and Annual Turnover not more than Rs.50 crore.
Medium	Investment in plant and machinery not more than Rs.50 crore and Annual Turnover not more than Rs.250 crore.

(Ministry of Micro, Small and Medium Enterprises Notification, 2020).

The emergence of information and communication technology undoubtedly has revolutionised the business environment. It has open new channels for wider reach, access to global market and has given opportunities for expansion and growth. In the Information Economy Report (2011) by United Nation Conference on Trade and Development it was emphasized that the use of ICT can significantly contribute to the growth and development of micro, small and medium enterprises.

There are number of technological innovations which contributes towards the development of MSMEs. The emergence of E-marketplace is one of such ICT innovations. Some of the popular e-marketplaces in India are: India mart, Trade India, All India Bazar, Dial for Trade and many others. Under the initiative of government of India, the National Small Industries Corporation (NSIC) has launched a B2B portal for Indian MSME named, 'msmemart' (www.msmemart.com). The Government has also launched a public procurement portal Government E-marketplace (GeM) to promote MSMEs. On the MSME day observed in 2019, the government announced that it is considering to set up an e-commerce platform for MSMEs. Marketplaces such as India Mart becomes the first B2B marketplace in India to register ten crore users. Thus, the study becomes important to understand the perception of micro enterprises towards e-marketplaces and how it has been adopted by them.

Literature Review

Subawa & Mimaki (2020) using the task technology fit and technology-organization-environment framework examine the determinants which affect the behavioural intention to adopt e-marketplace among 100 Indonesian MSMEs. Organizational and environmental factors were found to have a significant positive impact on Intention to adopt e-marketplace. In a thorough review of literature Stockdale & Standing (2004) identified benefits and barriers of e-marketplace. Access to wider range of markets, greater potential for partnerships, flexibility in administration and communication, 24/7 accessibility, improved customer services, lower transaction costs, customisation, ability to enter supply chain of larger companies are the advantages offered by e-marketplace. On the other hand, lack of support from market makers, lack of standards for operation, the lack of understanding by small enterprises, resistance by small enterprises for supply chain integration, financial constraints are some of the factors which impede the development and growth prospects of e-marketplace.

Daniel et al. (2004) Investigating why some e-marketplace fails and some get success, developed a framework for the sustainability of e-marketplaces. They identified seven factors categorised into three levels of influence: macroeconomic/ regulatory level, the industry level and the firm level.

Ho, Fu, & Chien (2005) in their study on Taiwanese firm, presented a three-level hierarchical structure which explains all the factors who influence the adoption of e-marketplace model. Starting from the basic level these factors include basic infrastructure factors such as telecommunication and information structure, security, laws and regulations. The second level called as technology and capital include technology and their cost related factors, the organizational and collaboration factors constitute the third level and market and customer related factors were put on the top.

Upadhyaya, Thayyil, & Karantha (2013) identifies the barriers impeding the adoption of B2B e-marketplace in Indian manufacturing MSMEs. The incompetency of service providers to understand the needs of the enterprises, enterprises dependency on traditional intermediaries in trading and resistance from business partners were reported as some of the major barriers. They suggested that in order to increase the participation of MSMEs the service providers need to cater the wide needs of the sector.

Purwandari, Otmen, & Kumaralalita (2019) through a survey method identified the factors which influence the e-marketplace adoption in MSMEs. Based on the Technology-Organization-environment framework the study reports Competitive pressure, financial resources, perceived risk and Top management support as the important determinants of e-marketplace adoption.

Duan(2020) examined the current rate of e-market adoption by Australian SMEs. It was found that the SMEs rely more on their self-developed e-market rather than participating in public marketplaces. The rate of adoption was found to be low. He suggested that SMEs should participate in private e-market to reduce their operational cost, the government need to promote e-market adoption in SMEs.

The literature highlighted various aspects of e-marketplace in terms of their characteristics, benefits, barriers and determinants. But most of these researches target large and medium enterprises and in the context of developed countries. Yu (2006) argued that the studies conducted in developed countries may not be of much use for application in Asian countries. As pointed out by Upadhyaya et al. (2013) the study on e-marketplaces in reference to small firms has been very limited in India, majority of the studies have focused on large organisations. As micro enterprise constitutes around 99 percent of MSME sector and their nature is very different from the other medium and large enterprises, it is important to understand their e-marketplace adoption behaviour. As suggested by Duan(2020) participation in e-markets can help enterprises facing financial and other developmental issues to expand their market and build a strong enterprise. This strong foundation will surely contribute towards the development of the overall MSME sector and also towards the Indian economy.

ICT Innovation Adoption Theories

The literature highlights that there are number of theories developed over the years, which explains how an innovation is adopted both at individual and organizational level. As this study aims to examine the determinants of a technology adoption named e-marketplace by micro enterprises, we focus on theories which include the dimensions of business environment to explain the determinants of adoption at all levels of a firm interaction. The two popular theories are: Diffusion of Innovation Theory and Technology-Organization-Environment framework. The DOI theory developed by Roger (2003) highlights five innovation characteristic namely, Relative advantage, Compatibility, Complexity, Observability, and Trialability which influence the adoption of an innovation technology. On the other hand, TOE framework categories the factors in technological, organizational and environmental context, where technological context relates to the available technologies to the firm which affect its further usage, organisational context refers to its own structure which affect adoption and environmental context relates to the external forces in form of competitors, partners which influence a firm's decision to adopt and use a technology (Tornatzky, Fleisher, & Chakrabarti, 1990)

Research Objective

As evident from the literature e-marketplace offer many benefits to the micro enterprises. It becomes important to examine the influential factors which impact the e-marketplace adoption intention of micro enterprises. Thus, the study aims to:

To examine the factors influencing the adoption intention of micro enterprises towards e-marketplace.

Research Framework and Hypotheses

Based on the theories of Diffusion of Innovation and Technology-Organization-Environment framework, and previous literature in on e-marketplace adoption this study identifies some important determinants which influence the adoption intention of E-marketplaces in the micro enterprises.

Technological Context

It has been highlighted that adoption of an innovation is influenced by its own characteristics and attributes. In this study relative advantage, cost of e-marketplace, compatibility involved in its usage and security concern are the four technological factors used to examine their influence on intention to adopt e-marketplace in micro enterprises.

- **Relative Advantage:** Many researchers highlighted that when a technology is perceived to give benefits to the prospective users it is more likely to be adopted by the enterprises

(Ghobakhloo, Aranda, & Amado, 2011). Thus, they highlight that there is a positive relationship between the perceived relative advantage and the adoption intention. Thus, we propose the following hypothesis:

H₁: Perceived relative advantage of e-marketplace has a significant positive impact on micro enterprises' e-marketplace adoption intention.

- **Compatibility:** When the adoption of a technology innovation is perceived to be consistent with the enterprise **values**, work practices and needs of the potential adopters it is more likely to be adopted (Rogers, 2003). Thus, the literature highlights as the degree of compatibility increases the adoption intention increases. Therefore, we propose the following hypothesis:

H₂: Perceived compatibility of e-marketplace has a significant positive impact on micro enterprises' e-marketplace adoption intention.

- **Cost:** the adoption of any technology has some cost associated with it. Researchers found that as micro enterprises face financial issues cost is an important consideration for them, if they perceive the cost of adoption to be high its adoption is inhibited (Chang, Hung, Yen, & Lee, 2010). Based on the literature it is proposed:

H₃: Perceived cost of e-marketplace has a significant negative impact on micro enterprises' e-marketplace adoption intention.

- **Security Concern:** Al-Zoubi (2013), defined security concern as, "the perception and fear of safeguarding mechanism for the movement and storage of information through electronic databases and transmission media". It was found internet technologies are considered risky and users have low confidence in security of data over network and resist adopting these technologies. Thus, we propose that:

H₄: Perceived security concern of e-marketplace has a significant negative impact on micro enterprises' e-marketplace adoption intention.

Organisational Context

The other context of TOE framework, highlights the characteristics of the firm. An organization's intention to adopt a technology innovation is affected by its own resources both human resources and financial resources. This context includes those factors which constitute and describe the organization such as: owner-manager IT knowledge, firm financial resources, and employee's IT skills.

- **Owner-manager IT knowledge:** It is a general belief that micro enterprises are majorly influenced by its owner. Therefore, the owner IT knowledge is a crucial factor which promotes the adoption of a technology innovation in a firm. Previous study by Rahayu (2015) have found this as a significant factor thus, we propose:

H₅: Owner IT knowledge has a significant positive impact on micro enterprises' e-marketplace adoption intention.

- **Organization IT capability:** Researchers point out that the smooth operation of a adopted technology required skilled employees who can manage the work efficiently, it is only when the organization is having skilled employees it will intend to adopt a technology innovation (Ifinedo, 2011). Thus, we propose:

H₆: Organization IT capability has a significant positive impact on micro enterprises' e-marketplace adoption intention.

- **Financial resources:** Finance is the blood of any enterprises. To carry out any activity in an organization financial resources are required. A firm deploy or invest in a technology innovation only when they have sufficient resources to meet the adoption and maintenance cost owner IT knowledge (Zhu, Kraemer, Xu, & Dedrick, 2004). Thus, we propose:

H₇: Availability of financial resources has a significant positive impact on micro enterprises' e-marketplace adoption intention.

Environmental Context

The environmental context includes those factors which are external to an organization and still impact its operation and decision. The literature highlights that trading partner pressure, competitors' pressure and vendor support are some of the major factors influencing e-marketplace adoption intention.

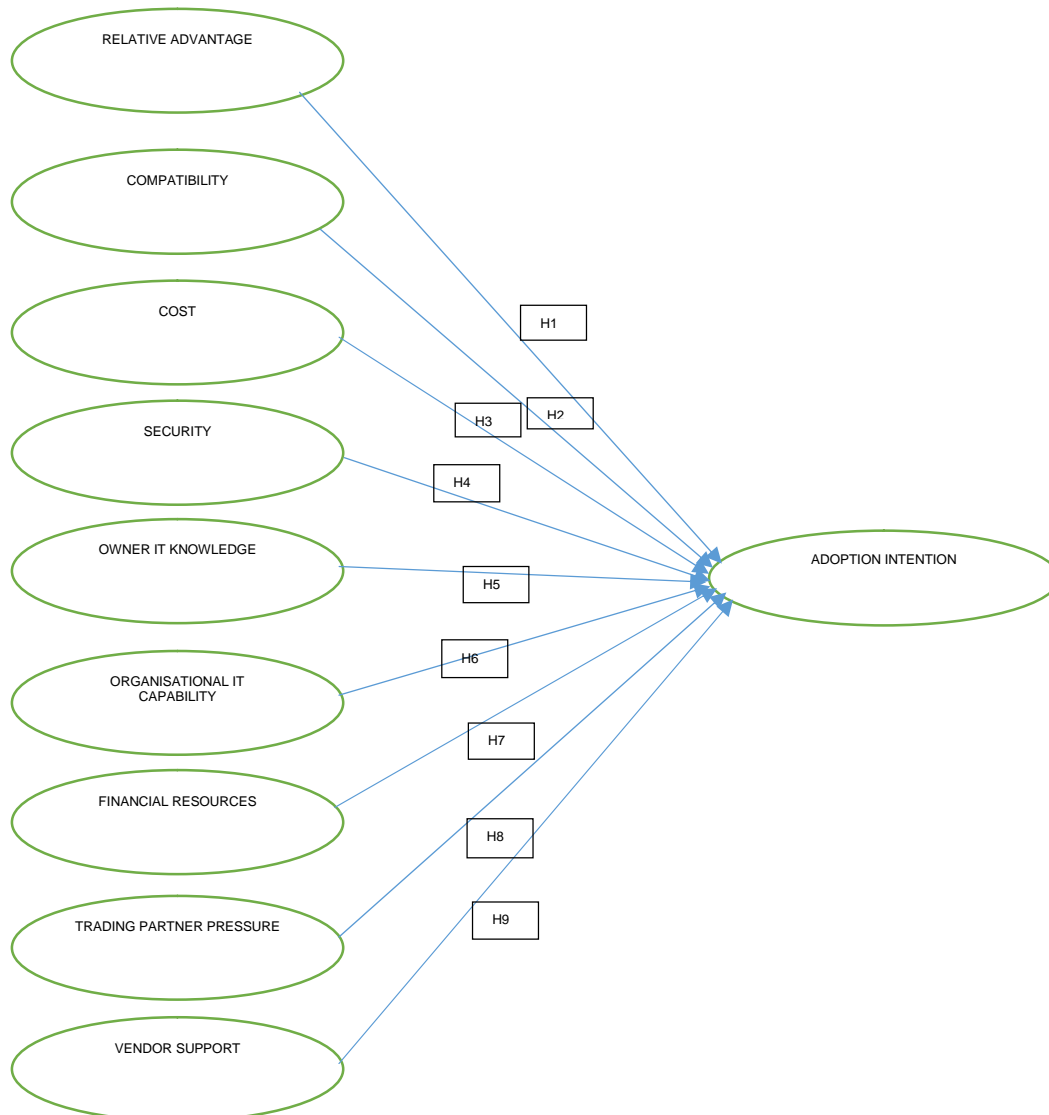
- Trading partner pressure:** Researchers point out that it is imperative for the business to satisfy the needs of customers and suppliers in a best possible way, the emergence of internet technologies like e-marketplace have increased the trading partners expectation for effective communication and better delivery of goods and services which the enterprise needs to fulfil (Chatzoglou & Chatzoudes, 2016). Thus, we propose:

H₈: Trading partner pressure has a significant positive impact on micro enterprises' e-marketplace adoption intention.

- Technology Vendor support:** Literature highlights that if the enterprise perceives that the e-marketplace vendors or the authorities behind it provides the required support in times of need, they will be inclined to adopt these technologies Ghobakhloo et al. (2011). Thus, we propose:

H₉: Availability of vendor support has a significant positive impact on micro enterprises' e-marketplace adoption intention.

The research framework is presented below:



Research Methodology

The section describes the details of the sample, measurement items, statistical technique used to test the hypotheses.

Sampling and Data Collection

The target population of our study are the micro enterprises in the manufacturing sector located in Delhi-NCR. According to the classification of MSME by the Government of India, micro enterprises refers to those enterprises whose investment in plant and machinery is less than one crore and annual turnover should not exceed five crores. The enterprises were selected randomly from the directory provided from the Directorate of Industries of Delhi. Data was collected using an electronic survey. Questionnaire were mailed to the owners and managers of the enterprise. 189 valid responses were received which were used to test the research hypotheses.

Measures

The constructs used in this study were adopted from the existing literature. The study has ten independent variables and one dependent variable.

All the variables were measured using multiple items on a five-point Likert scale ranging from 1=strongly disagree to 5= strongly agree. They have been adopted from previous literature. The items for measuring relative advantage and trading partner pressure of was adopted from the study of Hsu, Kraener, Dunkle, Kraemer, & Dunkle (2006). The items for measuring Cost and Security were adopted from the study of Ilin et al. (2017). Compatibility and Owner IT knowledge measures were adopted from the study of Rahayu(2015). The items for financial resources availability were adopted from the study of (Awa, Ukoha, & Emecheta, 2016). Items to measure Organisational IT competence and Vendor Support has been adopted from Ifinedo(2011). Adoption intention measures were adapted from the study of Gangwar, Date, & Ramaswamy (2015)and Maduku, Mpiganjira, & Duh (2016).

The questionnaire consisted of two sections, where the first section measures the demographic profile of entrepreneurs and enterprise profile, second section measures adoption intention and the ten determinants influencing adoption. The questionnaire was discussed with academicians and personal interview were done with entrepreneurs to test the clarity and understanding of the questionnaire.

Data Analysis

- **Descriptive Statistics**

The demographic and enterprise profile of the respondents is presented in Table 1:

Table 1: Demographic and Enterprise Profile

	Frequency	Percent
Age		
18-30 Years	37	19.6
31-40 years	107	56.6
40-50 years	34	18
more than 50 years	11	5.8
Education		
High School	31	16.4
Graduate	106	56.1
Post Graduate	52	27.5
Number of Employees		
Less than 9	58	30.7
Between 10-25	94	49.7
Between 26-100	26	13.8
Between 101-200	11	5.8
Industry		
Computer Hardwares & Softwares	6	3.2
Minerals and Metals	9	4.8
Construction and Real Estate	8	4.2
Logistics & Transportation	3	1.6
Textile & Furnishing	6	3.2

Home Supplies	6	3.2
Paper & Packaging	12	6.3
Plastics & Products	18	9.5
Professional Services	2	1.1
Chemicals	8	4.2
Machines & Equipments	31	16.4
School & Office Supplies	16	8.5
Publishing	3	1.6
Crafts & Gifts	18	9.5
Food Processing	8	4.2
Automobiles	5	2.6
Fittings & Hardwares	13	6.9
Health & Beauty	12	6.3
Electronics	5	2.6
Total	189	100

Measurement Model Analysis

Confirmatory factor analysis was performed to test the factor structure of the observed variables. The stated 28 items loaded well on their assumed factors identified from the literature. The model validity was checked by establishing convergent and discriminant validity. For convergent validity the standardised factor loading of the construct items should be greater than 0.5 preferably above 0.7; next, we calculate the average variance extracted (AVE) and it should be above 0.5; We also calculated the Composite reliability of the constructs and it was found to be greater than AVE (CR>AVE) (Fornell & Larcker, 1981). All the constructs meet the threshold criteria indicating that convergent validity is achieved. The results are presented in table 2.

Table 3: Measurement Model Analysis

Construct	Items	Standardized Loading	AVE	Composite Construct Reliability
Relative Advantage	PRA1	0.862	0.62306	0.904528
	PRA2	0.959		
	PRA3	0.787		
Compatibility	COMP1	0.923	0.82106	0.932117
	COMP2	0.949		
	COMP3	0.843		
Cost	COST1	0.573	0.625495	0.823558
	COST2	1.051		
	COST3	0.666		
Security concern	SEC1	0.736	0.604543	0.818753
	SEC2	0.902		
	SEC3	0.677		
Owner IT knowledge	OK1	0.908	0.53258	0.906901
	OK2	0.816		
	OK3	0.8		
	OK4	0.841		
Organisational IT capability	OC1	0.916	0.631699	0.831856
	OC2	0.861		
	OC3	0.561		
Financial Resources	FR1	0.795	0.744692	0.897166
	FR2	0.896		
	FR3	0.894		
Trading partner pressure	TP1	0.71	0.689455	0.868266
	TP2	0.858		
	TP3	0.91		
Vendor Support	VS1	0.844	0.76902	0.908689
	VS2	0.95		

	VS3	0.832		
Adoption Intention	AI1	0.925	0.886382	0.959011
	AI2	0.964		
	AI3	0.935		

Next, we check for discriminant validity which explain how much the indicators differ from the other indicators. Discriminant validity is achieved when the construct's square root of AVE is greater than its correlation coefficient with other constructs (Fornell & Larcker, 1981). The results presented in Table 3 indicating that discriminant validity for the constructs has been achieved.

TABLE 3:	DISCRIMINANT VALIDITY									
CONSTRUCTS	1	2	3	4	5	6	7	8	9	10
1. Relative advantage	0.87218									
2. compatibility	0.455	0.906123								
3. cost	-0.087	-0.128	0.790883							
4. security	-0.17	-0.244	-0.041	0.777524						
5. owner IT knowledge	0.379	0.662	0.056	-0.186	0.729781					
6. organisation IT capability	0.301	0.467	-0.098	-0.221	0.483	0.794795				
7. financial resources	0.051	0.06	-0.07	0.088	0.119	0.176	0.862956			
8. trading partner pressure	0.289	0.51	-0.043	-0.103	0.441	0.442	0.187	0.830334		
9. vendor support	0.249	0.522	0.017	-0.244	0.549	0.439	-0.103	0.348	0.876938	
10. adoption intention	0.543	0.639	-0.176	-0.196	0.596	0.433	0.024	0.497	0.504	0.941479

note: diagonal elements are square are square root of AVE and other are correlation coefficient

Structural Model Analysis

We check for the model fit indices to test for the goodness of fit of the proposed research model. The fit indices as CMIN/DF, CFI, NFI, RMSEA AND PCLOSE all meet the threshold as presented in Table 4; thus, our research model fits well with the data.

Table 4: Goodness of Fit Index

	Model Fit Result	Acceptable Range
Chi-square	581.801	
CMIN/DF	1.496	between 1 and 3
CFI	0.955	>0.9
TLI	0.946	>0.9
RMSEA	0.051	<0.06
PCLOSE	0.391	>0.05

After obtaining the good fit of the research model, the standardised regression coefficients and the path significance were estimated for testing the hypotheses. The results of the hypotheses testing are presented in Table 5. Relative advantage, compatibility, trading partner pressure, vendor support and owner knowledge were found to have a significant positive relationship with adoption intention. Relative advantage was significantly and positively is related to e-marketplace adoption intention at ($p>0.001$ and $\beta=0.35$). Owner IT knowledge was found to be the second significant factor influencing adoption intention at ($p>0.001$ and $\beta=0.28$). Compatibility was also found to be significantly and positively related to adoption intention at $p>0.001$ and $\beta=0.24$). Trading partner pressure was also a significant factor influencing adoption intention at ($p>0.001$ and $\beta=0.23$). Vendor support was also found to be significant at ($p>0.01$ and $\beta=0.18$).

Table 5: Results of Hypotheses Test

H1	Perceived relative advantage of e-marketplace has a significant positive impact on micro enterprises' e-marketplace adoption intention.	Supported
H2	Perceived compatibility of e-marketplace has a significant positive impact on micro enterprises' e-marketplace adoption intention.	Supported
H3	Cost of e-marketplace has a significant negative impact on micro enterprises' e-marketplace adoption intention.	Not Supported

H4	Perceived Security Concern of e-marketplace has a significant negative impact on micro enterprises' e-marketplace adoption intention.	Not Supported
H5	Owner IT knowledge has a significant positive impact on micro enterprises' e-marketplace adoption intention.	Supported
H6	Organization IT capability has a significant positive impact on micro enterprises' e-marketplace adoption intention.	Not Supported
H7	Availability of financial resources has a significant positive impact on micro enterprises' e-marketplace adoption intention.	Not supported
H8	Trading partner pressure has a significant positive impact on micro enterprises' e-marketplace adoption intention.	Supported
H9	Availability of vendor support has a significant positive impact on micro enterprises' e-marketplace adoption intention	Supported

Findings

The research aim was to identify the factors influencing the e-marketplace adoption intention among manufacturing micro-enterprises. A framework grounded in TOE theory was developed to identify these influencing factors. The study comes out with the following finding:

Under the technological context three factors were identified from the literature which determine the adoption behaviour of enterprises with regard to technology innovation. Among the examined factors relative advantage and compatibility was found to be a significant factor which positively influence the adoption intention of enterprises. The positive relation indicates that the enterprises who perceive e-marketplace to be beneficial for their enterprises and compatible with their products and services are more likely to adopt it. This finding is in consistent with Ghobakhloo et al. (2011) whose study also reveals a significant positive relationship between relative advantage, compatibility and adoption intention. Cost was not a significant factor in our study. The probable reason could be the identification of the benefits by these enterprises which reduce the cost burden and thus cost is not a significant factor influencing their adoption behaviour. Security concern was also found to have no significant influence on adoption intention of the enterprises.

The organisational context of our study identifies the role of owner IT knowledge as a significant factor influencing adoption intention of e-marketplace by an enterprise positively. As already pointed out, owners have a strong influence on the working pattern of micro enterprises as they are mostly under sole proprietorship or with limited number of partners. Chang et al. (2010) also points about the influence of owner knowledge on adoption of technology by enterprises. The other factors of organizational context such as organization IT capability and financial resources had no significant impact on adoption intention.

Among the environmental factors trading partner pressure was found to have a significant positive impact on adoption intention. This finding is in consistent with Gangwar et al. (2015) and Chatzoglou & Chatzoudes (2016) who states that firms in order to satisfy the suppliers and customer expectations adopt new technologies. Vendor support had no significant impact on adoption intention of enterprises.

Conclusion

The research under the TOE framework empirically tested the proposed model to identify the factors influencing B2B e-marketplace adoption intention of the micro enterprises. The study found relative advantage to be the most important determinant of adoption intention followed by owner IT knowledge, compatibility and trading partner pressure. The study provides meaningful insights both for the government and e-marketplace vendors or authorities. These factors should be considered while approaching these enterprises as it was found that compatibility is an important determinant of e-marketplace, industry and product or service specific e-marketplace model should be developed to attract more enterprises.

The introduction of web enabled e-marketplaces would act as a catalyst to turn the traditional business model into innovative and effective business model to compete globally in this digital space. Adoption of digital technology solve many of the problems of business and help the enterprises in their growth and expansion and thus it is a boon to this sector. The B2B e-commerce is growing day by day, it becomes important for the micro enterprises to participate in the digital economy and expand their business. B2B e-marketplace is a promising solution which provides ample of opportunities for growth and development of business operations.

Limitations and Future Scope

The study has few limitations as well. This study was conducted on micro enterprises in the manufacturing sector thus, the findings of this study cannot be generalized to other sectors and small and medium enterprises. The study is cross-sectional in nature a longitudinal study which keep tracking the important determinants as the enterprises grow and expand can surely provide more meaningful insights. This study only measures the intention of enterprises regarding the adoption of e-marketplace further studies can be conducted to measure the level of actual adoption and usage.

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BANKING: A GIANT IN INDIAN ECONOMY

Dr. Pankaj Kumar*

ABSTRACT

For last 5 decades specially in the last 2 decade, Indian Banking System has Faced various Achievements to its credit. The Slowdown in the whole World with recession which occurred in 2008 no doubt had impacted the whole world, and India was not an exception to this, but still the impact was managed well by our Indian Banking System. This strong-ness of our system helped us in having an economy that is well manageable with those all challenges which is encountered by the economy of any developing country. With this developed Banking System of developing Country also has some loopholes which if managed or removed can give more better results and India could become the only developing country in the world with largest as well as strongest economy of the world.

KEYWORDS: *Banking Structure, Public Sector Banks, Developing Economy, Reforms, Development.*

Introduction

The latest reports published at world level indicate that probably India will be the 3rd largest economy of the world in next 4 decades, as well as an emerging economy giant in the next decade. It is not only the world's largest economy but also the largest developing economy probably. How does it happen? Is India has shown a drastic empowerment in Manufacturing or it is because India has entered into sphere of service industry or India started becoming the leader of world export business? No they all are undoubtedly played a significant mark in this sphere but the major contribution in making India a world leader in economy is it stress and organized development of its Banking Structure. Not even in India but in all economies a healthy economy is not at all possible without a sound, developed and effective Banking system.

Role of Banks in Economy

The Banking portfolio of India consists of Nationalized Banks, Public Sector Banks, Development Banks, Cooperative Banks and Regional Rural Banks. The new phenomena as introduced by RBI is Small Finance Banks and money Banks. There is no need to tell to anyone how banks work. But for laymen it is simply accepting deposit and lending the money. But this not correct if we talk in terms of economy. Their function is ideally to channelize the savings of country (i.e. its citizens) through a way of investment and loans to industries, businesses and of course to government. Banks plays a major role in connecting those who has capital with them with those who need it. Since the funding need of people get fulfills they pays a good amount of interest and consequently banks pays handsome returns to depositor and by this way it creates new demand deposits and purchasing power of country automatically increases. In the last 2 decades the sphere of the banks is not limited to metropolitan cities but extended to almost every corner of the country. Around 30 to 35 percent population of india lives in metros and urban areas. With the strong increased emphasis of Development Banks (Like NABARD. SIDBI) the whole economy is diverted in industrialization and business pathway. These banks plays multiple roles and helped in promoting, nurturing, supporting a wide range of activities as driven drivers of Industrial Development. They also facilitate trade in and out of the country in various other ways such as by providing bill discounting facility or fund transfer internationally extra.

What Banks can do for an Economy

As discussed above banks play many roles in development of any economy but apart from above banks can helps economy in following ways too:

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Ñ **Cultivating the Habit of Saving**

By giving attractive offers and deposit schemes and higher rates of interest the banks can develop a habit of saving among the people. Now a day's bank offers various accounts and fixed deposit which attract people to invest the money into the banks. One of the attractive schemes which is very popular now a days is flexi deposit. Where a customer gets interest of FD but it is simultaneously can be used a saving account.

Ñ **Capital Formation**

The other function which banks perform or could perform for economy growth is to create capital for business and entrepreneurs by channelizing the funds (as accumulated in various accounts of Depositors) towards the businesses and industries by providing the Advances and lending at attractive rates. Thus the need of every one will get fulfilled. If it doesn't happen the funds will remain idle. The development Banks plays a vital role in this context by providing Finance to industries and acquiring a stake in their capital, thus it helps those business where either the risk is high or return possibility is low.

Ñ **Monetary Policy Implementation**

Since Central Banks develops the Monetary Policy but it cannot implement the same without the banks who deal with public at large. Hence Banks helps in implementing the policy considering the requirements of developing country.

Ñ **Providing Loan in Foreign Currency**

Those who are interested in setting up of Business outside India or wants to engage in the business of Export and Import, or those who wants to expand, diversify or modernize their business, banks can help them by providing them Long term finance in foreign currency. Thus it will than help in enriching and nurturing the economy with expansion with foreign industrialist too.

Thus the banks have to economic responsibility of business and to play a constructive role in finding out and fixing the economic viability of businesses. Their role is not limited up to the funding the needs of fund of an enterprise but also to develop infrastructure and skill in the new entrepreneurs. This function can be performed in better way if government joins hand with Banks and facilitate various schemes which extends to almost all kinds of people or entrepreneurs, as well as to help in setting up of various training institutes. The government could also help banks by identifying the potential business areas and attracting entrepreneurs to setup their business in those areas.

The Negative Corner

However the one negative part on banks portion is they are not taking the initiative as well as participation in entrepreneurial development, as seriously as they should take, and the same is truly evident from there casual approach of creating an awareness amongst the potential industrialist or entrepreneurs, specially on the part of government Banks. Even being a major stake holder and Investor into any Business enterprise, do not draw their attention and interest in their day to day functioning.

On the one hand Banks has to make sure that the business is running smoothly and do not fail, they on the other hand, need to ensure that finds given to them is not being misutilised at all. Some time even without any wrong intentions of entrepreneur business gets failed because of a poor management. This all need to be deeply analyzed by the banks. But banks still working in their old pattern and not becoming the part of this globally changed economics. On the other hand, one major issue is few sectors in our country is over financialised, which is too very dangerous. For example the housing finance is a kind of finance which is excessively available in our country. Now in that case the housing sector keen to excessive demand and thus result in more demand for housing and that depends on credit conditions.

The weak growth of Public sector banks is not hidden to anyone. Their lazy behaviour has put them into back side of the whole banking world. If government has not supported to these banks, probably many of them would have closed down with discouragement to others. The revolutionary steps of Government has supported them very well and still pausing them in front of the wheel. This is one of the biggest loophole in our economy. The banks are undoubtedly vulnerable to corruption and fraud, because of involvement of Liquid assets. The rising level of NPA's in last year's is not hidden to anyone. The corporate frauds emerged in last one decade with loss of crores of funds of banks has broke the bone of Banking Structure. The result is being the funds of the banks could not be diversified over those areas where it was required i.e. to new entrepreneurs and businesses. The banks themselves are reluctant to enhance or create new credit to new business coz of fear of NPA.

How to Overcome from the Problem

First of all the Banks has to change their Mind set from the old pattern which they are following from last many years. Especially the government Banks has to change their culture of working. There is no doubt that private sector banks can never be the part of economy to that level as of Public sector Banks. The capital Involved, The human resources involved and of course the participation of government in the public sector banks makes it more conversant to economy. Specially the Indian economy which in size is the largest economy probably, need back bone of Public Sector Banks. So the Banks has to be very intelligent in making efforts and exploring the new areas of business, entrepreneur ships and industries. They need to work with new and young business modelers and developers and to help them in setting up their business not to the extent of finance only but in enriching, enhancing and fashionising on world map. They has to develop that level of structure at which the private sector banks works.

Conclusion

With all above cited discussion we can conclude various factors. The first one is Banking is the back bone of an economy. Without a strong Banking Mechanism no economy is possible at all. Hence to make a strong development in economy specially when it belongs to developing country, having the 2nd largest population and largest democracy, this becomes necessity. The second one is because most of the population of India lives in rural areas, where (in few case) the banking phenomena is still untouched, the linking of that population in the total sphere of economy is not possible and if it is not included in the economy the actual size is still not measurable. The third one is public sector banks plays a vital role undoubtedly, in our economy but unfortunately the same is not up to that level where it should be. Public sector banks hold around 60 to 70%of our Banking structure and their unorganized way to work, sometimes unethical and specially their lazy attitude of working and implementation of policies, becoming a great barrier in success of economy. Last but not the least the political unwillingness in certain areas, with political uncertainty makes a strong hazard for making the economy more strong. Because of strong competition among the banks, the focus of banks has shifted from customer acquisition to customer retention. Although due to various electronic products in banking such as ATM, Internet banking, Electronic Payment system etc. has made ease in doing the business but still it has also led various banking Frauds and thus the result is slowdown in economy.

Hence a strong cumulative effort from Public sector banks. Private sector banks and government is required. We need to be ethical, a strong policy maker and organized to work towards development of an economic environment for developing country like ours.

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CORPORATE GOVERNANCE “A NEED TO INDIAN CORPORATES”

Dr. Manoj Kumar Gupta*

ABSTRACT

Today's fast and ever changing world has created a challenge in front of everyone, not only a corporate person but also for a common man to work and come out with greatest efficiency and with his optimum contribution. Competition is multiplying every day and that has given birth to number of good or bad aspects. Corporate Governance is now not a new mechanism in India. The Growing globalisation and corporatization in business era ask for a level of management that is best suited and in benefit of all stakeholders. The increase of shareholders awareness and shareholder activism is also the greatest reasons of generation of interest in company's affairs by stakeholders. The corporate Governance evolving the whole of the word into a system where company is run by the management in the best benefit of stakeholders. The corporates now a day understands their responsibility towards shareholders hence they are also keen to take care their interest. Good governance is the expectations of every stakeholder, specially, shareholder. The word Governance reflects the control mechanism of any activity or function. Corporate refers to the business world in an organized manner that may be a company or any other form organisation similar to company. However generally it refers to company only. Both the terms i.e. Corporate and Governance, combinable known as Corporate Governance. This Article discusses the impact of corporate Governance along with corporate Governance Mechanism in India as well to the remaining world. The article also enlightens the policies which have been developed over a period of time for Corporate Governance for Indian Context.

KEYWORDS: *Corporate Governance, Shareholders, Rights of Shareholders.*

Introduction

There is no single definition of Corporate Governance which is describing it literally. Over a period of around 4 decades various authors has defined it in their own way. However for one thing the all authors and corporate person's are agree and accept. According to it Corporate Governance is a system through which the Companies are controlled and governed by the Management in the best interest of the Stakeholders and others, thus to ensure it has best management, greatest transparency and on time financial reporting. Directors have responsibilities for governance of their Companies. In other words it is a combination of Policies, Procedure and Process followed by company with the intention to achieve its objective and to ensure that interest of various stake holders of company are not prejudicially affected. Corporate Governance is not at all new for India as well as for World. Almost more than 5 decades has been passed since its existence in India. The first introduction of Corporate Governance Mechanism in India was on the recommendation of Kumar Manglam Birla committee. Than On recommendation of NR Narayan Murty Committee the Government of India has introduced Section 292A in erstwhile Companies Act, 1956. That was as major game changing Provision, in Indian Corporate World with the impose of additional Liabilities on the part of corporates to take care of their investors. After that many changes has been introduced in companies act, regarding the provisions of Corporate Governance. Securities Exchange Board of India has also issued certain Guidelines for betterment of Corporate Governance.

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Corporate Governance around the Globe

Ñ Corporate Governance Framework in USA

The companies in U.S are governed by a variety of legal regimes relating to corporate governance matters. It comprises laws of various states and central statutory Rules and policies of various Agencies of Government. It also includes the various norms as promoted and approved by United States Securities Exchange Commission and those other organisations which are self regulated, for example stock exchanges which puts restrictions on listed companies. The primary sources of federal rules and regulations include the Securities Act of 1933 and the Securities Exchange Act of 1934 and the regulations framed under those Acts. There are also other rules which imposes requirement for Disclosure and Compliance are Sarbanes Oxley Act, 2002, consumer Protection Act, 2010 and Dodd-Frank Wall Street Reform.

Ñ UK Corporate Governance Code, 2018

In United Kingdom and Ireland an independent Regulator works names as Financial Reporting Council, which is responsible for regulation of Accounting Professionals, Actuarial Service professional and Auditors. It also works for promoting Transparency and Integrity in the businesses. The Financial Reporting Council sets out the rules for Corporate Governance for United Kingdom, Stewardship code for United Kingdom and works on Accounting Standards along with Rules on Actuarial Services. It also maintains the quality of Financial and Corporate Reporting and takes strict action in case it is not followed by entities. Financial Reporting Council is totally an independent agency for Accountants and Auditors and Actuaries. It has published various codes for on various points of time. The latest code published by it is in 2018 which is known as UK Corporate Governance Code, 2018. After that it has issued revised guidelines on Board effectiveness which was supporting to the United Kingdom Corporate Governance Code, 2018. It was introduced for ensuring that companies have been assisted properly for Good practices to be followed by them in financial reporting. The UK Corporate Governance Code, 2018 is applicable to all companies whether it is incorporated in United Kingdom or not. However this code is applicable on for Accounting period on or after January, 2019 and onwards.

Ñ Corporate Governance Principles and Recommendations, Australia -2019

The premier council for corporate Governance in Australia is ASX Corporate Governance Council, which came into force in 2002. The prime work of the organization is to make coordination and bring Various Businesses, Shareholders and Industries together with the intention that since each provide valuable insights and experience on Corporate Governance issues from the prospective of their own shareholders. Their main function is to develop the Set of rules and recommendations on corporate Governance. It has issued various guidelines on various point of time. The first one was issued in 2003. The second one was issued in 2007 and the third one was published in 2014. However with the passage of time there were significant changes in Social and market culture, values and trust, they found it right time to issue fourth edition of the guidelines in 2017. It was inclusive of various latest case histories of listed companies.

Corporate Governance in Indian Scenario

In India Companies are formed, Registered and controlled by companies act, 2013. Before companies act, 2013, The Companies Act, 1956 was the premier Act which was controlling the Companies in India. The new act has various provisions relating to improvement of Corporate Governance of Companies. The companies Act, 2013 clearly directs that focus of Regulator that is Ministry of Companies Affairs, is on enhancing the Roles, Responsibilities and Accountability of Board of Directors of the companies. The Act incorporates various requirements for Corporate Governance, including Disclosures, and enhances role & Responsibilities of Board of Directors. Provision relating to various Board Committees with the inclusions of Independent Directors has also been incorporated. Apart from companies Act, 2013, Securities Exchange Board of India has also issued Chapter IV (Regulation 17 to Regulation 27) of SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015. These provisions contain more detailed and strict provisions regarding corporate governance. Because of these provisions the Corporate Frauds has almost at its lowest level.

Few of the provisions of the companies act regarding Corporate Governance are:

- Ñ Appointment of Independent Directors with maximum possible tenure up to 3 years.
- Ñ Provision for appointment of women Director,

- Ñ Detailed Disclosures for all kind of Related Party Transactions and Arm's Length Price Transactions, Evaluation of Performance of the Directors and Committee & Board as a whole;
- Ñ Stricter and forward-looking procedural requirements for Secretarial compliances and Secretarial Standards made mandatory;
- Ñ Various disclosures by Board of Directors,
- Ñ Provisions relating to rotation of Auditor's with putting restrictions on reappointment through cooling period of 5 years, under section 139,
- Ñ Making Distinction between role of Chairperson and Chief Executive Officer through section 203
- Ñ Mandatory provisions regarding vigil mechanism under section 177
- Ñ Constitution of Nomination and Remuneration Committee under section 178,
- Ñ Secretarial Audit under section 205

Few of the provisions of the Guidelines of Securities Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations, 2015 regarding Corporate Governance are:

- Regulation 17: Board of Directors
- Regulation 18: Audit Committee
- Regulation 19: Nomination and Remuneration Committee
- Regulation 20: Stakeholders Relationship Committee
- Regulation 21: Risk Management Committee
- Regulation 22: Vigil Mechanism
- Regulation 23: Related Party Transactions
- Regulation 24: Subsidiary of Listed Companies

As per Regulation 17, Board of directors or Board of company should comprise both Executive and Non Executive Directors in a proper combination, in such a way that At least out of total number of directors, fifty percent shall be Non-Executive Directors and at least one Women Director shall be in Board. If any vacancy arises at the place of an Independent Director due to resign or removal, than the vacancy shall be filled within next three months or next Board Meeting, whichever is later. New appointee must also be an Independent Director. This vacancy does not need to be filled if company already has more than minimum number of Independent Directors.

As per regulation 18 The audit committee should constitute minimum 3 members and 2/3 of the members should be independent director. All the members shall be financially literate i.e. they should understand basics principles of financials and one member if the committee shall have expertise in accounting or financial management. The chairman of the committee must be an independent director and he should be present all the times in the meeting of committee and AGM also. The Audit Committee has right to look into any matter according to the terms of agreement, Seek information's from the Employees and Take outside legal or professional advice, to call an outsider for expert advice.

As per Regulation 19 the Company shall constitute a committee with at least three Directors. To be called Nomination and remuneration committee. All of the members of this committee shall be non Executive Directors. At the same time it has also to be ensured that out of total number of members, at least fifty percent shall be independent Directors. Out of total number of members of the committee, one chairperson shall be appointed who must be an independent Director. The chairperson of the company may be member of the committee but he shall not be chairperson of the Committee. The Quorum for any meeting of the committee shall be two members or 1/3rd of total members of the committee, whichever is higher. However to ensure the compliance of Quorum one more requirement shall also be fulfilled which is that at least one independent director shall also be there in meeting. At least one meeting shall be conducted once in a year.

As per Regulation 20 A Board Committee to be called as "Stakeholders Relationship committee" shall be formed to specifically look into the redressal of grievances of shareholder, debenture holders and other security holders, like transfer of shares, non-receipt of balance sheet, non receipt of declared dividends, etc. At least three Directors which consist of at least one Independent Director shall form this committee. Chairman of committee shall be a Non-Executive Director. He shall be present at the annual general meetings to answer queries of the security holders. At least one meeting of the stakeholder's relationship committee shall be held once in a year. The BOD shall decide other members of committee.

As per Regulation 21 Each Company covered by above rules shall have a procedure to inform the Directors of the Board, about the Risk Assessment and Minimization Procedure. At the same time it shall also be noted down that there shall also be a procedure to periodically review the above procedure so that it can be ensured that Management of the company is controlling the risk using above Risk Minimization procedure. The company will also constitute a committee called Risk Management Committee from the Board of Directors. One meeting once in a year is compulsory. The Functions, Roles and Responsibilities of the Risk Management Committee shall be according to the instructions of the Board of Director. It will also perform such other functions as directed to it by the Board.

As per Regulation 22 A Vigil Mechanism shall be established in the company for all Directors and employees of the company to report their genuine concerns. The Mechanism is established in such a manner that it provides for Safeguard against victimization of Directors and/or Employees if they uses the Mechanism. There should be an important element in the Vigil Mechanism that complainant shall have direct access to the chairperson of the Audit committee. The details of the Establishment of Audit Committee shall be uploaded on the website of the company.

As per Regulation 23 For deciding the materiality of related Party Transactions and for dealing with related Party Transactions, The Company shall have a predefined policy. All kind of Related Party Transactions shall be first approved by Audit committee of the company and the approval shall be prior approval. In certain cases the company may give omnibus approval with certain predefined conditions.

Conclusion

A company having good corporate governance has greater level of confidence amongst the shareholders associated with that company. The company which have Active, Professional and Independent Directors enjoys a positive attitude in the Market both in trade as well as in financial. The reason being the Governance of any company is in the hands of the Top Management; hence the constitution of Top Management is very important. It is also a basis for determination of investments by foreign institutional investors to invest in. The Corporate Governance do not only Mechanize the Governance in well mannered way rather it also emphasize on Audit function, and legal, Moral as well as ethical implications which are required for the business and interest of shareholders. The set of norms and principles of the company are those measures which increases the participation of stakeholders in making decisions and makes ensure transparency in corporate governance in corporate sector, through which the interest of Stakeholders is safeguarded.

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BONUS ISSUE (TRUE RETURN TO SHAREHOLDER'S OR NOT)

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ABSTRACT

Bonus issue is capitalization of Accumulated profits of the company. The company keeps retained a portion of their profit every year and do not distribute dividend out of it, in the perception that it will help in the years of loss. When such retained earnings becomes huge and more than the required amount, the company decides to distribute the same among the shareholders, through the way of issue of Bonus shares. Whenever bonus shares are issues, a question arises in the mind of the shareholder that he really privileged with the dividend which was not given to him in previous years? Do really the share price has increase with this resulting gain to him? The current study has undertaken with the object to find out whether the share price goes up when Bonus issue comes. If yes, than the increase in market price are truly real or just an event increment, and the net effect with dilution in the net worth after ex bonus is same. To evaluate the reaction of Bonus on share price, around 50 listed companies have been selected which have declared Bonus shares, and through an event study methodology has been adopted to analyze the abnormal or excess returns. This excess return than further analysed using Paired T-Test. The results obtained shows that although the number of share holding of shareholder increases or multiple after bonus issue but the market price of securities gets down after the ex-bonus event, resulting with no benefit to shareholders and no impact on the share price.

KEYWORDS: *Bonus Issue, Capitalization, Excess or Abnormal Returns, Stock Prices.*

Introduction

The net worth of any company includes reserves and surplus too i.e. the retained earnings. This retained earnings belongs to shareholders of the company, as it is accumulated from the profits of the past periods which is not distributed among the shareholders. When company accumulates huge amount of earnings which are enough to encounter any unforeseen circumstances, the company plans to return back a portion of such retained earnings to shareholders. However to distribute such earnings in form of dividend is not at all prohibited, but that have two negative aspects. One is it will need a cash outflow, that too will be in large amount, which may create a problem of liquidity crunch for the company. Second the company will pay a higher amount of dividend in the current period, with the retained earnings, which will create an expectation of higher dividend for the future period also, and company will not be able to pay the same rate of dividend. This might create a negative perception in the minds of shareholders and share price might get its low. Hence the better way to distribute the retained earnings is to capitalize the same into the form of bonus shares. i.e. company will issue shares to the existing shareholders in a proportion of existing shares without receiving any payment from them. This is simply converting reserves and surplus into capital. This will not result into any cash outlay. Also the need to maintain a higher rate of dividend in future will not require. However the issue of bonus share could impact the market price for a short span of time.

Objective of Study

Since it is almost impossible to predict the market price of the shares. Over a period of 6 decade, a number of statistical methods, theories and studies have been developed but none of them has claimed as perfect one to measure or predict the share price. Some of the authors honestly claimed in their study that no one can predict the stock market. The reason being number of factors are there which in combination impact the market price and measuring all of them simultaneously is almost impossible. One of such factor is issue of Bonus shares. As we said as such there is no change in net

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worth of the company on issue of bonus share, so technically there should be no impact of the same on share price, however the dates of declaration of bonus issue is well known in advance, hence due to shareholder's expectation, the share prices takes a movement for a while. Thus it is important for company as well as for shareholders to know that how issue of bonus share could impact the market price. This Research paper finds out the answer of this question.

Review of Literature

Lee and Chang (2011) used the financial econometric models like asymmetric generalized autoregressive conditional heteroskedasticity (GARCH) model and the smooth transition auto regression with GARCH model to evaluate the pattern of the volatility in response to the various monetary and financial benefits and announcements made by the company such as Dividend or Bonus, in Taiwanese Stock Market. The accepted in their study that stock market price movement has significant volatility and leverage effect for most of the returns on equity in the stock market.

Mishra (2005) He has conducted a research to find out the price movement in share price with the respect to bonus share issue, with the view to examine the Indian Stock Market is efficient or not. He has taken a sample of around 45 bonus issues to study the effect of announcement of Bonus with the help of event study methodology. For the use of event study methodology, he has taken +20-20 study base for his research. It means 0 day has been taken as day of announcement of Bonus share and stock price for 20 days before the issue of bonus share and 20 days after the issue of Bonus share has been considered to study the impact of issue of bonus Shares. According to his observation, stock starts to volatile from eighth or ninth day before the issue of bonus share, that might be due to spread of information of Bonus issue. The behaviour of AAR's and CAAR's is also found to be in accordance of expectation and hence it is claimed that Indian Stock Market is semi efficient.

M. Obaidullah (1992) he enlighten the reaction of share price in response to Bonus Issue. Over seventy five stocks he examined responding to Bonus Issue by analyzing impact on CAAR. He also concluded to provide evidence for semi strong form of market efficiency and contended that announcement of bonus shares is adjusted in stock prices, before the prices converts into Ex bonus. However for Indian context he rejected the contention of semi strong form of market efficiency.

Sloan (1987) all from Australia, investigated the pattern of share prices near to ex dates of share split and dividends. In a sample study of around 89 observations, he saw significant positive abnormal returns in last five days just prior to ex price day. However his results were found to distinguished considerable from the results of other major studies.

Lukose & Rao (2005) has examined reaction of market prices along with operating performance near to Bonus share distribution in Bombay Stock Exchange. They have taken perhaps the largest sample (among all the Studies on this subject topic) from a time period of 10 years. They observed significant positive correlation of those shares having abnormal returns with bonus issue. Their studies have shown that shares have generated on an average 12.73 percent abnormal returns. They observed that when any company announces bonus share issue is a sign of extraordinary performance due to which share generate abnormal returns.

Rational of Study

As we saw a number of studies have been conducted on the above research topic, however the result still not concluded. None of the study has come out with any ground rule of evaluation of impact of Bonus share Issue on market price of shares. Even significant difference exists in the results of these studies in spite of the fact that these studies have been undertaken at different points of time. The views are of mixed nature regarding volatility changes for Bonus share announcements. This study however has been undertaken with the possible latest figures of Bonus issues by Indian companies. We expect the study will help far better than the all previous studies to understand the impact of price volatility due to Bonus share issue.

Hypothesis for Study

- H₀₁:** There is no significant difference between the returns in the market earned before and after the announcements of Bonus shares.
- H₀₂:** There is no significant difference between the returns in the market earned before and after the ex-bonus date in the market.

Research Methodology

Research methodology is a process through which a study comes on conclusions with solution of a problem, along with the suggestions and recommendations. It is science based approach where data and results are scientifically analyzed based on various ratios and trends.

Nature of Study

For the purpose of this research, Event Study methodology was adopted. The research has been conducted with the view to analyse the abnormal or excess returns to the dates near to Bonus date.

Sampling Technique

For the use of event study methodology, researcher has taken +20-20 study base for his research. It means 0 day has been taken as day of announcement of Bonus share and stock price for 20 days before the issue of bonus share and 20 days after the issue of Bonus share has been considered to study the impact of issue of bonus Shares. An estimation window is also used with the event window. Such estimation window is generally for period prior to event period.

Sampling Design

In designing the sample certain variable has been used for the purpose of testing of hypothesis. While testing the results, these variables have been taken into consideration. These variables are daily returns on the share price, Normal and abnormal returns, Cumulative abnormal returns and average abnormal returns.

Results and Analysis

Out of the selected 50 companies the data of 10 companies have been taken for the purpose of data analysis. Following data has been used for the study

Table 1

S.No.	Name of the company	Bonus Declaration Date	Ex-Bonus Date
1	United Phosphorus Ltd.	24-07-2008	29-10-2008
2	G A I L (India) Ltd.	23-06-2008	06-10-2008
3	Siemens Ltd.	22-11-2007	29-02-2008
4	Bharat Heavy Electricals Ltd.	25-01-2007	31-05-2007
5	H C L Technologies Ltd.	14-12-2006	15-03-2007
6	Oil & Natural Gas Corpn. Ltd.	26-07-2006	27-10-2006
7	Dr. Reddy'S Laboratories Ltd.	31-05-2006	28-08-2006
8	Infosys Technologies Ltd.	14-04-2006	13-07-2006
9	Cipla Ltd.	11-02-2006	24-04-2006
10	Mahindra & Mahindra Ltd.	14-06-2005	01-09-2005

In the above mentioned companies Out of above ten companies seven companies (at number 1, 3, 4, 5, 7, 8, and 10) has issued bonus share in the ratio of 1:1. Other companies have issued Bonus in different proportion.

Table 2

S.No.	Name of the company	Returns	
		Before Bonus	After Bonus
1	United Phosphorus Ltd.	7.63	4.31
2	G A I L (India) Ltd.	0.89	-4.89
3	Siemens Ltd.	-0.71	-3.79
4	Bharat Heavy Electricals Ltd.	4.95	3.99
5	H C L Technologies Ltd.	2.03	-3.07
6	Oil & Natural Gas Corpn. Ltd.	3.70	2.22
7	Dr. Reddy'S Laboratories Ltd.	-2.78	-2.49
8	Infosys Technologies Ltd.	3.05	-1.17
9	Cipla Ltd.	4.11	10.11
10	Mahindra & Mahindra Ltd.	4.06	0.89

As shown in table two, five companies out of ten (at number 1, 4, 6, 9, and 10) has shown a positive excess return, after the bonus issue. However remaining companies were showing negative excess returns. However we shall also consider that out of these five remaining companies, two companies (i.e. Siemen's Ltd. and Dr. Reddy's Laboratories Ltd.) has found to be having Negative returns even before the Bonus issue. Hence there impact is not at all considerable. Remaining three companies has shown has shown excess negative return after the Bonus issue. Calculation of T-Test (paired test) gives the following results.

Table 3

		Mean	N	Standard Deviation	Mean	Correlation	Significance
Pair 1	Before bonus issue	2.2323	13	3.02047	.89196	0.689	0.009
	After bonus issue	-1.6758	13	8.01234	1.10252		

Based on above Test results the researcher rejects both the null hypothesis and concludes that there is significant difference between the returns in the market earned before and after the announcements of Bonus shares and there is significant difference between the returns in the market earned before and after the ex-bonus date in the market. This results into the fact that investors have secured the excess returns after the bonus issue.

Conclusion

After going through with the all above mentioned discussion, literature review and statistical results analyzed above, it cannot be argued whether Bonus issue has benefit or not for the shareholder's. Answer is yes as well as no. The reason for saying no is being that the additional returns after the date of ex-price to bonus will cut down the benefits as the market price will get down, hence no real benefit has been passed on to the shareholders. They left with what they had before bonus issue. However on the other side the capital base of the company will definitely increase as well as number of shares will also get increase. This will give them two long term benefits. The first one is they will be in position to get higher amount of dividend as they have more shares. The second one is they will be able to trade more securities in the market, out of some of the securities have been acquired at zero price being Bonus Issue. Hence the entire sale price will be there net gain. In context of these two fundamentals, the shareholder is in position of benefit.

Through Data analytics it was observed that companies who declared the Bonus issue has enjoyed the positive excess gains in almost entire period of selected event window. However it was on highest with decreasing trend in the beginning 9 days of the date of declaration of Bonus Issue, with the highest on the day of the Bonus issue.

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IMPACT OF WORLD BANK LENDING ON ASIAN ECONOMIES: A COMPARATIVE ANALYSIS OF INDIA AND CHINA

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Dr. Rajinder Kaur**

ABSTRACT

The present study is an attempt to find out what impact does World Bank lending has on the economic growth of Asia's two of the most developing economies, i.e., India and China. For the purpose of study, data for 28 years, from 1991-2018 has been taken. Multiple linear regressions was applied. The results reveal, that while World Bank Lending has positive and significant impact on the economic growth of India, the impact was insignificantly positive in case of China's economic growth. The study further concludes, that the nations should focus more on effective utilization of the foreign aid, in order to have promising impact of the economic growth.

KEYWORDS: World Bank, Economic Growth, GDP, Multiple Linear Regression.

Introduction

India and China are two of the most flourishing developing economies, not only in Asia, but throughout the world. Both these nations are categorized under developing economies. Year after year, these nations are reaching new heights in all spheres of development. However, to sustain this process of development, continuous availability of finance is needed. But since these economies are still growing, self sufficiency of funds to run the nation, is out of question for them. For this purpose, India and China, like all other developing nations of the world, seek financial assistance from International Financial Institutions. These institutions provide financial aid to developing nations like India and China, to give them a hand, in their process of economic development.

World Bank is one of the leading International Financial Institution and India and China are amongst it's top borrowers. World Bank has lent money to these countries for various purposes, pertaining to different sectors and still continues to do so. However, the effectiveness of such lending, has always been a debatable issue. While some researches show, that foreign aid has positive impact on the development of the countries, others prove to contrary.

The present study is an attempt to add onto the ongoing debate. It analyses the impact the World Bank lending has on the economic growth of the two of most developing nations in Asia, India and China.

Review of Literature

The various literature reviewed for the purpose of the study are as under:

Ahmad (1990) attempted to study the impact of foreign aid on the economic growth of Bangladesh. The data for the period 1960-1980 was used. A positive and significant impact of foreign aid on the economic growth of Bangladesh was found.

Dreher (2004) analyzed the impact of IMF programme on the economic growth of ninety eight countries over the period 1970-2000 and concluded that IMF programme does not contribute to the economic growth of the nations.

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Butkiewicz and Yannikaya (2005) studied the data of 100 countries for the period 1970-1997, to analyze the impact of IMF and World Bank lending on the long run economic growth of the countries. The study concluded that the lending by both the institutions had a negative and insignificant impact on the economic growth of the nations under study.

Mohey-ud-din (2005) conducted a study to find what impact does foreign aid has on Pakistan's economic development. The study was conducted for the period 1960-2002 using Multiple Regression. The paper concluded that aid has significantly positive impact on the economic development of Pakistan.

Rajan and Subramaniam (2009) studied the relationship between aid and growth of all developing countries of Sub Saharan Africa and East Asia for the period 1960-2000. Regression analysis was used for the purpose of study. Insignificant impact of aid inflow on economic growth was found.

Objectives

The objective of this paper is to analyze the impact of World Bank lending on the economic development of selected Asian economies, i.e., India and China.

Research Methodology

For the purpose of the study, data has been collected for a period of 28 years, from 1991 to 2018. Data has been collected from World Bank Indicators and Annual reports of World Bank. Multiple linear regression has been employed for the analysis. Gross Domestic Product per capita (GDP) has been taken as the dependent variable while the predictors are, Foreign Aid (Lending by the World Bank), Inflation (as measured by Consumer Price Index) and Gross Domestic Savings (GDS as a % of GDP). SPSS software was used to compute the results.

Analysis and Findings

Multiple Regression Analysis was carried to reach the results of the set objectives.

Table 1 and Table 2 contain the results of the estimated regression model for India and China, respectively.

According to Table 1, aid has a positive and significant impact on India's economic growth. R-square value indicates that 99.3% of the variations in the results can be explained by the variables of the model. F statistic is also found to be significant, meaning thereby, a significant relation is established between the dependent variable and the predictors.

Table 1: Estimated Regression Model for India

Variable	-Coefficient	t-Statistic	Sig.
AID	2.149	3.336	.003
GDS	9.531	4.431	.000
CPI	3.452	36.658	.000
Constant	123.432	0.654	0.520
R-Square = 0.993 Adjusted R-Square = 0.992 F-Statistic = 1147.15 P-Statistic = 0.000			

Source: Author's construction from SPSS Software

Table 2: Estimated Regression Model for China

Variable	-Coefficient	t-Statistic	Sig.
AID	1.248	0.124	.902
GDS	7.292	1.373	.182
CPI	6.743	7.932	.000
Constant	232.432	3.764	0.001
R-Square = 0.851 Adjusted R-Square = 0.832 F-Statistic = 45.710 P-Statistic = 0.000			

Source: Author's construction from SPSS Software

According to Table 2, aid has a positive but insignificant impact on China's economic growth. R-square value indicates that 85.1% of the variations in the results can be explained by the variables of the model. F statistic is also found to be significant, meaning thereby, a significant relation is established between the dependent variable and the predictors.

Conclusion

No nation can grow without having adequate amount of finance at its disposal, at the right time. Developing nations, like India and China, are no exception. An attempt was made to find out the effect of World Bank's lending on the economic growth of India and China, Two of the most developing nations. The results reveal, a positive and significant impact in case of India while a positive and insignificant impact in case of China. Further, it is suggested, that the countries should give due consideration on effective utilization of aid received so that promising impact on the country's development could be enhanced.

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BENEFITS AND CHALLENGES OF CASHLESS ECONOMY

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ABSTRACT

Indian economy has always drifted through macroeconomic transformations from time immemorial, which has shaped the economy leading to its current state. In ancient times transactions were usually conducted through system of credit, in which goods and services were exchanged for a promise of future compensation. Then came the age of mercantilism, where trade happened through exchange of gold or silver and further its transformation into barter system. Barter system was the one where commodities were exchanged to satisfy the end means. Later, with the expansion of economy and arrival of industrialization, money was invented. Money can be defined as a physical economic unit which is uniformly accepted as a medium of exchange in transactions, at the same time it acts as a measure and store of value.

KEYWORDS: *INDIAN economy, Macroeconomic Transformations, Mercantilism, Barter System.*

Introduction

Money, today in a broader sense, consists of coins and currency notes. India is majorly a cash driven economy, where people prefer to carry cash instead of digital money in the form of ATM/credit cards. This scenario changed drastically with the announcement of demonetization in November 2016, when the government of India announced demonetization of all 500 and 100 banknotes. It announced issuance of new 500 and 2000 banknotes in exchange of old 500 and 100 notes and since then, our country is witnessing major economic reforms. Approximately 86% of the existing currency was withdrawn from circulation in order to end the menace caused by cash driven economy. This announcement was followed by cash shortages creating significant disruption in the economy and people seeking to exchange their banknotes had to stand in lengthy queues and had to face much more problems. However, in general, people supported the move as this step was going to inculcate more transparency in to the system by reducing corruption and flow of black money which would eventually result into economic growth and decentralization of resources.

Cashless economy is powered by the digital revolution which enables paperless transactions with the help of electronic media including use of cards, net banking, mobile banking, e- wallets and UPI payment gateways. The government has initiated many schemes and programs which has promoted cashless transaction making it easy, secure and beneficial to all parties. For example, removal of duties and taxes for cashless transaction devices, IMPS, RBI's easing of the norms of private payment gateways, BHIM app, lowering income tax on non-cash transactions for small scale businesses, Aadhaar Pay and Rupay cards. This transformation has also given rise to many start-ups like Paytm, Amazon-pay, Paypal, Phone-pay which have transformed the ecommerce sector a lot.

One of the major benefits for the economy going cashless is achieving financial inclusion through innovations in banking system. Transactions have become quick and real time and there is no dependency on financial intermediaries. Digital payment system helps monitor the payments of elusive and informal sectors by monitoring the transactions and brining them in the tax base, hence boosting the GDP. It helps in tracking illicit transactions, as large denomination of notes is prevalent in activities like extortion, money laundering, human trafficking, leakages on subsidy schemes in the form of tax evasion, black money, Grey economy i.e. crimes, terror-funding, drug trafficking, illegal immigration and corruption. It makes way for elimination of fake currency notes, cash can be hoarded easily leading to

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unaccounted income which creates loss of revenue to the economy in the form of taxes. Cash is portable, anonymous and easier to store, making such crimes easier to commit and therefore, leaving an electronic trail of transactions can benefit the authorities in tracking down on such deals. Further to this, cost of logistics of physical money, printing paper and ink which is in thousand of crores could be cut down by transacting in digital money.

From a user perspective, going cashless has many advantages that serve as a motivation for people to go cashless. It promotes ease of doing business as every transaction has a digital record, ease of conducting financial transactions, as you no longer have to carry cash, cards or even stand in long queues of ATM. It's an easy and safe option to spend while you are travelling. Transaction can be done anytime, without being physically present, reducing the dependency of transacting in office hours. In order to incentivise cashless transactions, government has come up with lot of discounts and freebies, like waiver of service tax on card transactions of up to Rs. 2000, 0.75% discount on digital purchase of fuel, saving on railway tickets, highway tolls and buying insurance digitally. To add to this, there are cashbacks offers and discounts offered by mobile wallets like Paytm, reward points and loyalty benefits on credit cards. It is now easy for people to track their spends and in case of an income tax scrutiny they can easily explain their spends and cash flows. People can plan their finances in a better way by keeping tab on expenses and this allows better budgeting.

Flip side of the 'coin' is that going cashless can expose you to a higher risk of identity theft. Since we are not culturally accustomed to digital transactions, even well-educated people can run the risk of falling into phishing traps. As the digital payments are rising, there is a surge of online frauds and hacking as well. Further, there is a lot of dependency on the mobile phone, loosing which a person will be facing double trouble, not only they will run the risk of losing their confidential information and identity theft, but they will be rendered helpless in the absence of cash and other payment options. If phone gets discharged without any immediate battery backup or charging option, one can be left stranded in middle of a transaction of emergency. Finally, it can be a problem for old people, digitally uneducated and poor people who may not be able to afford smartphones, as these segments will find it difficult to adapt to the changes.

In the end, it can be concluded that if challenges of digital economy can be managed properly by new government initiatives, improving digital infrastructure, increasing technological awareness and digital literacy followed by digital penetration to rural areas, India can successfully harness the benefits of going cashless. Even though there is a huge psychological shift in going cashless, it is a phase of cultural-economic transition which we must go through in order to come up as a better managed country.

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AN ANALYSIS OF FINANCIAL PERFORMANCE OF THE CENTRAL PUBLIC SECTOR ENTERPRISES IN INDIA

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ABSTRACT

Many Central Government Public Sector Enterprises (CPSEs) continue to suffer the legacy of high investment in townships, over-employment, bad location, and inappropriate technology. Pricing of the products of the CPSEs has not been based on market forces and conditions prevailing in domestic and global markets. All these factors have affected adversely the profitability and financial position of the CPSEs in India. The present paper makes an attempt to assess the performance of CPSEs by analyzing the trend in profit, various financial ratios, and capacity utilization. To analyze the growth of financial parameters the mean, standard deviation, coefficient variation (CV) and diagram have been used. The correlation matrix has been computed to find the relationship between the financial parameters.

KEYWORDS: *Disinvestment, CPSEs, Capacity Utilization, Financial Performance, Pricing Mechanism.*

Introduction

The term Central Government Public Sector Enterprises (CPSEs) includes companies set up under the Companies Act, 2013 in government ownership and statutory corporations Act enacted by the Parliament. The as per the Department of Public Enterprises (DPE) the Central Public Sector Enterprises is a company in which the central government possesses more than 50 percent of equity share holding or one of its holding companies or its subsidiary owns more than 50 per cent equity. The Industrial Policy of 1991 commenced the process of de-licensing, and lifting of permit and quota. Many quantitative restrictions were abolished from import and export of the raw material and technical know-how. The market was opened for domestic private capital and foreign capital to provide free entry up to 51 percent equity in priority areas. The aim of economic liberalization was to promote the competition and allow new firms to enter the market to promote the economic efficiency. A paradigm shift of the Government's economic policy orientation began since 1991 due to foreign debt servicing crisis and poor performance of public sector enterprises. After opening of the market for the private sector and MNCs, the public sector undertaking started struggling to maintain their monopoly position in many areas and market. With the entry of new firms a number of problems began to manifest themselves in many enterprises. Problems were observed in terms of low productivity, poor project management skills, over-manning, lack of technological up-gradation, inadequate attention to research and development and low priority to human resource development. Public sector was assumed to work for the public welfare not for the profit motive. Because of that the price policy adopted was not based on the market conditions. But it is also true that faulty planning and marketing strategies are equally responsible for the poor performance of public sector enterprises. "It should not be forgotten that PSUs have some inherent handicaps in generating profits commensurate with those in the private sector: (i) Their social obligations are much higher; the 'social profits' cut into financial returns, (ii) The form and content of the existing system of accountability to Parliament, executive and judiciary is inhibitive of business-like decision making, (iii) Many PSUs continue to suffer the legacy of high investment in townships, over-employment, bad location, and inappropriate technology and, (iv) Profits of industries in the basic goods and services cannot be compared with the units producing consumer goods and services". (Narain Laxmi).

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Pricing of the products of the CPSEs has not been based on market forces and conditions prevailing in domestic and global markets. Many CPSEs have adverse impact on their profitability. These have been set up in backward and uneconomical region. In addition to this, these have been suffering from over-manning due to political and bureaucratic intervention. Government is less good than businessmen at ensuring efficiency and exploiting the business opportunities. These enterprises are supposed to serve many social and economic purposes for the well-being of society but the cost of these services cannot be quantified in monetary terms for the cost and benefit analysis. Therefore, it is not feasible to assess the performance of CPSEs on the basis of merely profitability. In this paper an attempt has been made to assess the financial performance on the basis of financial ratio and their analysis.

Review of Literature

Talha Mohd. (1986) assessed the economic performance of the public sector undertakings through the gross profit ratio, working capital turnover ratio, returns on total assets and return on capital. He found that due to high operating cost the gross profit has been very low. The raw material was purchased at the higher price than the prevailing prices. The cost of hiring the labour was very high. A large amount was spent on day-to-day functions of the official and staff. Many public sector undertakings were incurring the gross loss. This indicates that the production operations were not planned in systematic way to economize the activities. He found the performance of the most of the public sector undertakings was not satisfactory and economically viable.

Kumar Pramod (1991) in his study for analysis of financial statements covered the 17 private, 5 state owned and 1 central public sector companies. He analyzed the fixed capital, working capital, current ratio, liquidity ratio, interest coverage ratio, solvency ratio, debtor turnover ratio, average collection period. He found that the activities and products of the public sector undertakings were not based on the prevailing conditions and requirements. There was no proper demand forecasting before the production. Before extending the product line and production area the feasibility report was not considered properly. Even the human and physical assets planning were not satisfactory. He found that many public enterprises rather than contributing to growth of the economy were burden on the exchequer. He suggested some policy measures to improve the profitability and techniques of cost control.

Objectives of Study

- To study the financial performance and examine the efficiency of the selected CPSEs.
- To analyze the capacity utilization of the selected CPSEs.
- To find the relationship between the financial parameters.

Methodology and Data Source

To analyze the growth of financial parameters in the CPSEs, the mean, standard deviation, coefficient variation (CV) and diagrams have been used. The correlation matrix has been computed to find the relationship between the financial parameters. The data has been compiled from the Public Enterprise Survey (published by the Bureau of Public Enterprises), Ministry of Finance, Govt. of India, Department of Disinvestment, Govt. of India and various issues of Economic Survey.

Analysis and Interpretation

• **Financial Performance of the Central Public Sector Enterprises (CPSEs)**

The prime cost ratio shows the cost of variable factors like raw material, and labour. This is the first component of the cost of production. There is need to manage the cost from this point. It requires proper planning of purchase of raw material and required labour. In many CPSEs, it has not found economical. The gross profit ratio which is the first and initial stage of profit making for the enterprises is satisfactory only for few CPSEs. The gross profit provides the signal to management about the future profitability of the enterprise. Due to stiff competition in domestic and global market, the sales proceeds have declined rapidly. There is immediate need to reduce the operating cost and raising the operating profits otherwise, these companies will become sick. The average collection period shows the time of recovery of the sales. Table 1 shows that current ratio is satisfactory. It gives idea about the current assets compared to current liabilities of the enterprise. The higher the ratio better is the position of the concern. The table 2 shows the relationship between the financial parameters. The long term ratios are positively related to long term assets ratio. While, liabilities are negatively affected the creation of fixed and current assets.

Table 1: Financial Performance of Profit Making Central Public Sector Enterprises (CPSEs)

Financial Ratio	Mean	S.D.	C.V.
Prime Cost/ Sales	33.87	24.57	72.54
Operating Profit Ratio	27.64	12.96	46.89
Gross Profit Ratio	24.43	19.74	80.80
Manpower Cost/Sales	7.78	5.93	76.22
Working Capital Turnover Ratio	3.24	1.56	48.15
Debt Equity Ratio	1.85	0.48	25.95
Return on Total Assets	7.34	5.24	71.39
Return on Capital	16.62	11.80	71.00
Solvency Ratio	56.26	7.43	13.21
Liquid Ratio	1.87	0.61	32.62
Interest Coverage Ratio	9.85	7.96	80.81
Current Ratio	2.21	0.42	19.00
Fixed Assets Turnover Ratio	0.64	0.27	42.19
Inventory Turnover Ratio	4.76	1.64	34.45
Debtors Turnover Ratio	8.16	3.07	37.62
Average Collection Period	76.79	56.14	73.11
Capital Turnover Ratio	80.06	24.23	30.26
Proprietary Ratio	49.11	6.79	13.83

Source: Authors' calculations

Table 2: Correlation Matrix

	OPR	LR	GPR	WCTR	CR	PR	ROC
OPR	1.000						
LR	.538*	1.000					
GPR	.110	-.292	1.000				
WCTR	.657*	.721*	.689*	1.000			
CR	-.333	.130	.845*	-.033	1.000		
PR	-.471	-.256	-.264	-.063	-.174	1.000	
ROC	.603*	.548	-.100	-.242	.092	-.856*	1.000

* Significant at 5% level of significance

Note: OPR- operating profit ratio, LR- Liquidity Ratio, GPR- gross profit ratio, WCTR- working capital turnover ratio, CR- current ratio, PR- proprietary ratio, ROC- return on capital.

Capacity Utilization

The table 3 and 4 show the capacity utilization of public sector enterprises operating in the manufacturing and production sectors. The CPSE Hindustan Salts Limited could utilize only 60% of the installed capacity and Cement Corporation of India Limited used 20% its productive capacity. This is a matter of great concern. A developing country like which is fighting with poverty and unemployment cannot afford the under-utilization of scarce resources. The Artificial Limbs Manufacturing Corporation of India and Security Printing and of Minting Corporation India Limited utilized their installed capacity to a great extent.

Table 3: Capacity Utilization in Manufacturing CPSEs 2016-17 (Consumer Goods/Textiles)

Central Public Sector Enterprises (CPSEs)	Product	Installed Capacity	Capacity Utilization (%)
HLL Life care Ltd.	Blood Bags	12.51 (In M. Pcs.)	74
	Suture	6 (In L.DoZ)	34
	Pregnancy Test Card	26 (In M. Pcs.)	48
	Suture	5.97 (In L.DoZ)	34
Hindustan Newsprint Ltd.	Newsprint	100000 (In MT)	92
Hindustan Salts Ltd.	Bromine	900 (In MT)	60
Security Printing and of Minting Corpn. India Ltd.	Circulation Coins	7334 (In M. Pcs.)	132
	Bank Notes	6917.32 (In M. Pcs.)	127
	Non Judicial Stamp Paper	319.32 (In M. Pcs.)	88
	Passport and Allied Booklets	12.46 (In M. Pcs.)	125
Artificial Limbs Mfg. Corpn. of India	Tricycles	78000 (In Nos.)	119
	Wheel Chairs	30000 (In Nos.)	163
	Crutches	62400 (In Nos.)	129
	Hearing Aids	85200 (In Nos.)	142

Cement Corporation of India Limited	Cement	38.98 (In Lakh Ton)	20
NEPA Limited	Newsprint	8964000.00 (In MT)	0.05
National Textile Corpn. Ltd.	Yarn	615.43 (In KG)	85

Source: Based on the data collected from Ministry of Heavy Industries and Public Enterprises, Govt. of India.

Note: Abbr. M. Pcs: Million Pieces, MT: Metric Tonne, L.Do: Lakh Dozen

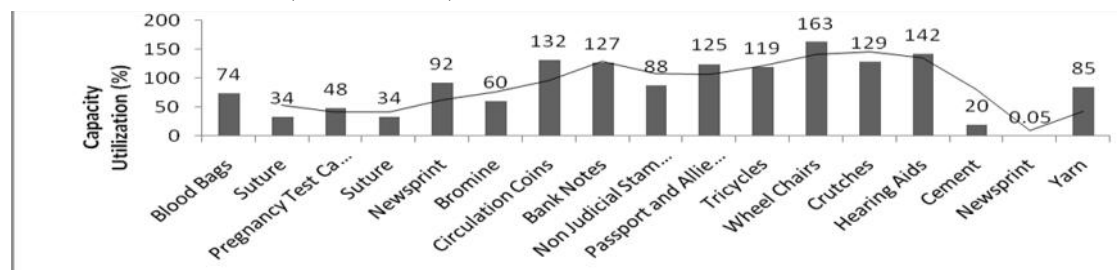


Fig. 1 trend in capacity utilization in manufacturing CPSEs

Table 4: Capacity Utilization in Manufacturing CPSEs 2011-12 to 2015-16 (Consumer Goods/Textiles)

Product/CPSE	Unit	Capacity	Production (%age Utilization Capacity)				
			2011-12	2012-13	2013-14	2014-15	2015-16
Consumer Goods							
Artificial Limbs Manufacture Corpn. of India							
Aids and Appliances	Numbers	272893	190077	350226	403401	315704	272893
			0	0	0	0	(100)
Cement Corpn. of India Ltd.							
Cement	LMT	3898671.33	854550	708005	836265	-	-
			-21.92	-18.16	-21.45	-	-
Cement	MT	3898056.46	854550	708005	836265	952685	912870
			-21.92	-18.16	-21.45	24.44	(23.42)
Hindustan Newsprint Ltd.							
Newsprint	MT	99986.27	102450	103282	103360	101986	-
			-102.45	-103.28	-103.36	102	-
Hindustan Paper Corporation Ltd.							
Writing and Printing Paper	MT	NA	180262	138962	144057	-	-
Newsprint/Printing Paper	MT	100001	-90.13	-69.48	-72.03	-	-
			-	-	-	-	100501
			-	-	-	-	(100.5)
Hindustan Salts Ltd.							
Bromine and Salt	MT	NA	211	280	294	-	7988
			-23	-31	-33	-	-
Bromine	MT	911.76	-	-	-	310	264
			-	-	-	34	(29.33)
Salt	MT	NA	-	-	-	6578	-
Nepa Ltd.							
Newsprint	MT	88338.24	59205	50055	43110	30035	21825
			-67	-57	-49	34	(24.80)
Sambhar Salts Ltd.							
Refined and Processed Salt	MT	NA	46006	41869	38296	34497	22022
			-42	-38	-35	-	-
Salt	MT	NA	151683	168649	180459	185064	205973
			0	0	0	-	-
Security Printing and Minting Corpn. India Ltd							
Bank Note	MPCS	6581.1	6541	7421	8018	8358	7150
			-105	-112	-121	127	(104)
Circulation Coins	MPCS	6607.5	6282	6708	7650	7929	9254
			-101	-101	-116	120	(126)
Non Judicial Stamp Paper	MPCS	321.09	329	406	411	414	289
			-103	-127	-128	129	(90)
Passport and Allied Booklets	MPCS	12.5	7.75	5.69	6.3	10.67	15.277
			-62	-45.55	-50	85.36	(122)
Security Paper	MT	2996.33	2925	2925	3240	3266	-
			-98	-98	-108	109	-

Textiles							
National Jute Manufactures Corporation Ltd.							
B Twill Jute Bags	MT	-	4886	9379	9916	-	-
			-5.33	-10.25	-10.84	-	-
National Textile Corpn. Ltd							
Cloth	L. Meter	-	120.25	127.29	147.78	-	-
			-69.48	-66.65	-79.77	-	-
Yarn	Lakh Kg.	586.67	350.2	427.98	489.11	-	-
			-83.37	-81.34	-70.59	-	-
Yarn and Cloth	Kg. and Meter	648.46	-	-	-	-	562.02
			-	-	-	-	(86.67)

Source: Ministry of Heavy Industries and Public Enterprises, Govt. of India.

Note: Figure Appearing as Zero and NA Relate to the Information is Not Available.

Table 5: Amount of Investment and Net Block in (CPSEs) 2018

(in Lakh)

Name of CPSE	Investment	Net Block
Air India Engineering Services Ltd	83098	36895
Air India Ltd	5891774	2650574
Airline Allied Services Ltd	40225	774
Andaman and Nicobar Islands Forest and Plant. Dev. Corp. Ltd	31900	286
BEL-Thales Systems Ltd	5762	494
Bharat Petro Resources Ltd	528981	6249
Bharat Pumps and Compressors Ltd	13297	4237
Bharat Sanchar Nigam Ltd	2336129	10628592
Bharat Wagon and Engg. Co. Ltd	10003	440
BHEL Electrical Machines Ltd	1050	437
Birds Jute and Exports Ltd	2589	13
Brahmaputra Crackers and Polymer Ltd	419289	782715
British India Corporation Ltd	11726	479
Burn Standard Company Ltd	22454	46901
Fertilizers and Chemicals (Travancore) Ltd	241756	29462
Fresh and Healthy Enterprises Ltd	14567	3487
Handicrafts and Handloom Exports Corp. of India Ltd	1844	28129
Hindustan Fluorocarbons Limited	2297	5170
Hindustan Newsprint Ltd	10900	23258
Hindustan Organic Chemicals Ltd	31284	10240
Hindustan Paper Corporation Ltd	109883	17070
Hindustan Photo Films Manufacturing Co. Ltd	44439	4293
HLL Biotech Ltd	51886	29248
HMT Ltd	152445	1437
HMT Machine Tools Ltd	32949	4324
HMT Watches Ltd	649	5
Hotel Corpn. of India Ltd	13760	3758
HPCL Biofuels Ltd	63248	50163
IDPL (Tamilnadu) Ltd	6592	5949
Indian Drugs and Pharmaceuticals Ltd	572777	1087
Indian Vaccine Corp. Ltd	1879	551
Instrumentation Ltd	14606	2012
Kanti Bijlee Utpadan Nigam Ltd	386060	386965
Mahanagar Telephone Nigam Ltd	1092271	801442
Nagaland Pulp and Paper Company Ltd	18521	382
NBCC Engineering and Consultancy Ltd	100	3
North Eastern Regional Agri. Marketing Corp.Ltd	2768	174
ONGC Mangalore Petrochemicals Ltd	485683	580152
PEC Ltd	6000	21
Prize Petroleum Company Ltd	24500	884
Rajasthan Drugs and Pharmaceuticals Ltd	499	1387
Ranchi Ashok Bihar Hotel Corpn. Ltd	490	520
Rashtriya Ispat Nigam Ltd	1143501	1678264
RITES Infrastructure Services Ltd	5	0
Sambhar Salts Ltd	860	1293

STCL Ltd	150	312
Steel Authority Of India Ltd	3390769	5861072
TCIL Bina Toll Road Ltd	14079	11299
TCIL Lakhnadone Toll Road Ltd	9287	8990

Source: Public Sector Enterprises (PSE's) Survey, various issues.

Table 6: Growth in Real Investment/ Gross Block CPSEs (2002-03 to 2016-17)

(Rs. in Crore)

Years	Accumulated Gross Block in CPSEs	Gross During Year	Growth Over Previous Year (In%)
2002-2003	525301	34903	7.12
2003-2004	596727	71426	13.6
2004-2005	649245	52518	8.8
2005-2006	715108	65863	10.14
2006-2007	782668	67560	9.45
2007-2008	862240	79572	10.17
2008-2009	978167	115927	13.44
2009-2010	1129983	151816	15.52
2010-2011	1237051	107068	9.48
2011-2012	1408046	170995	13.82
2012-2013	1555575	147529	10.48
2013-2014	1756530	200956	12.92
2014-2015	1906796	150266	8.55
2015-2016	2026315	119389	6.26
2016-2017	1808372	143197	8.60

Source: Based on the data collected from Ministry of Heavy Industries and Public Enterprises, Govt. of India.

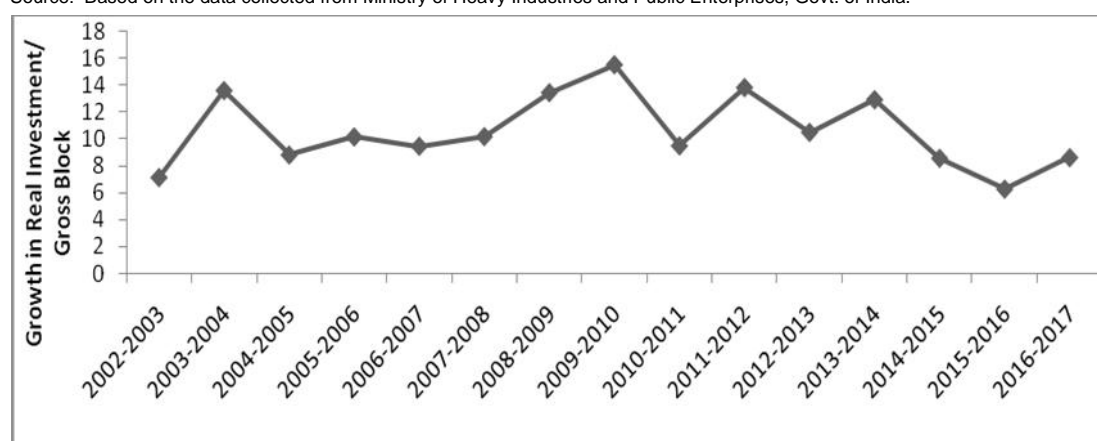


Fig.2 Trend in Accumulated Gross Block in CPSEs

Table 7: Variability in Accumulated Gross Block in CPSEs

	Accumulated Gross Block in CPSEs	Gross Block
mean	11,95,874.93	1,11,932.33
standard deviation	5,16,374.86	48,591.91
minimum	525301	34903
maximum	2026315	200956
standard error of the mean	1,33,327.41	12,546.38
skewness	0.29	0.11
kurtosis	-1.44	-0.97
coefficient of variation (CV)	43.18%	43.41%

Source: Authors' calculations

Table 8 shows that in 2014-15, 112 CPSEs declared the dividend. There has been a decline in the percentage of dividend compared to the 2013-14. In 2013-14 it was 48.56% of the net profit while in 2014-15 it was 44.27%.

Table 8: CPSEs Declared Dividend

Type of CPSE	CPSEs Declared Dividend (Crore)			
	No of CPSEs	Paid Up Capital	Net Profit	Dividend Declared
Statutory corporations	2	725	2141	429
Listed Companies	34	58125	97471	40424
Unlisted Companies	76	47762	30826	16896

Source: Public Sector Enterprises (PSE's) Survey.

In absolute figures, the decline in dividend declared was by 8,446 crore as compared to the previous year. The distribution of dividend is an indicator of the financial position of the concern and a great attraction for the prospective and existing shareholders.

Conclusion

The assessment of financial parameters indicates that due to accumulated losses, many CPSE's are on the verge of closure. The gross profit ratio, working capital turnover ratio, returns on total assets and return on capital are quite low. The cash management has not properly planned to exercise a balance between return and requirement. The average collection period is also high which increases the problem of working capital. The capital market has not been properly used for the raising the capital and extension requirement. Problems were observed in terms of low productivity, poor project management skills, over manning, lack of technological up gradation, inadequate attention to research and development and low priority to human resource development. Capacity utilization has been found very poor. This implies the wastage of human and physical resources.

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THE PHENOMENAL GROWTH IN MARKET BY OVERCOMING PROBLEMS OF E-COMMERCE IN INDIA

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ABSTRACT

Purpose: *The purpose of this paper is to analyse the growth by overcoming problems of E-commerce from the customer's and seller's perspective.*

Design/methodology/Approach: *The study based on exploratory cum descriptive nature by using secondary data with reference to journals, internet, books and research article.*

Findings: *The business focused on customers problems apart from marketing and by providing better services with advancement of brand promotion, ease of shopping, detail product review and many more.*

Research Limitations/Implications: *The research based on few variables and it is done through secondary data. It is required to studied other factors and steps should be taken to explain them.*

KEYWORDS: *Electronic Commerce, Smartphone Saturation, Problem and Growth.*

Introduction

Information Technology has transferred the way people work. Electronic commerce has allowed to run free yet another revolution, which is changing the way businesses buy and sell products and services. Associated with the buying & selling of information, products and services over computer communication networks. E-commerce helps behavior traditional commerce through new traditions of transferring and processing information, since it is information which is at the core of any commercial activity. Information is electronically transported from computer to computer in an automated way.

E-commerce includes not only transaction between buyer and seller through internet but also functioning in various business process which helps to achieve business goal. These business transactions are business to business, business to consumer, business to government, consumer to consumer, and consumer to business, etc. Online shopping is increasing rapidly due to benefits of lower price in good brands of product and services which offer by businesses. The use of E-commerce increases enormously due to the easy and appropriate way of exchanging goods and services in the earlier days and now a days it becomes simulated main street of the world. The Indian e-commerce market is expected to raise to US\$ 200 billion by 2026 from US\$ 38.5 billion as of 2017. Much progress of the industry has been caused by increasing internet and smartphone saturation. The ongoing digital revolution in the country is expected to rise India's total internet user base to 829 million by 2021 from 604.21 million as of December 2018.¹

The growth of e-commerce increased due to many reasons like busy lifestyle of individuals, high disposable income as increased employment, awareness of product due to various products and brands, increased usage of internet, educational level of computer is increased etc. It is also providing cost

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benefit to customer by reducing cost of products and services. Switching costs endorse to competitive advantage by increasing the bargaining power of suppliers, increasing barriers to entry, decreasing the risk of substitutes and reducing the bargaining power of buyers. The increase competition for new customers and decrease competition for existing customers. Higher switching costs lead to increases in customer retention, profitability and competitive advantage.²

The awareness of e-commerce includes a broad time of business activities, that vary from the straightforward provision on the web of information or advertising about products and services that visit physical and area unit ordered, delivered and brought by physical means that to transactions that area unit entirely virtual and involve promoting, advertising, ordering, delivering, buying and servicing products and services entirely over the web. First, the Internet enhances the relative power of buyers, suppliers and intermediaries by bringing down the cost of finding and distributing market related information. Second, the broadcasting of information through e-commerce enables more firms to offer substitute goods and services.³

E-commerce has a lot of benefits which add value to customer's satisfaction in terms of customer suitability in any place and allows the company to improvement more competitive advantage over the other competitors. The phenomenal growth of e-commerce increased due to many reasons like busy lifestyle of individuals, high disposable income as increased employment, awareness of product, increased usage of internet, increase educational level of computer etc.

Review of Literature

Review of the literature plays an important role in any research; it is considering the importance of E-commerce and a number of academicians have tried to study the Problem and Growth of e-commerce.

A Brief Review of Literature on E-Commerce: Problem and Growth

No.	Title	Author name	Area of Research	Findings and Suggestion
1	E-commerce and its Future Prospects in India.	Dr.S.M.Tariq Zafar , Dr.D.S. Chaubey and Dr S.R.Sharma (2009)	The study conducted conceptual and comparative study on future aspects of E-commerce.	1) The Business has to focused on needs of better care and consistency in execution, tight integration of the system by the online retailers apart from the develop latest technology. 2) government has play judicial role in promotion and development of E-commerce with social safety measure in the respect of customers.
2	E-Services in India: Conceptual Framework of Internet-Commerce Is Consumer Safe?	Dr. Jaskaran S Dhillon, Mr. Madhur Joshi, and Ms. Ramita Verma (2012)	The research examine which countries are the largest in terms of Internet users, and also aspects into the e-commerce growth potential of Internet in India.	1) There is the opportunity cost of sales. 2) There is the shift in demand from online to off-line business channels. 3) Privacy concern represent an intangible cost component for online business.
3	Problem and Prospects of E-commerce	Alka Raghunath & Murli Dhar Panga (2013)	The area of research is analysed the challenges and opportunities of E-commerce.	1) E-commerce creates new opportunities for business and also for education and academics. 2) New ethical issues of business must be identified and immediate steps and actions should be taken.
4	E-commerce in India- Problems and Prospects.	Dr. Prakash M. Herekar (2014)	It attempts to examine the theory of E-commerce by covering various topics.	1) E-commerce offers many benefits are cost effectiveness, quick shopping comparison, better customer service, higher business margins, information saving and market development etc.
5	Growth of E-commerce in India: An Analytical Review of Literature.	Madhurima Khosla, and Harish Kumar (2017)	The Growth of E-commerce in India examine on the basis of various literature review.	1)Through mobile penetration, opportunities are emerging in the rural markets which, cannot be tapped unless followed by a network explosion, better mobile app infrastructure, content development in local languages and last mile connectivity.

History of e-Commerce

The timeline of the history of e-Commerce⁴:

- 2000: Rediff entered India time in the E-commerce market after 3 to 4 months. However, except two companies none of were able to extensively convince the country to shop online.
- 2002: Indians taught to book tickets online and many people felt safe to use their credit cards because website is under control of government. For this reason, E-commerce achieve outstanding achievement.
- 2003: Air Deccan announced low cost airlines to India which was to generate an industry for airline ticket collection in 2003, which would soon be conquered by MakeMyTrip.
- 2007: India started their product-based e-commerce taking space only with Flipkart. Their discounts model and excellent customer service made a lasting impression on Indian online customers.
- 2009: Myntra was in the business of personalization of online afterwards its expanded to retail fashion and lifestyle products.
- 2013: Amazon started with electronic goods and now has expanded into fashion apparel, beauty, home essentials and healthcare categories in 2013.
- 2017: Instagram presents shoppable tags- enabling people to sell directly from the social media platform.

Methodology

The present study is exploratory cum descriptive nature. It is based on the analysis of secondary data with reference to journals, internet, books and research articles.

Objective 1: to measure the impact of the scale through overall growth of E-commerce on the willingness to repeat the purchase experience and the willingness to recommend it to others.

Objective 2: to validate empirically the proposed theoretical aspect of E-commerce.

Objective 3: to explain the problems of E-commerce in the society.

Problems of e-Commerce that Faced by Customer

In the era of the Internet-based uprising, e-Commerce industry is high around the world. This may seem smooth sailing at first but many companies small or big have come across many problems associated with E-Commerce business towards customers.

- **The Economic Constrain**

When business focused on consumer's affordability to buy product then it is found two possibilities. The first possibility is low price of product includes discounts with limited hour and second is High price to get position in market with better quality of product.

Solution: while lunching or selling the product business should fix price and quality according to customer perspective.

- **False Advertisements**

While surfing internet in PC people see advertisement such too get thinner in few days which is totally wrong. Beyond the fact that every person wishes to get beautiful, there is also the question is 'how' to really achieve it. Many customers believe in such fake sites and invest their money and getting nothing by losing their hope.

- **Time Consuming Delivery Time**

Long delivery times are a major problem for B2C trade, because customers don't like to wait for their product. Sometimes customers have to wait for their product for more than due date of product and it is totally worsen situation for them. It is important for public to know when their product is arriving so that they can preparation their day accordingly. Customers often complain that the delivery guys do not even call them before arriving to deliver the product. Generally, consumers search for several minutes in a category before selecting one or more products for purchase. If direction is not smooth, users will end up getting tired and leaving the site, leaving after a neglected shopping cart. It is not surprising that this is one of the problems faced by e-commerce consumers.

- **Hidden Cost Loose Customer's Belief**

Businesses make the offer more attractive to the customer, relying on the belief that after procedure of ordering process, they won't leave it and finalize the purchase. Users need to be aware of all costs, including shipping and handling and taxes up front, moving to the checkout with a clear understanding of the price they'll be charged. Sometimes additional cost make product too costly and it is totally burdensome for customers.

- **Required Account for Purchase of Product**

Businesses think that user accounts will make it easier for customers to buy product but they can have the reverse outcome for new customers. The major error among ecommerce websites is requiring users to create an account prior to purchase. For this reason, if a customer wants to buy product but because of this lengthy procedure they refuse to buy it.

- **Return and Refund of Product**

Online shoppers select the product but if there is no return policy for a time, they hesitate to buy it. When products are returned because it is damaged or customer is not satisfied, business go through from huge losses of shipment and even it plunders the brand image. Poor return policy and refund procedure of product businesses loose customer belief and sustainability in market. Customer also lost their money and faith in online shopping when product gets no return and refund. Customers place an order for the returns to be picked up and there is no answer. They will send the delivery man when they seem fit, almost never according to the promised time. At times customers receive the product after the want is over.

- **Poor Product Quality**

Poor product quality is most general problem faced by customers who shop online regularly. The quality of the product is often not up to the mark with what is offered in the image. When they buy product, they suffered such problems like product totally different in colour, size, damaged product, poor quality, not getting actual product and many more. Many websites become a marketplace for sellers to sell their products with the competition growing in e-commerce industry, and the issue of fraudulent sellers is increasing to earn more profit. Even worse, quality-checks have become so rare with the magnitude of online sales which is soaring high.

- **Limited Payment Method**

Most of times customer suffered in payment process due to lack of knowledge because not all customers have facility of Debit Card and Credit Card. Sometimes consumers do not know how to make the payment if the debit cards they use are not available as an option. Further so, consumers are often stuck with the payment options when Cash on Delivery is not available. They fear to choose online method due to frauds picking up none so most consumers prefer paying cash on delivery as they are doubtful about sharing their card information. This is a general complaint by many consumers these days. They do not have many payment methods that they can belief.

- **Absence of Payment Confirmation**

This is common another problem is missing payment confirmation page. When the consumers are linked with payment page their money deducted from the account and immediately page close without any prior note. While consumers asking for refund to company is a different problem for them because of lengthy process. It is happened while sales in bulk but the same time they give answer page is working good and sometimes company is refused to give refund too.

Reasons for Growth of e-Commerce

E-commerce has been growing rapidly in recent times. It grows every single area of market and also reach to number of individuals from child to old age. The main reasons for explosive growth of e-commerce are explain below:

- **Increase the Ratio of Internet Usage**

The report by Nielsen and Internet and Mobile Association of India (IAMAI) has observed that India reach 451Mn monthly active users as on March 31, 2019. It is noted that out of 451 Mn users 385Mn are 12 years of age and 66 Mn are in the age bracket of 5 to 11years who access the Internet on the devices of family members.⁵ As the ratio of internet increase to the child to old age the value of E-commerce is also increase.

- **Busy Lifestyle of Individual**

Earlier, the individual must go for market to buy daily needs of products for satisfying their needs, but now life becomes so fast to the point that they cannot go to the market each and every time for shopping. People also want to buy their products to their comfort zone. This is the main reason for they depend on online website like big basket, Grofers, Nature's Basket, Reliance fresh, Amazon Pantry etc. The online websites provide reliable products in expected time and it is safe.

- **Digitalization of Banking Sector**

Online banking is saves time by allowing direct transaction form anywhere. There is no need to wait for bank when it opens and person get money. The main advantage of Online banking is, it provides 24*7 services and brings all things to the table in convenient way. It is also Eco-friendly process as it does not need paper for conservative banking modes and hence protect the environment.

- **Increasing Product Awareness**

As the level of Education increase people became more sensitive towards products. They know how to buy products in good manner so then can be saved from fraudulent from fake Products. Online shopping is best option to buy products from website because they provide better customer services. In recent times people are getting much more information about products through assistance of media like Mobile, TV, New papers etc. so they shop online with confidence.

- **Indian Shoppers Fascinate by Various Discounts and Offers**

India a land of various religion and faith, it has full of festive and wedding which spread across the year. Festive time is a boom time for retailers and they provide heavy discounts and offers to their customers. Indian people have good sense to negotiate to buy product by using coupons and codes through their smartphones. As competition increase day by day in each and every area of business, they provide products at minimum price with good quality to sustain in market.

Future Aspect of e-Commerce

The e-commerce has changed the way business is complete in India. The Indian e-commerce market is predictable to raise to US\$ 200 billion by 2026 from US\$ 38.5 billion as of 2017. Much growth of the industry has been generating by increasing internet and smartphone penetration. The continuing digital transformation in the country is predictable to increase India's total internet user base to 829 million by 2021 from 560.01 million as of September 2018. India's internet economy is predictable to double from US\$125 billion as of April 2017 to US\$ 250 billion by 2020, majorly backed by ecommerce.

India's E-commerce revenue is predictable to jump from US\$ 39 billion in 2017 to US\$ 120 billion in 2020, rising at an annual rate of 51 per cent, the highest in the world. The future of ecommerce is indefinite, but some things remain constant delivery times will progress, customer service will get progressively better, and product selection will become ever greater. Using personal online data such as search queries, page visits, and purchase history, brands transform their online stores to greatest serve the customer's needs and interests.

Propelled by rising smartphone penetration, the launch of 4G networks and increasing consumer wealth, the Indian e-commerce market is predictable to raise to US\$ 200 billion by 2026 from US\$ 38.5 billion in 2017 Online retail sales in India are predictable to grow by 31 per cent to touch US\$ 32.70 billion in 2018, led by Flipkart, Amazon India and Paytm Mall. During 2018, electronics is now the biggest contributor to online retail sales in India with a share of 48 per cent, surveyed closely by apparel at 29 per cent.

Conclusion

This paper discusses about problems and future of E-commerce towards customers. The future of E-commerce is going upwards only there is no downward in respects of customers. Now a day's businesses improving their services for satisfied customers by solving their problems. This paper emphasizes on customers problems which faced by customers and future aspect of e-commerce in brief.

The key factor for growth is the proliferation of mobile devices combined with internet access via affordable broadband solutions and mobile data. Marketers need to look at the enhancements in their competitive advantage like brand promotion, ease of shopping, detailed product review and many more. Customer services strategies such as define customer experience, connecting with customers' needs, creating human to human experience, designing and delivering value suggestions to customer etc. are

important for all businesses. To conclude that there is a huge market of e-commerce potential in India, and there is a definite need for efficient management. On the basis above study and experts view showed that the future of e-commerce in India would be bright in the upcoming years if all the competitive advantage would be focused. It is required that the other factors should be studied and steps should be taken to explain them.

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TAX AUDIT (WHO IS PRIVILEGED BUSINESS OR GOVERNMENT)

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ABSTRACT

While talking about the taxation structure in India, it found to be most complicated in the whole world probably. The slab structure of income, the classification of tax payers, and the long list of deductions which have no use probably to many people as they are not able to understand it and take benefit of it, perhaps made the entire tax structure out of the understanding of a common man. However the simplification exercise has also been attempted to make it easy and understandable, through inserting many provisions of varied nature. This complication sometimes make it eager people to even not to file the return and pay the taxes, or sometimes the people use to undertake serious mistakes like non disclosure of income or disclosure of income in a wrong way, which is not at all intentional, but still made a revenue loss to the government. Few people sometimes use the complicated provision to escape from their liability which is again making loss of revenue to the government. This mostly happens in case of Assessee having income from some kind of Business or Profession. To come out from this problem of non disclosure or wrong disclosure whether it is intentional or unintentional, the income tax act has come out with the provision of audit under income Tax act, 1961, which is also known as Tax Audit. This article is coming out with the provisions of Tax audit with the finding or conclusion that who actually benefitted by the provisions of Tax Audit.

KEYWORDS: Tax Audit, Tax Evasion, Tax Saving, Non Disclosure of Income, Escaping of Tax.

Introduction

As we said that income tax has made a provision for checking or verifying the truth ness of income disclosure by Business and Profession Assessee, hence they introduced section 44AB to 44AD for this purpose. Following persons shall get his accounts of such previous year audited by an accountant before the required date and furnish by that date the report of such audit within the prescribed form which is signed as well as verified by chartered Accountant. The section has divided Assessee in two categories for the purpose of conducting their Tax Audit. The first one is **Person carrying on business**. In this case If his total sales turnover or gross receipts > 1 Crore, in any previous year or If the profits and gains from the business are deemed to be the profits and gains under section 44AE, 44BB, 44BBB and he has claimed his income to be not up to the profits or gains so deemed Or carrying on the business shall, if the provisions of section 44AD(4) are applicable in his case and his income exceeds the utmost amount which isn't chargeable to income-tax in any previous year. As per provisions of 44AD(1), in case of an assessee having business of plying, hiring or leasing of products carriages and having its total Turnover or Gross receipts no more than 2 crores, a sum capable 8% (or a better regarded as he chooses) of the entire turnover or gross receipts shall be deemed to be the profits and gains of such business chargeable to tax under the pinnacle PGBP. Same as per section 44AD(4), where an assessee announces his profit for any previous year as per the provisions of this section and he declares his profit for any of the 5 assessment years relevant to the previous year succeeding such previous year not in accordance with the provisions of section 44AD(1), he shall not be eligible to assert the good thing about these provisions of this section for next five assessment years after the

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relevant assessment year which is relevant to the previous year during which the profit has not been declared in accordance with the provisions of Section 44AD(1). On the other hand as per section 44AD(5), an eligible assessee to whom the provisions of section 44AD(4) are applicable and whose total income exceeds the most amount which isn't chargeable to income-tax, shall be required to stay and maintain such books of account and other documents PRN under section 44AA(2) and find them audited and furnish a report of such audit PRN under section 44AB.

Person Carrying on profession in this case Audit is compulsory if gross receipts > 50 Lakhs Or if the under section U/s 44ADA and he has claimed such income to be less than the profits and gains so deemed to be the profits and gains of his Profession and his income exceeds the utmost amount which isn't chargeable to income-tax in any Previous Year.

When Audit is Not Compulsory

The provision of audit as contained in section 44AB shall not apply to the person, who declares profits and gains for the previous year in accordance with the provisions of section 44AD(1) and his total sales, turnover or gross receipts, because the case is also, in business doesn't exceed 2 crore rupees in such previous year. However following points merit consideration as stated within the Guidance note on Tax Audit issued by the ICAI. The first one is Price of products returned should be deducted from the figure of turnover whether or not the return are from the sales made within the earlier years. The second one is Cash discount otherwise than that allowed in an exceedingly cash memo/sales invoice is within the nature of a financing charge and isn't associated with turnover. the identical shouldn't be deducted from the figure of turnover. And the last one is Special rebate allowed to a customer may be deducted from the sales if it's within the nature of deduction.

The proviso to section 44AB has mentioned out that in case the accounts of an assessee are required to be audited by or under any other statute, it shall be sufficient if that person gets the accounts of such business or profession audited under that other law before the date mentioned and furnishes by that date a report of Auditor as required under section 44AB. But this relaxation cannot be claimed in case of a Charitable trust, or Co-operative Society etc., which shall get their Accounts Audited compulsorily in case their Turnover exceeds the threshold limit, even though their income is exempted. Same as if the income of an assessee is below the taxable limit, still he will be liable to get his accounts Audited, if the Turnover exceeds the threshold limit. Section 44AB is applicable to NRI also.

Who can Conduct the Tax Audit

Under various sections of taxation like 12A, 35D, 44AB, 80IA, 142 (2A) audit is required to be conducted. As we mentioned that such audit is termed Tax Audit. For the aim of Tax Audit the Term "Accountant" shall have the identical meaning as given within the Explanation below to Section 288(2). The above-mentioned explanation read as "Accountant" means a comptroller as defined in section 2(1)(b) of the Chartered Accountants Act, 1949 who holds a legitimate certificate of practice, but doesn't include

- in case of an assessee, being an organization, the one who isn't eligible for appointment as an auditor of the said company in accordance with the section 141(3) of the Companies Act, 2013, or
- In the other case,
 - the assessee himself or just in case of the assessee, being a firm or AOP or HUF, any partner of the firm, or member of the association or the family, or
 - in case of the assessee, being a trust or institution, someone noted in sub-section (3) of section 13, or
 - In case of any individual aside from persons stated in sub-clauses (i) and (ii), the one who is competent to verify the return under section 139 in accordance with the provisions of section 140,
 - Any relative of any of the persons noted in sub-clauses (i), (ii) and (iii),
 - An officer or employee of the assessee, An individual who may be a partner, or who is within the employment, of a politician or employee of the assessee,
 - An individual who, or his relative or partner

- is holding any security of, or interest in, the assessee, only if the relative may hold security or interest within the assessee of the face value not exceeding Rs. 100000,
- is indebted to the assessee, on condition that the relative could also be indebted to the assessee for an amount not exceeding Rs. 100000,
- has given a guarantee or provided any security in reference to the indebtedness of any person to the assessee, as long as the relative may give guarantee or provide any security in reference to the indebtedness of any person to the assessee for an amount not exceeding Rs. 100000,
- A one who, whether directly or indirectly, has account with the assessee of such nature as is also prescribed,
- A one that has been convicted by a court of an offence involving fraud and a period of 10 years has not elapsed from the date of such conviction.

However Audit can even be done by a firm of chartered accountants. Section 44AB mentions that only Chartered Accountants shall conduct the tax audit. However this section doesn't make it compulsory that only the statutory auditor appointed under the Companies Act, 2013 or other similar Statute shall conduct the tax audit. Per se the tax audit will be conducted either by the statutory auditor or by the other accountant fully time practice.

Other Considerations in Tax Audit

The income Act 1961 do not at all restricts a relative or an employee of assessee to be a tax auditor under section 44AB. However as per Council, a CA who is in a job of a priority or in the other concern under the identical management cannot be appointed as a tax auditor of the entity. If a member gives an audit report under section 44AB within the case of an entity during which he and/or his relatives have substantial interest, he would be deemed to be Guilty of Professional Misconduct under clause 4 of II Schedule, part 1 of CA Act 1949. Chartered accountant writing or Maintaining the books of account of the assessee mustn't audit such accounts. Audit of accounts of an expert firm of Chartered Accountants, cannot be conducted by any partner or employee of such firm. Chartered Accountant or firm of Chartered Accountants, who has been appointed as tax consultant or tax advisor of the assessee, can also conduct tax audit. An auditor of the assessee cannot conduct tax audit if he's an employee of the assessee. However the Council of ICAI has decided that an internal auditor of an assessee, whether working with the organisation or independently practicing accountant or a firm of chartered accountants, cannot be appointed as his tax auditor. In case of Tax Audit the auditor maybe appointed for tax audit by the Board of Directors or maybe by any officer, if so authorised by the Board during this behalf. The appointment made as an auditor in the firm or a proprietary business is made by a partner or the proprietor or anyone who is authorised by the assessee. Assessee may appoint even Joint Auditors for the Tax Audit. All the chartered accountants, just in case of disagreement, they'll give their reports separately. There isn't any specific procedure for removal of tax auditor appointed however; it's possible for the management to get rid of a tax auditor where there are any valid grounds for such removal, for instance Auditor has delayed within time the submission of audit report. Before accepting a tax audit, he should take into consideration the ceiling on tax audit assignments. A member of the Institute of chartered accountant in practice shall be guilty of professional misconduct if he accepts during a period of twelve month (i.e. a year) over 60 tax audit assignments whether person carrying compulsory tax audit or voluntary tax audit. Audits of accounts of persons carrying on business covered by section 44AD, 44AE, 44AF, 44BB or 44BBB isn't included within the aforesaid limit. The audit of head office and branch offices of the assessee shall be considered one tax audit assignment.

Audit Reporting under Tax Audit

Tax Auditor has to issue his report either in form No. **3CA** or **3CB** along with details of various items, in form **3CD**. Under form 3CA/3CB auditor gives his opinion about True & Fair view of information contained in form 3CD. Under form 3CD he should report whether information submitted in 3CD is "**true & correct**". **It is primary responsibility of Assessee to prepare the information in form 3CD. Form 3CD is not a report of Auditor rather it is an Annexure to be attached with Audit Report.** However it should be noted that the tax auditor auditing accounts under section 44AB is not computing the income but is - (a) reporting on accounts, and (b) reporting on the information as furnished in Form No. 3CD.

Conclusion

The tax Audit has no doubt benefitted the both the Assessee as well as the income tax department and it is clear from the above mentioned discussion. However the benefit accruing to the assessee is pretty less compare to the benefit accruing to the government. Somewhere the provision makes a difficulty for the assessee when he is never under disclosed his income and the profit earned by him is actually very low. Even the income tax department also uses the provision as a measure of recovering the illegal tax form assessee. Assessee however gets a kind of clearance while he obtains audit report after conducting the Audit by a chartered Accountant. Even not in that year but also having a clean report make him free from all worries of notices or penalties when he actually not in receipt of any income or less income. Hence from all the prospective, saying that it is one sided benefit provision will be altogether wrong. However with certain amendments or corrective action the provision can be made more beneficial.

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MUTUAL FUNDS: ADVANTAGES AND DISADVANTAGES

Dr. Santosh Kumar Agarwal*

ABSTRACT

In simple words, Mutual Funds is a collection of money from many investors and putting it altogether to invest. Also as Wikipedia says - A mutual fund is an open-end professionally managed investment fund that pools money from many investors to purchase securities. These investors may be retail or institutional in nature. We would be discussing the many advantages and disadvantages of investing your money in Mutual funds. Though investment is one way to utilize and secure your money be it surplus or going over an edge to save it, but it is extremely important to be very knowledgeable about market. It is your hard earned money after all. Investments always results in a fruit, sometimes sour or sweet but never bitter. It is just a game of right research and time.

KEYWORDS: *Mutual Funds, Open-end, Investment Fund, Portfolio Management.*

Introduction

Before we begin on start on the advantages and disadvantages, let's have a quick overview on 5 key quotes of Warren Buffett on value investing:

Rule no. 1: Never lose money. Rule no. 2: Never forget rule number 1.

Price is what you pay. Value is what you get.

Risk comes from not knowing what you are doing.

Be fearful when others are greedy. Be greedy when others are fearful.

I made my first investment at age eleven. I was wasting my life until then.

An overview of Mutual Funds Advantages and Disadvantages

Today Mutual Funds are considered as the most popular and wise decision to invest your money for the majority of investors but it is very important to be very careful and to understand first the advantages they offer and the disadvantages.

The most lucrative advantages for investors are that they provide advanced portfolio management, dividend reinvestment, reducing risks, extreme convenience and always a fair and better price. Major disadvantages include high costs (fees), tax inefficiency, and execution of poor trade and management abuses.

Disadvantages include high expense ratios and sales charges, management abuses, tax inefficiency, and poor trade execution. Below are the detailed key points of the advantages and disadvantages of Mutual Funds.

Advantages of Mutual Funds

There are indeed many reasons why the first choice of today's investor is Mutual Funds. Below are few points:

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- **Liquidity**

Mutual fund investors can easily redeem their shares at any time, for the current net asset value (NAV) plus any redemption fees.

- **Advanced Portfolio Management**

When an investor buys mutual fund, he pays a small management fee as part of their expense ratio, which is utilized to get a manager who handles portfolio professionally. This manager is responsible to buy and sell stocks, bonds, etc.

If we compare this ratio of what we are paying to what service we get with such ease, this results in a very nominal and small fee for such professionally well maintained service of handling portfolio.

- **Dividend Reinvestment**

With the declaration of dividends and other interest income sources for funds, this eventually can be utilized in buying new shares in mutual funds, resulting in investment growth.

- **Risk Reduction (Safety)**

Reduced portfolio risk is achieved through the use of diversification, as most mutual funds will invest in anywhere from 50 to 200 different securities depending on the focus. Numerous stock index mutual funds own 1,000 or more individual stock positions.

- **Convenience and Fair Pricing**

Understanding Mutual Funds is not rocket science, it is extremely easy to gain knowledge in this. It is easy to buy and easy to learn market.

They generally have low minimum investments and they are traded only once per day at the closing net asset value (NAV). This eliminates the chances of fluctuations in price throughout the day and various arbitrage practices.

What decides and dictates the best mutual funds for you is your profit goals, your budget, timeline and your understanding.

Michael Bloomberg rightly said: *And I think the more money you put in people's hands, the more they will spend. And if they don't spend it, they invest it. And investing it is another way of creating jobs. It puts money into mutual funds or other kinds of banks that can go out and make loans, and we need to do that.*

Disadvantages of Mutual Funds

With advantages of Mutual funds, there are few disadvantages too that one has to be aware of while being an investor.

- **High Expense Ratios and Sales Charges**

If you lose out your awareness and notice to mutual funds expense ratios and sales charge, they can turn out to something really heavy.

One needs to be very cautious while investing in funds with expense ratios higher than 1.20% as these are categorized on the higher cost end.

- **Tax Inefficiency**

It is inevitable, that investors have no choice when it comes to capital gains payouts in mutual funds. Due to the turnover, redemptions, gains, and losses in security holdings throughout the year, investors typically receive distributions from the fund that are an uncontrollable tax event.

- **Poor Trade Execution**

If you are placing your mutual fund trade before the cut-off time for same-day NAV, you will get the same closing price NAV for your buy or sell on the mutual fund. If you are looking for faster execution times, mutual funds provide a week execution strategy due to day trading, or timing the market.

It is advisable to learn how mutual funds work and how the market works, the growth rate of mutual funds has been tremendously increasing since many years. Nobody can guarantee upto how much one can make profits or losses, but a proper knowledge and study can lead to great investments and portfolio growth.

Happy Investing!

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AN ANALYSIS OF TRENDS IN DISINVESTMENT IN CENTRAL PUBLIC SECTOR ENTERPRISES IN INDIA

Rekha Manotiya*

ABSTRACT

The present paper makes an attempt to analyze the trend and growth of amount of disinvestment proceeds during the two sub-period 1991-92 to 2004-05 and 2009-10 to 2018-19. The study find that there has been a rising trend in the amount of collection in 2000s but it also seems that there has been a lack of proper planning, preparatory work and strategy in the procedure followed. Study concludes that the disinvestment is not solution of the problems faced by the PSEs. This raises the issue that whether the present ills and shortcomings of the public sector enterprises can be mitigated by change of their ownership. There is need of pondering over this.

KEYWORDS: *Disinvestment, PSEs, Financial Management, Public Welfare.*

Introduction

In Economic growth and the advancement of the Indian economy, public sector enterprises have become a crucial and major player. To address the chronic problems of unemployment, rural, urban, inter-regional and inter-class inequalities and infrastructural backwardness and create a progressive model of socialism in the world, the public enterprises were imagined as magic option.

Public sector in India, which was perceived to be the vehicle of speedy economic development, has run into rough waters. It not only failed to produce surpluses which it was expected to generate for the future growth but also the return on investment remained poor. The post-tax profitability of about 5% on capital employed is much less than even cost of borrowing. In the new economic environment, where competition has increased and budgetary support reduced, their survival in many cases is at stake. This raises the issue that whether the present ills of the public sector enterprises can be mitigated by change of their ownership.

In view of burgeoning revenue deficit in budget and huge amount of public resources blocked in several PSEs, the government was forced to go for disinvestment. Government could not continue pumping in more tax payers' money indefinitely when people are struggling for basic needs like water, schools, road and medicine. Since 1980 to 1990, a substantial amount was pumped in the name of revival or restructuring of PSEs. And they remain where they were. "Six attempts were made to revive the HEC but it still made a loss of more than Rs. 1000 crore in 1999-2000. Similar is the story with IDPL, HSCL, Hindustan Shipyard and MAMC and so on. There is no point in throwing good money after bad. Disinvestment will end the waste of money in subsidies and let these companies succeed in the private sector. Then the government can redirect the savings to the sectors and causes that need it most. Since payments are often held up, workers suffer delays in the payment and they might even lose jobs, apart from the demoralization arising out of sitting idle". Sick PSEs are a sticky problem for the government. Government announced its policy that the main objective of disinvestment is to put the national resources and assets to optimal use and in particular unleash the productive potential inherent in our public sector enterprises.

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Review of Literature

Sharma and Sinha (1995) used a cob-Douglas production to study productive efficiency which combines both technical and allocative efficiencies for the cement industry in India. Their study makes use of cross sectional data set of 16 non- multiproduct large cement companies of India of which 13 are in the private sector and three are in the public sector. Based on the data for 1987-88, their principal conclusion is that the public enterprises are not inherently less efficient than the private enterprises in the cement industry of India. They argued that one of the important reason for the poor performance of PSEs poor financial management and lack of spirit of competitiveness. Because of that they could not adopt the prevailing modern technology and management practices. There is no doubt that the study has gathered extremely useful data and by comparing the performance of several enterprises before and after divestiture, the authors have taken the case study approach to its logical conclusion. However, by its very nature, this approach can give only suggestive conclusions at its best, because of its inability to isolate the effects of privatization from those of improved policies or of the economic growth which may be highly correlated with the factors leading to privatization.

Himanshu Joshi (2001) in his study on “Does Disinvestment Improve Financial Performance- A Case of Bharat Heavy Electricals Ltd. (BHEL)” argued that the change in the ownership brings the change in the performance of PSEs because their the main motive get changed. For the public sector is to serve the public welfare, while the private sector is profit oriented and they operate in more competitive market conditions. He argued that if we compare public and private firms that compete against each other we should not find a systematic difference. In some cases, we might expect that public firms to be more efficient and in others the opposite may be true. He examined the effect of disinvestment on BHEL and observed that it experienced a huge improvement in its profitability, liabilities- assets ratio, working capital and fall in debt-equity ratio.

Nand Dhameja (2003) discussed the process and principles followed in PSU disinvestment in India. The author found that amount realized from the disinvestment of selected public enterprises like telephone, engineering, and petroleum companies was more than targeted and expected. They found good response from the investors. The probable reason for it may be that these PSEs had high possibility of making money from the market. The study makes clear the lack of proper planning, preparatory work and strategies in the process of disinvestment and no attempt was made towards the publicity for disinvestment. The study suggest that amount realized from disinvestment should be used for rehabilitation and restructuring of PSEs which are incurring the heavy losses but have the good prospects and possibility of recovery in the future.

Objectives of Study

- To compare and contrast revenue realization from disinvestment performance during two sub period 1991-92 to 2004-05 and 2009-10 to 2018-19.
- To analyze the financial performance of selected public sector enterprises.
- To offer suggestions to improve the process of disinvestment.

Methodology and Data Source

The present study is based on the secondary data which have been collected mainly from Public Enterprise Survey (published by the Bureau of Public Enterprises), Ministry of Finance, Govt. of India, Department of Disinvestment, Govt. of India. For the analysis and interpretation of the collected data the statistical tools like percentage, mean, standard deviation and co-efficient of variation have been applied in appropriate context.

Analysis and Discussion

In spite of tall claims of the government regarding disinvestment, the actual performance has been unsatisfactory. The public sector which was assumed to play the role of engine of growth, failed in its objectives due to political, red-tapism, bureaucratic interference in decision making, lack of professionalism, over-staffing, lack of dynamism in management practices.

Table 1: Targeted and Actual Amount of Disinvestment of Public Sector Undertakings (PSUs) in India**(Rs. in Crore)**

Year	Targeted Receipts	Actual Receipts	Percent Realisation
1991-1992	2500	3038	121.52
1996-1997	5000	380	7.60
1998-1999	5000	5369	107.38
1999-2000	10000	1723	17.23
2000-2001	10000	1870	18.70
2001-2002	12000	3028	25.23
2002-2003	12000	3149	26.24
2003-2004	13200	16632	126.00
2004-2005	4000	4363	109.10
2005-2006	No target	1570	-
2006-2007	No target	-	-
2007-2008	No target	2367	-
2008-2009	No target	4182	-
2009-2010	25000.00	23552.93	94.21
2010-2011	22144.79	22144.22	100.00
2011-2012	13144.55	13894.05	105.70
2012-2013*	-	931.99	-
2014-2015	26353.00	24349.00	92.40
2015-2016	25313.00	23997.00	94.80
2016-2017	40500.00	46247.00	114.19
2017-2018	100000.00	100057.00	100.06
2018-2019	80000.00	84972.00	106.22

Source: Various Public Enterprise Survey

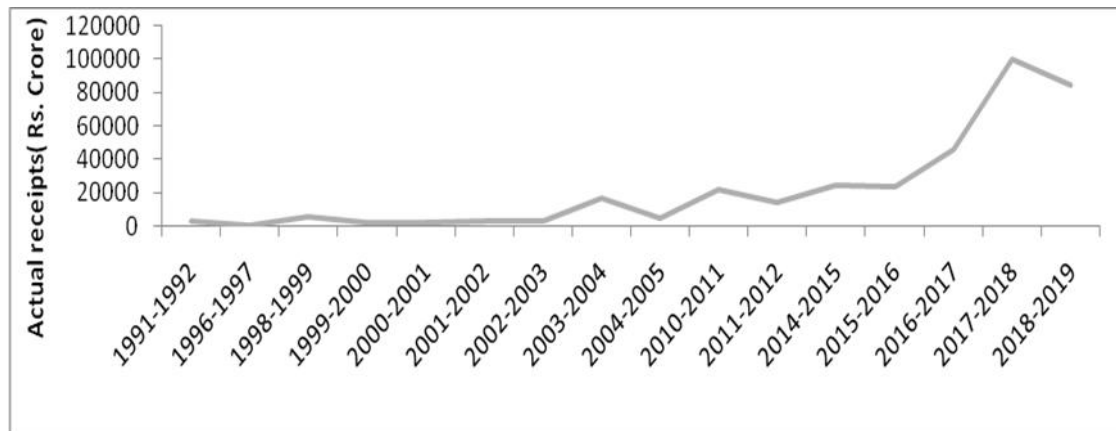


Fig. 1: Trends in actual receipts of disinvestment

From the table 1 it can be seen that for the year, 1999-2000, disinvestment was targeted at Rs. 10000 crore but the actual realization was quite low (Rs. 1723 crore). Similar for the year, 2001-2002, disinvestment was targeted at Rs. 12000 crore but the actual realization was less one-third of it. Sounding a note of optimism the Finance Minister in his 2001-02 budget speech observed "The procedure for privatization of public sector enterprises has now been considerable streamlined. The Department of Disinvestment has been set up to accelerate the privatization process. To maximize the returns to government, our approach shifted from the disinvestment of small lots of share to strategic sales of blocks of share to strategic investors. The Government has already approved privatization of 27 companies in which the process of disinvestment is expected to be completed during the course of time. These companies include among others VSNL, Air India, and Maruti Udyog Limited".

However, from the 2014-15 to 2018-19 performance in the actual realization of disinvestment receipts have been progressive and satisfactory. 'As is evident from the table 1 that during the 2018-19 the targeted amount for disinvestment was Rs. 80000 crore and actual receipts was more than it (Rs. 84972).

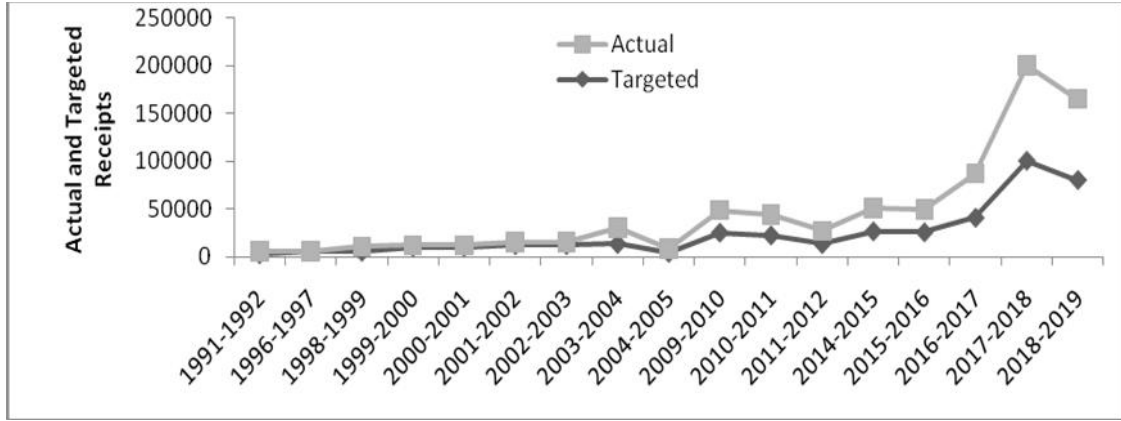


Fig. 2: Targeted and Actual Receipts trend line

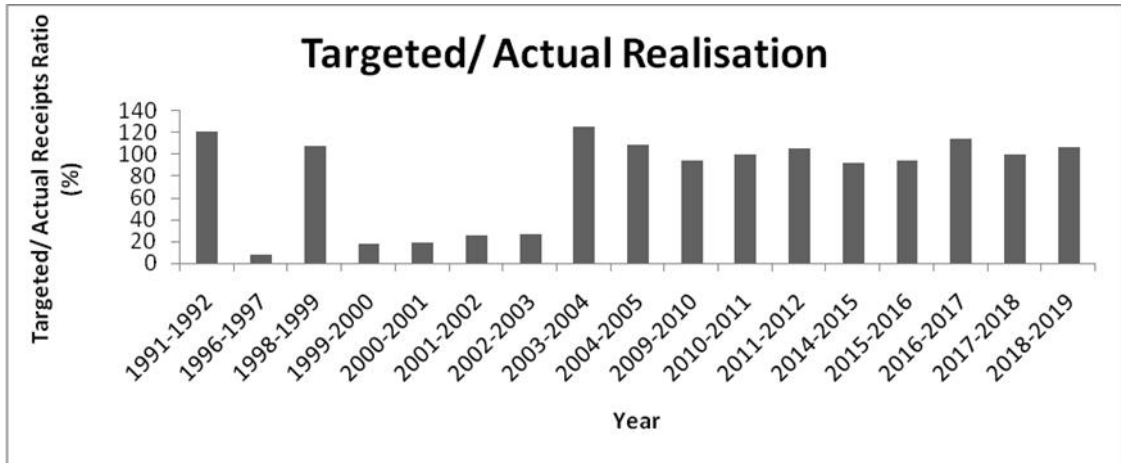


Fig.3: Ratio of Targeted and Actual Receipts

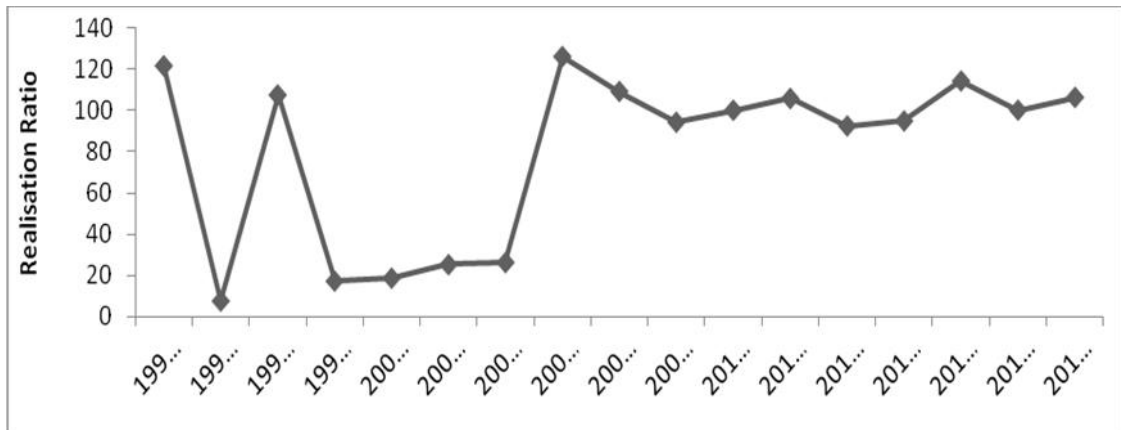


Fig. 3: Trend in Realization Ratio

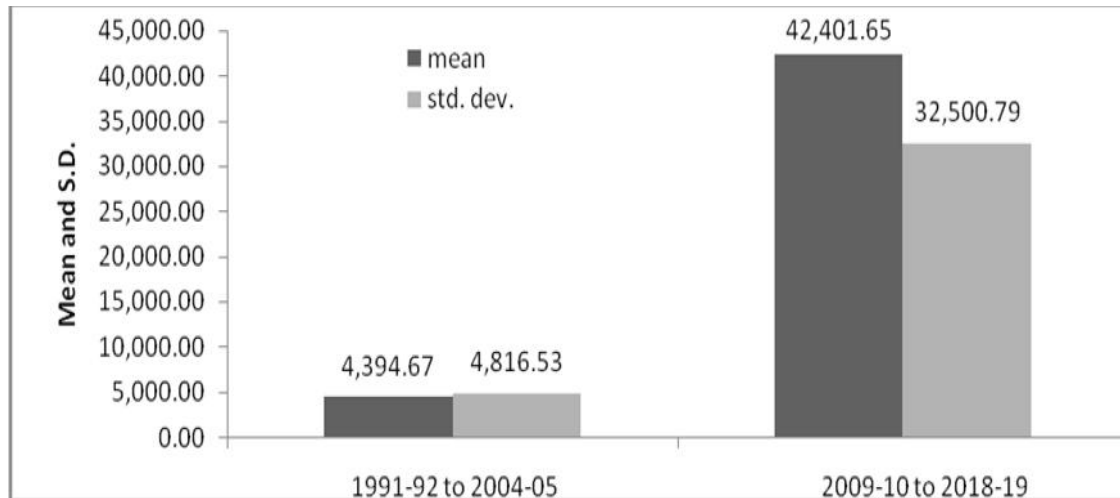


Fig. 4: Variation in Targeted and actual receipts of disinvestment

Table 2: Comparison of Mean and Std. Deviation

	Period 1991-92 to 2004-05	Period 2009-10 to 2018-19
mean	4,394.67	42,401.6500
std. dev.	4,816.53	32,500.7936

Source: Authors' calculations

Table 2 shows that the mean value of disinvestment proceeds was about Rs. 4395 crore during the period 1991-92 to 2004-05 and increased rapidly to Rs. 42401 crore during the period 2009-10 to 2018-19. It is quite clear from the table 4 that during the 2000s there has been substantial growth in the amount of disinvestment. But it may be because of worry also because government is also going to sale those PSEs which are getting surplus and contributing to the exchequer.

Table 3: Descriptive statistics of Targeted and Actual Receipts from Disinvestment

	Targeted Receipts	Actual Receipts
mean	23,891.4906	22,280.3059
variance	73,09,05,188.3672	85,61,07,235.4253
standard deviation	27,035.2582	29,259.3102
minimum	2500	380
maximum	100000	100057
range	97500	99677
standard error of the mean	6,557.0133	7,096.4251
confidence interval 95.% lower	9,991.2435	7,236.5568
confidence interval 95.% upper	37,791.7376	37,324.0549
skewness	2.0782	1.8956
kurtosis	3.8952	2.9970
coefficient of variation (CV)	113.16%	131.32%

Normal curve GOF

p-value	.0001	.0004
chi-square(df=2)	18.59	15.65
E	3.40	3.40
O(-0.84)	0	0
O(-0.25)	10	9
O(+0.25)	4	5
O(+0.84)	1	1
O(inf.)	2	2

Source: Authors' calculations

Table 4: Govt. Share, Method and Receipts of Disinvestment of Central Public Sector Enterprises 2018-19

Year/CPSEs	Method of Disinvestment	%age of GOI's Shares Disinvested	Receipts (Rs. in Crore)
Mishra Dhatu Nigam Ltd. (MIDHANI)	IPO	25.00	434.14
Bharat 22 ETF	ETF	*	8325.26
Rail India Technical and Economic Service (RITES)	IPO	12.60	460.51
Indian Railway Construction Company (IRCON) International Ltd.	IPO	10.00	466.00
Garden Reach Shipbuilders and Engineers Ltd. (GRSE)	IPO	25.50	342.90
Coal India Ltd. (CIL)	OFS	3.19	5218.30
Kudremukh Iron Ore Company Ltd (KIOCL) Ltd.	Buy Back	1.98	205.34
CPSE-ETF	FF03	**	17000.00
National Aluminium Corporation Ltd. (NALCO)	Buy Back	1.80	260.41
Neyveli Lignite Corporation Limited (NLC) India Ltd.	Buy Back	0.48	989.86
Coal India Ltd. (CIL)	Employees OFS	0.01	17.33
Cochin Shipyard Ltd. (CSL)	Buy Back	3.23	137.29
Bharat Heavy Electricals Ltd. (BHEL)	Buy Back	3.15	992.41
National Hydroelectric Power Corporation Ltd. (NHPC)	Buy Back	^	397.90
Bharat 22 ETF	FF02	***	10404.59
Indian Oil Corporation Ltd. (IOCL)	Buy Back	3.39	2647.00
Oil and Natural Gas Corporation Ltd. (ONGC)	Buy Back	0.43	2510.51
CPSE-ETF	FF04	****	9350.07
Coal India Ltd. (CIL)	Buy Back	0.19	1039.71
National Mineral Development Corporation Ltd. (NMDC)	Buy Back	2.56	768.77
Oil India Ltd. (OIL)	Buy Back	0.15	720.80
Metal Scrap Trade Corporation Ltd. (MSTC Ltd.)	IPO	25.10	210.60
Total			62899.70
Strategic Disinvestment			
HSCC (India) Ltd.	Strategic Disinvestment	100.00	285.00
Dredging Corporation of India Ltd. (DCIL)	Strategic Disinvestment	73.44	1049.17
PEC-REC Deal	Strategic Disinvestment	52.63	14499.99
National Projects Cons. Corp. Ltd. (NPCC)	Strategic Disinvestment	98.89	79.80
Total			15913.96
Other Disinvestment			
SUUTI Sale of Axis Banks Shares	-	-	5378.66
Sale of Shares under the Custody of CEPI	-	-	779.02
Total			6157.68
Grand Total			84971.34

Source: Department of Disinvestment, Govt. of India

Conclusion

The current wave of divestiture is largely a response to the financial crisis facing many governments. Consequently, budgetary matters and short term revenue maximization tend to be high on the list of governmental objectives. These may, however, lead to sub-optimal policies and divestiture techniques if the efficiency is not given priority ranking in objectives. The study makes clear the lack of proper planning, preparatory work and strategies in the process of disinvestment and no attempt was made towards the publicity for disinvestment. The study suggest that amount realized from disinvestment should be used for rehabilitation and restructuring of PSEs which are incurring the heavy losses but have the good prospects and possibility of recovery in the future.

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डॉ. मुहम्मद जावेद*

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प्रकृति ने हमें स्वच्छ वायु मण्डल प्रदान किया, परन्तु मनुष्य ने आर्थिक विकास एवं औद्योगिकीकरण की अंधी दौड़ में उसे इस प्रकार प्रदूषित किया है कि आज वायु प्रदूषण मानव जीवन के अस्तित्व के लिये संकट बन गया है। वायु में गैस के रूप में मिश्रित होने वाले विभिन्न प्रदूषण वायु को प्रदूषित कर रहे हैं। वायुमंडल में हानिकारक गैसों का प्रतिशत बढ़ता जा रहा है, जिससे वायुमंडल में गैसों का सन्तुलन बिगड़ता जा रहा है। वायु प्रदूषण ने पूरे विश्व के मौसम चक्र को बिगाड़कर रख दिया है। हमारे जीवन जीने की शैली ने इसमें आग में घी का काम किया है। वायु प्रदूषण के कारण अनेक बीमारियों का जन्म होता है। $\beta, d \nu \epsilon ku ds \epsilon r k f c d i j s$ fo'o ea ifr o"kl ok; q i nllk.k l s yxllkx 16 yk[k rd ykx ekf ds f'kdj gkrs gllp इस वायु प्रदूषण से हमारा देश भी बचा नहीं है। भारत, चीन और जापान विश्व में ऐसे तीन देश हैं, जो 40 प्रतिशत वायु प्रदूषण फैलाते हैं।

ok; q i nllk.k D; k gS

वायु प्रदूषण ऐसी स्थिति है, जिसने बाह्य वातावरण में उपलब्ध वायु में विभिन्न अवयवों में असंतुलन और कुछ हानिकारक तत्व मिल जाते हैं, जो मनुष्य, जीव-जन्तुओं तथा वनस्पति जगत के लिए हानिकारक होते हैं। आम तौर पर वायु में 78 प्रतिशत नाइट्रोजन, 21 प्रतिशत ऑक्सीजन, 0.03 प्रतिशत कार्बनडाईऑक्साइड तथा 0.5 प्रतिशत से 1 प्रतिशत तक जलवाष्प मिले हैं। लेकिन इस मिश्रण में गड़बड़ी हो जाने से वायु प्रदूषित हो जाती है। वायु प्रदूषण के लिए सबसे अधिक कार्बन मोनोऑक्साइड सल्फर डाईऑक्साइड, नाइट्रोजन के विभिन्न ऑक्साइड तथा सस्पेंडेड पार्टिकुलेट मैटर (ए.पी.एम.) की अधिवकता उत्तरदायी है। औद्योगिक इकाइयों की चिमनियों तथा परिवहन वाहनों से उत्सर्जित होने वाले प्रदूषक वायु प्रदूषण की समस्या के लिये मुख्य कारण हैं।

ok; q i nllk.k ds dkj .k

वायु प्रदूषण के अनेक कारण हैं, मुख्य कारण इस प्रकार हैं :-

- औद्योगिकीकरण
- कल-कारखाने
- यातायात के साधन
- वृक्षों की अंधाधुंध कटाई
- नाभिकीय परीक्षण
- जनरेटर
- कीटनाशकों का उपयोग

* एसोसिएट प्रोफेसर, वाणिज्य विभाग, शिब्ली नेशनल कालेज, आजमगढ़, उत्तर प्रदेश।

- रसायनिक कारखाने
- धुएं
- दुर्गन्ध
- कारखानों के अपशिष्ट (राख)
- तेल शोधक कारखाने
- मेडिकल अपशिष्ट
- तीव्र ध्वनि
- अन्य।
- $vks|kfxdhdj.k$

ऊँची आर्थिक विकास की दर को प्राप्त करने के उद्देश्य से प्रत्येक देश ने अन्धाधुन औद्योगिकीकरण का मार्ग अपनाया। अधिक से अधिक औद्योगिक इकाइयों की स्थापना की गई एवं उनका विकास किया गया। इसी कारण बड़ी-बड़ी अनेकों प्रकार की औद्योगिक इकाइयां स्थापित की गईं। इन औद्योगिक इकाइयों ने खूब वायु को प्रदूषित किया और इनसे अनेकों प्रकार के प्रदूषित अपशिष्ट पदार्थ निकले। जैसे कचरा आदि।

- $dy&dkj [kkus$

आधुनिक कल कारखानों की चिमनियां दिन रात जहरीली गैसों निकालती रहती हैं, जो वायु में अनेकों गैसों से मिल कर वायु प्रदूषण पैदा करती हैं। ये गैसे निम्न हैं –

- कार्बन मोनोऑक्साइड
- कार्बन डाईऑक्साइड
- सल्फर डाईऑक्साइड

उपरोक्त गैसों का वायुमंडल में बढ़ना ही वायु प्रदूषण को बढ़ाने में सहायक सिद्ध हो रहा है।

- $ifjogu ds | k/ku$

बढ़ते हुए परिवहन के साधनों के कारण पेट्रोल एवं डीजल के उपयोग से वायुमंडल में कार्बन मोनोऑक्साइड, सल्फर डाईऑक्साइड व सीसा की मात्रा बढ़ती जा रही है। यह बढ़ती हुई इनकी मात्रा वायु प्रदूषण उत्पन्न करती हैं।

- $o\{kka dh dVkbz$

वायु प्रदूषण का यह भी एक मुख्य कारण है कि वनों की तेजी से कटाई की गई तथा इनसे प्राप्त भूमि कृषि के उपयोग में लाई गई, किन्तु नए वृक्ष उसी संख्या में नहीं लगाए गए। लगाए भी गए तो केवल कागजी फाइलों तक सीमित रहे। इस प्रकार घटते हुए वृक्षों व वनों के क्षेत्र के कारण वायु प्रदूषण बढ़ा।

- $ukfHkdh; ijh\{k.k$

आज प्रत्येक देश प्रमाणु या महाशक्ति बनने की होड़ में लगा है। चोरी छिपे सभी देश नाभिकीय परीक्षण कर रहे हैं, जिसके परिणाम स्वरूप रेडियो धर्मी तत्व वायुमंडल में मिलकर वायु प्रदूषण उत्पन्न करते हैं।

- $tuj\{j$

विद्युत आपूर्ति के अभाव के कारण शहरों से लेकर गाँव तक गड़गड़ाहट के साथ दिन रात जनरेटरों का उपयोग किया जाता है। इन जनरेटरों से विषैली गैसों निकलकर वायुमंडल को प्रदूषित कर रही हैं।

• dhVuk' kdkɑ dk mi ; ksx

आज कीटनाशकों का उपयोग दिन प्रतिदिन बढ़ता ही जा रहा है। सभी उपयोग किया गया कीटनाशक लक्ष्य तक नहीं पहुँच पाते हैं। एक अनुमान के अनुसार केवल एक प्रतिशत ही लक्ष्य तक पहुँचते हैं, शेष 99 प्रतिशत प्रदूषक के रूप में वायुमंडल में मिलकर वायु को प्रदूषित करते हैं। घरों में विभिन्न प्रकार के कीटाणुओं से छुटकारा पाने के लिए कीट रसायनों का प्रयोग आम हो चला आ रहा है। मक्खी, मच्छर, खटमल को मारने के लिये अक्सर कीटनाशकों का प्रयोग किया जाता है। वैज्ञानिकों ने तर्क दिया है एवं प्रमाणित किया है कि इस रसायनों (गुड नाइट, कछुआ छाप आदि) से केवल विषाणु ही नहीं आदमी भी मर सकता है। इन रसायनों के प्रयोग से घर की वायु, जल, भोजन यहाँ तक कि कपड़े भी प्रदूषित हो जाते हैं।

• jkl k; fud o moʃd dkj [kkus

रासायनिक व उर्वरक कारखाने दिन रात जहरीली गैस विसर्जित करते रहते हैं, जो वायुमंडल को प्रदूषित करने में सहायक सिद्ध हो रही हैं। रासायनिक उर्वरकों के उपयोग भी वायु प्रदूषण को बढ़ाने में सहायक हो रहे हैं। इन उर्वरकों का उपयोग करते समय बहुत बड़ी मात्रा में ये उर्वरक वायुमंडल में ही रह जाते हैं, जो आखिर में वायु प्रदूषण के रूप में प्रकट होते हैं (भोपाल गैस कांड 1984)।

• /kq j

धुआं सिगरेट का हो या ईंधन का, दोनों अत्यंत हानिकारक हैं। सिगरेट, बीड़ी, गाजे का धुआं घर के वातावरण को विषाक्त बना देता है। विश्व में प्रति दिन 60 लाख से अधिक सिगरेट फूँकी जाती है। घर में महिलाओं का धुआं से अधिक पाला पड़ता है। इस प्रकार विभिन्न स्रोतों से निकलने वाला धुआं वायु प्रदूषण को बढ़ाता है।

• nqʌll/k

सड़न गलन व अधजले शवों से दुर्गन्ध आती है। ये दुर्गन्ध कृषि उपज या फसल के अवशेषों से भी उत्पन्न होती है। इस प्रकार की दुर्गन्ध वायु को प्रदूषित कर वायु प्रदूषण उत्पन्न करती हैं।

• dkj [kkukɑ ds vi f' k"V ʌj k [k½

कारखानों से कुछ पदार्थ बिना किसी उपयोग के बच जाते हैं, जैसे— सीमेंट के कारखानों में सीमेंट बनाने के पश्चात् राख बचती है, जिसके व्यर्थ समझकर फेंक दिया जाता है। यह फेंकी गई राख हवा में उड़कर वायु को प्रदूषित करती रहती है।

• rsy 'kkʌkd dkj [kkus

तेल शोधक कारखाने अधिक मात्रा में सल्फर डाई ऑक्साइड, नाइट्रोजन ऑक्साइड से मिलकर अम्ल वर्षा होती है। इसी कारण मथुरा तेल शोधक कारखाना ताजमहल के लिये खतरे का एक कारण माना जाने लगा।

• efMdy vi f' k"V

मेडिकल अथवा नर्सिंग होमों अस्पतालों आदि के समीप अनेकों प्रकार के मास एवं उपयोग करके फेंकी गई पट्टियां जो जरासीम से युक्त होती हैं। हवा के सम्पर्क में आने के कारण ये वायु प्रदूषण को बढ़ाने में सहायक सिद्ध होते हैं।

• rhoz /ofu] vl;

ध्वनि प्रदूषण की समस्या सम्पूर्ण विश्व खासकर भारत में विकराल रूप धारण किए हैं। विश्व स्वास्थ्य संगठन के अनुसार 45 डेसीबल से अधिक तेज ध्वनि मानव जीवन के लिए हानिकारक है। जबकि हमारे यहाँ हम 90-100 डेसीबल से अधिक तेज ध्वनि सुन्ना आम है या हम सुनने को बाध्य हैं। उस असामान्य ध्वनि का सीधा असर मानव मस्तिष्क पर पड़ता है। इस ध्वनि प्रदूषण से— अनिद्रा, अंधापन, हृदय रोग, चिड़चिड़ापन व विक्षिप्तता।

श्रवणदोष जैसी अनेक बीमारियां झेलने को विवश है। अमेरिका में इस सन्दर्भ में एक घटना घटित हुई है। एक भारतीय वहाँ पर मुर्गा अपने घर ले आये। मुर्गा रात में जोर-जोर से बोलता था। पड़ोसी अमेरिकन था। उसकी नींद खुल जाती थी, जिससे उसका स्वास्थ्य खराब होने लगा। उसने अपना वजन कराया तो पता चला कि पूरा न सो पाने की वजह से उसका 15 किलो वजन घट गया है। वह कोर्ट गया तथा पूरा घटना क्रम व्यक्त किया। न्यायाधीश ने यह निर्णय दिया कि जो साहेब मुर्गा रखे हैं, वह पहले एक निर्धारित धनराशि पड़ोसी को दे, जिससे अपने स्वास्थ्य की भरपाई करें तथा आज से मुर्गा को वहाँ से हटा दिया जाय या मुर्गे के मुँह में साइलेंसर लगाये। अमेरिका और भारत के लोगों की मानसिकता में यही अन्तर है। इससे स्पष्ट होता है कि अमेरिकन स्वास्थ्य के प्रति कितने सचेत हैं।

वायुमंडल में चारों दिशाओं से प्रदूषण फैल रहा है। डॉ० हालवेन कानपुर आई०आई०टी० में एरोनेट प्रदूषण मापक यन्त्र लगाकर यहाँ के वायु प्रदूषण परिणाम देखे हैं। ये परिणाम बेहद खतरनाक और चौकाने वाले हैं। परिणाम देखने से तो यही लगता है कि कानपुर शायद विश्व का एक मात्र ऐसा शहर है, जहाँ वायु प्रदूषण ने अन्य शहरों का रिकार्ड तोड़ दिया है।

अब पहाड़ी इलाके भी वायु प्रदूषण की चपेट में हैं। नैनीताल के आर्यभट्ट रिसर्च सेंटर के पर्यावरण वैज्ञानिक $Mk\text{D} vjehr | kgk vk\text{S} Mk\text{D} ; | h /kfu\text{d}k$ ने बताया है कि सर्दी के मौसम में पहाड़ी इलाकों में प्रदूषण का धरातल नीचे आ जाता है, जबकि गर्मी में यही प्रदूषण की पर्त पहाड़ी के ऊपरी सतह पर फैल जाती है। इसी कारण पहाड़ों के मौसम के बारे में कोई सही भविष्यवाणी नहीं की जा सकती है। वायु प्रदूषण के कारण 10 प्रतिशत सूर्य की किरणें धरती पर नहीं आ पाती हैं। कुल मिलाकर वायु प्रदूषण ने भारत के सामान्य तापक्रम को बिगाड़ दिया है। वायु प्रदूषण के अनेक विनाशकारी प्रभाव हैं। संक्षेप में मुख्य प्रभाव निम्न है :-

- जीवन के लिए खतरा
- जन्तुओं व वनस्पतियों के लिए खतरा $\%t\text{S} \& fx) ks dk foy\text{r} gkuk\%$
- रोगों को बढ़ना
- मौसम में परिवर्तन होना
- ओजोन परत को खतरा
- कृषि उत्पादन का कम होना
- अन्य (अम्लीय वर्षा)

वायु प्रदूषण का सबसे घातक प्रभाव मानव के स्वास्थ्य पर पड़ रहा है। वायु प्रदूषण का मुख्य कारण जहरीली गैस है, जिनमें मुख्य रूप से तीन गैस अधिक हानिकारक हैं और वे हैं :-

- कार्बन मोनो ऑक्साइड
- कार्बन डाई ऑक्साइड
- सल्फर डाई ऑक्साइड

कार्बन मोनो ऑक्साइड मुख्य रूप से तम्बाकू के धुएँ, ईंधन गैस, स्टोव, मोमबत्ती जैसे ज्वलनशील तत्वों से उत्पन्न होती है। कार्बन मोनोऑक्साइड मानव स्वास्थ्य के लिए खतरनाक है। इससे घुटन पैदा होती है। एक नये शोध के अनुसार यह निष्कर्ष सामने आया है कि "बच्चों की श्रवण शक्ति के लिए कार्बन मोनोऑक्साइड घातक है।" इतना ही नहीं इस गैस के प्रभाव से अलजाइमर्स और पार्किंसन्स व्याधि जैसे खतरनाक रोग भी हो सकते हैं। सल्फर डाई ऑक्साइड से अम्लीय वर्षा होती है। इस वर्षा के कारण मनुष्य को दमा, खांसी तथा फेफड़े सम्बन्धी रोग जन्म ले सकते हैं। कार्बन डाई ऑक्साइड वायु में ऑक्सीजन की मात्रा को कम करती है। सीसा युक्त पेट्रोल व डीजल म्यूटेशन पैदा करते हैं (गुणसूत्रों में परिवर्तन जैसे बिना पूँछ के चूहा पैदा होना)।

iklyhl kbfdyd , jkefvd gkbMkdkcū (P.A.H.)

यह एक प्राणघातक प्रदूषण है। यह एक रंगहीन, इलका-पीला ठोस पदार्थ है। वायुमण्डल में यह मिश्रण के रूप में पाया जाता है। वायुमण्डल में यह सूक्ष्म कणों के रूप में पाया जाता है। वायुमण्डल में जब इसकी मात्रा अधिक होती है, तो यह वायुमण्डलीय गैसों के साथ अभिक्रिया करके कई जरीली गैसों का निर्माण करता है। पर्यावरण को प्रदूषित करने वाले इस नए कारक की खोज वैज्ञानिकों ने अभी हाल ही में की है।

पर्यावरण में i h-, -, p- की मात्रा बढ़ती जा रही है, जो चिन्ता का विषय है। पर्यावरण में जिस तेजी से इसकी मात्रा बढ़ रही है, वह पशु-पंक्षियों के अस्तित्व के लिए तो घातक है ही, मानव भी इससे अछूता नहीं रहेगा। पी.ए.एच. में सबसे अधिक मात्रा में बेंजीन रिंग होती है, जो कैंसर उत्पन्न करने वाला प्रमुख कारक है। इसके कारण मनुष्य में तेजी से कैंसर फैलता है। इसके अतिरिक्त शरीर के हार्मोन उत्सर्जन, प्रजनन तथा प्रतिरक्षा प्रणाली पर भी इसका प्रतिकूल प्रभाव पड़ता है। विश्व स्वास्थ्य संगठन सहित, मानव स्वास्थ्य से जुड़ी विश्व की अन्य कई संस्थाएं पी.ए.एच. के कारण चिन्तित हैं, क्योंकि भविष्य में प्रत्येक 5 व्यक्तियों में से एक को कैंसर से ग्रस्त होना तय है।

: i h (Dandruff)

अभी नवीन अध्ययनों से पता चला है कि रूसी वायु प्रदूषण फैलाने वाला एक प्रदूषक पदार्थ है। अतः हम यह कह सकते हैं कि "बड़ा वायु प्रदूषण पदार्थ है रूसी।" सिर की रूसी के बारे में अभी तक सामान्य तौर पर यह मालूम था कि यह खोपड़ी पर एक परत के रूप में जम जाती है और खुजली उत्पन्न करती है। इस परत के बहुत छोटे-छोटे टुकड़े सिर से झड़ते रहते हैं। वातावरण में उड़ने वाले ऐसे तत्वों को (एयरोसोल) के नाम से भी जाना जाता है। वातावरण के 25 प्रतिशत हिस्से में त्वचा के कण, पराग कण, पंखों के रेशे और अन्य कोशिका खंड मौजूद रहते हैं या होते हैं। एयरोसोल मौसम परिवर्तन में अहम भूमिका निभाते हैं।

fu"d"kl

निष्कर्ष के रूप में हम यह कह सकते हैं कि मानव ने ही इस विनाशकारी वायु प्रदूषण को बढ़ावा प्रदान किया है। वास्तव में वायु प्रदूषण अन्य प्रदूषणों जैसे जल प्रदूषण, भूमि प्रदूषण, ध्वनि प्रदूषण आदि से अधिक हानिकारक एवं विनाशकारी है, क्योंकि जल और भूमि का प्रदूषण तो राष्ट्रीय और अन्तर्राष्ट्रीय सीमाओं से बंधा रहता है। किन्तु वायु प्रदूषणों का इन राजनीतिक सीमाओं से कुछ भी लेना-देना नहीं है। वायु प्रदूषण एक विश्वव्यापी समस्या है। वायु प्रदूषण अधिक हानिकारक तथा इसके प्रतिकूल परिणाम कई वर्षों बाद सामने आते हैं। आज के भौतिकवादी युग में पूरी दुनिया में बहुत सारी मौतें अस्थमा, हार्ट अटैक, किडनी की खराबी, ब्रेन हेमरेज आदि के कारण हो रही हैं। इन बीमारियों की एक बहुत बड़ी वजह वायु प्रदूषण है।

ok; q i nllk. k dks jkdus vfkok de djus grq iz; kl o l pko

वायु प्रदूषण को कम करने अथवा इसके निवारण के लिये कोई सुनिश्चित प्रणाली व विधियां नहीं है। जैसी परिस्थिति हो उसी के अनुरूप नीतियां व कार्य प्रणाली व विधियों को अपना कर वायु प्रदूषण को कम किया जा सकता है। सामान्यतः वायु प्रदूषण को कम करने के निम्न उपाय या सुझाव हैं :-

- वायु प्रदूषण निवारण एवं नियंत्रण अधिनियम अथवा इससे संबंधित अधिनियमों का कड़ाई से पालन किया जाए तो इस पर नियंत्रण हो सकता है।
- जन जागरण व जन चेतना तथा जन आन्दोलन का रूप दे कर वायु प्रदूषण को कम किया जा सकता है, वरना प्रत्येक 5 जून को सरकारी अधिकारी पर्यावरण दिवस मनाया करेंगे तथा प्रतियोगिता परीक्षाओं में पर्यावरण दिवस, पूछा जाता रहेगा।
- वायु प्रदूषण के फैलाने वाले कारकों को नियंत्रित कर इसे कम किया जा सकता है।

- वायु प्रदूषण फैलाना एक अपराध घोषित होना चाहिये, जिससे लोगों में भय उत्पन्न होगा और वे ऐसे कार्य करने से बचने का प्रयास करेंगे, जिससे वायु प्रदूषण पर लगाम लग सकेगी।
- घरों में अधिक खिड़की व रोशनदान की व्यवस्था करने से कम से कम घर में तो वायु प्रदूषण कम रहेगा।
- वायु प्रदूषण को कम करने हेतु ग्रामीण क्षेत्रों में लकड़ी व कंड़ा सामान्य चूल्हे से हट कर एक नये चूल्हे जिसे हम इको चूल्हे के नाम से जानते हैं (धुआं रहित) को अपनाने हेतु प्रचार व प्रसार करना। इससे रसोई बनाने से जो धुआं निकलता है, कम से कम वह कम तो हो जाएगा और घर का वायु प्रदूषण भी कम हो जाएगा।
- अधिक से अधिक वृक्ष लगाने पर बल देना तथा लोगों को पेड़ों के महत्व के बारे में जानकारियाँ दे कर लोगों में पेड़ लगाने की ललक व प्रेरणा पैदा कर हम वायु प्रदूषण को कम कर सकते हैं।
- पर्यावरण प्रदूषण से संबंधित कानूनों का कड़ाई से पालन हेतु कोई विशेष संस्था की स्थापना होनी चाहिए जो कानूनों को लागू या क्रियान्वयन से संबंधित कार्य को देखें।
- पर्यावरण संतुलन के बारे में खूब प्रचार व प्रसार होना चाहिए।
- वायु प्रदूषण के दुष्प्रभावों को ज्ञान कराना एवं जानकारियाँ उपलब्ध कराने का पूर्ण प्रयास होना चाहिए।
- वायु प्रदूषण को कक्षाओं में एक अनिवार्य विषय के रूप रखा जाना चाहिये, जिससे शुरू से ही विद्यार्थियों को इसके रोकने की मानसिकता विकसित हो।
- पर्यावरण संतुलन हेतु समितियों का गठन करके पर्यावरण प्रदूषण फैलाने वालों पर दबाव बनाया जाने का प्रयास होना चाहिये, जैसे- दण्ड, वहिष्कार, आदि।
- कृषि अवशेषों को जलाने पर पूर्ण प्रतिबन्ध होना चाहिए। कृषि अवशेषों को जलाने पर अपराधिक मुकदमा दर्ज होने का प्रावधान होना चाहिए।
- अन्य।

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कोविड-19 आपदा काल में मानव जाति पर वित्तीय सेवाओं का प्रभाव

डॉ. सुनिल गहलोत*

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वर्तमान युग में लगभग सम्पूर्ण विश्व एक ऐसी महामारी बीमारी कोविड-19 से ग्रसित हो चुका है। जिसकी कल्पना मानव जाति ने नहीं सोची होगी। आज इस कोविड-19 महामारी ने सम्पूर्ण विश्व की अर्थव्यवस्था को आर्थिक संकट का सामना करने पर मजबूर कर दिया है। जिसका बहुत ही गहरा प्रभाव मानव जाति की प्रत्येक आर्थिक आवश्यकता पर पड़ा है तथा इस आर्थिक संकट की घड़ी ने मानव जाति को भिन्न-भिन्न परिस्थितियों में वित्तीय सेवाओं से प्रभावित हुआ है। जिस कारण ऐसा महसूस होता है कि प्रत्येक देश की विकास की गति रूक गई है या धीमी गति से चल रही है और वर्तमान युग में लगभग प्रत्येक देश आधुनिक उपकरण होने के बावजूद इस आपदा काल में अपनी आर्थिक सेवाओं को नियंत्रण करने में नाकाम साबित हुआ है तथा प्रत्येक वर्ग को सोचने पर मजबूर कर दिया है कि अगर भविष्य में ऐसी कोई महामारी संकट आ जाये तो हमें उससे लड़ने के लिए कैसे अपने आप को मजबूत या सक्षम बनाए। प्रस्तुत पत्र का उद्देश्य यह जानना है कि कोविड-19 काल में सरकारी उपक्रम एवं गैर सरकारी उपक्रम में मानव जाति को वित्तीय सेवाओं के अभाव में किन-किन परिस्थितियों का सामना करना पड़ा है।

ed; 'kln% कोविड-19 आपदा, मानव जाति, वित्तीय सेवा, आर्थिक संकट।

i fjp;

सामान्य तौर पर मानव जाति को किसी निर्धारित कार्य के बदले जो निर्धारित मूल्य प्राप्त होता है तथा उस मूल्य के बदले वह अपनी रोजमर्रा की आवश्यकता की पूर्ति करता है उसे वित्तीय सेवा कहा जा सकता है या ऐसी सम्पूर्ण गतिविधियां जो वित्तीय प्रकृति की होती हैं। उन्हें वित्तीय सेवाओं के रूप में माना जा सकता है। वित्तीय सेवाएं वित्त उद्योग द्वारा प्रदान की जाने वाली सेवाओं को संदर्भित करती हैं। वित्त उद्योग में सगठनों की एक विस्तृत श्रृंखला शामिल होती है जो आवश्यकतानुसार धन का प्रबंध करती हैं। वास्तव में आज दुनिया के सबसे बड़े उद्योगों में से एक वित्तीय सेवा उद्योग है। वित्तीय सेवा वित्तीय प्रणाली का एक आवश्यक भाग है। वित्तीय सेवाएं एक आधुनिक अर्थव्यवस्था की नींव हैं। इसीलिए वित्तीय सेवा क्षेत्र एक राष्ट्र की समृद्धि के लिए परम आवश्यक है, लेकिन कोविड-19 आपदा ने देश दुनिया के लगभग सभी राष्ट्र की वित्तीय सेवाओं की गति को प्रभावित किया है। जिसका प्रत्यक्ष प्रभाव मानव जाति पर पड़ा है।

v/; ; u dk m'ís ;

प्रस्तुत पत्र का उद्देश्य कोविड-19 आपदा के समय मानव जाति पर वित्त सेवा का क्या असर पड़ा है। कोविड-19 आपदा से सरकारी उपक्रम एवं गैर सरकारी उपक्रम में वित्तीय सेवा की गति में कितना अंतर आया है। जिसके कारण मानव जाति की रोजमर्रा की आवश्यकता में कितना बदलाव आया है। इसके बारे में जानना है।

* सहायक आचार्य, एनी बिसेंट कॉलेज, जोधपुर, राजस्थान।

'kks/k i fof/k

- भावबोधक शोध या विवरणात्मक शोध।
- द्वितीयक समंको का प्रयोग:- द्वितीयक समंको विभिन्न जर्नलस, शोध पत्रों, समाचार पत्रों, पत्र-पत्रिकाओं वेबसाइटस आदि से संकलित है।

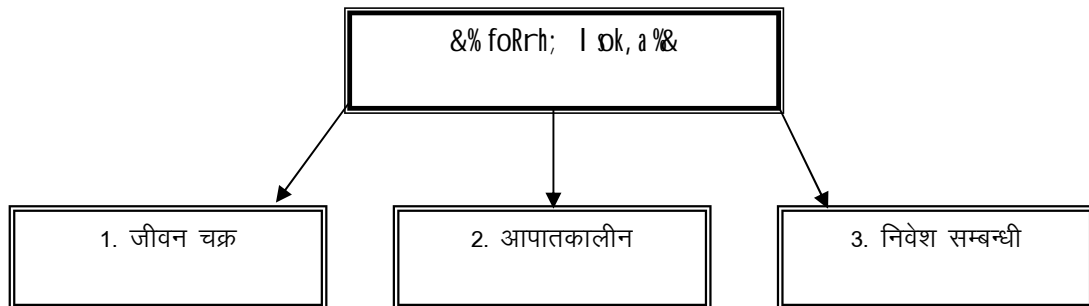
'kks/k mÍs ;

- मानव जाति वर्ग पर वित्तीय सेवा को समझना।
- कोविड-19 आपदा काल में मानव जाति पर वित्तीय सेवाओं के प्रभाव का जानना।
- कोविड-19 आपदा काल में वित्तीय सेवा से मानव जाति की रोजमर्रा की आवश्यकता/जीवन-शैली में बदलाव को जानना।
- कोविड-19 आपदा काल से भारतीय अर्थव्यवस्था पर कितना प्रभाव पड़ा इसका अध्ययन करना।
- भारत में कोविड-19 आपदा काल में मानव जाति की वित्तीय सेवा को दो भागों में सरकारी उपक्रम एवं गैर सरकारी उपक्रम विभाजित करके उनके मध्य अंतर का अध्ययन करना व निष्कर्ष निकालना।

सामान्य तौर पर मानव जाति पर वित्त सेवा से आशय यह है कि कोई उपक्रम या कम्पनी अपने उद्देश्य को पूरा करने के लिए मानव जाति का सहयोग लेता है तथा उस सहयोग के बदले मानव जाति को निर्धारित प्रतिफल का भुगतान करता है इसी प्रक्रिया को मानव जाति पर वित्त सेवा कहा जाता है अर्थात् किसी भी राष्ट्र की मजबूत अर्थव्यवस्था के पीछे मानव जाति अपनी अहम भूमिका निभाता है।

वित्त एवं वित्तीय संस्थाएँ मानव जाति की अधोसंरचना के ऐसे महत्वपूर्ण घटक हैं। जिनका मानव जाति का विकास पर गहरा प्रभाव पड़ता है। विशेषकर कमजोर सामाजिक और व्यक्तिगत परिसम्पत्ति के आधार वाले गरीब तबकों के हिसाब से वित्त का महत्व ही कुछ ओर हो जाता है। फिर चाहे मसला उपभोग या व्यवसाय के लिए ऋण का हो या फिर रोजमर्रा की जरूरतों और खर्च से निपटने का या फिर मृत्यु, बीमारी, रोग और आपदा के आन पड़ने पर छोटा-सा ऋण पा जाने का।

वित्त ही वह माध्यम है जो मानव जाति में जरूरतमंदों और गरीबों को खाद्य-असुरक्षा सामाजिक पिछड़ेपन, आजीविका सम्बन्धी मुश्किलों, बुरे-भले वक्त, कमरतोंड झटकों का सामना करने और गरीबी से छुटकारा पाने में मदद करता है। मानव जाति का कोई भी परिवार चाहे कहीं हो- गांव या शहर में, उसकी वर्तमान परिस्थिति चाहे जो भी हो, उसे वित्त या पैसे की जरूरत उत्पादन और उपभोग खर्चों के लिए होती है। इन वित्तीय सेवाओं की जरूरत को तीन श्रेणियों में विभक्त किया जा सकता है:-



इन दिनों दुनियाभर में कई बड़ें-बड़ें देशों में कोविड-19 आपदा के दौरान उनकी अर्थव्यवस्था में भयंकर गिरावट देखी गई है। जिसका प्रत्यक्ष प्रभाव मानव जाति पर दिखाई देने लगा है तथा उनका ज्यादा असर वित्त या वित्तीय फंड पर पड़ा है।

विश्व बैंक के अनुमान के मुताबिक वित्तीय वर्ष 2019–20 में भारतीय अर्थव्यवस्था की वृद्धि दर घटकर मात्र 5 प्रतिशत रह जाएगी तो वही वर्ष 2020–21 में तुलनात्मक आधार पर अर्थव्यवस्था की वृद्धि दर में भारी गिरावट आएगी जो घटकर मात्र 2.8 प्रतिशत रह जाएगी। रिपोर्ट में यह भी कहा गया है कि यह महामारी ऐसे समय पर आई है। जब वित्तीय क्षेत्र पर दबाव के कारण पहले से ही भारतीय अर्थव्यवस्था सुस्ती की मार झेल रही थी और अब कोविड-19 आपदा के कारण इस पर और दबाव बढ़ा है।

दरअसल कोविड-19 आपदा के कारण देशभर में लॉकडाउन जैसी स्थिति उत्पन्न हो गई है। जिससे सभी कारखाने, कार्यालय, मॉल्स, व्यवसाय आदि सब बंद होने के कारण घरेलू आपूर्ति और मांग प्रभावित होने के चलते आर्थिक वृद्धि दर प्रभावित हुई है तथा साथ ही जोखिम बढ़ने से घरेलू निवेश में सुधार भी देरी होने की संभावना दिखाई दे रही है। ऐसे में अर्थव्यवस्था मुश्किल दौर में पहुंच सकती है।

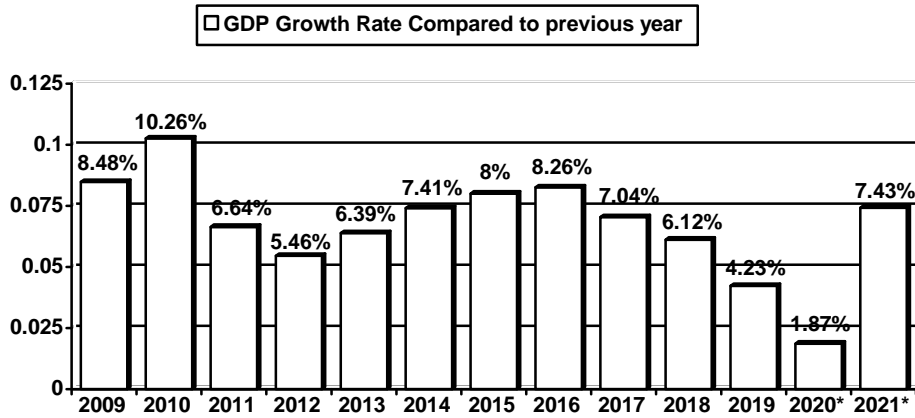
दुनिया भर में बचत और राजस्व के रूप में जमा खरबों डॉलर स्वाहा हो चुका है। वैश्विक सकल घरेलू उत्पाद (जीडीपी) में रोज कमी दर्ज की जा रही है। लाखों मानव जाति अपना रोजगार खो चुके हैं। अंतर्राष्ट्रीय मुद्रा कोष ने बताया है कि दुनिया के लगभग 90 देश उससे मदद के लिए गुजारिश कर रहे हैं। आईएलओ के अनुसार कोविड-19 आपदा की वजह से दुनियाभर में ढाई करोड़ नौकरियां पर खतरे की घंटी बज रही है। कोविड-19 आपदा के कारण चीन से होने वाले आयात के प्रभावित होने से स्थानीय और बाहरी आपूर्ति श्रृंखला के संदर्भ में चिंताएं बढ़ी हैं। सरकार के द्वारा कोविड-19 आपदा के प्रसार को रोकने के लिये लॉकडाउन और सामाजिक दूरी जैसे प्रयासों से औद्योगिक उत्पादन प्रभावित हुआ है। लॉकडाउन के कारण बैरोजगारी बढ़ी है। जिससे सार्वजनिक खर्च में भारी गिरावट आई है। लॉकडाउन के कारण कच्चे माल की उपलब्धता, उत्पादन और तैयार उत्पादों के वितरण की श्रृंखला प्रभावित हुई है। जिसे पुनः शुरू करने में ज्यादा समय लग रहा है।

उदाहरण के तौर पर उत्पादन स्थगित होने के कारण मजदूरों का पलायन अपने क्षेत्र की तरफ बढ़ने लगा है। ऐसी स्थिति में कम्पनियों के लिये पुनः कुशल मजदूरों की नियुक्ति कर पुरी क्षमता के साथ उत्पादन शुरू करना एक बड़ी चुनौती होगी। जिसका प्रभाव अर्थव्यवस्था की धीमी प्रगति के रूप में देखा जा सकता है। खनन और उत्पादन जैसे अन्य प्राथमिक या द्वितीयक क्षेत्रों में गिरावट का सीधा प्रभाव सेवा क्षेत्र की कम्पनियों पर भी पड़ा है। जो उपक्रम इस कोविड-19 आपदा से बुरे दौर से सबसे ज्यादा प्रभावित होंगे। उसी उपक्रम या सेक्टर की नौकरियों को भी सबसे ज्यादा खतरे का सामना करना होगा। एविएशन सेक्टर (निष्कासन क्षेत्र) में 50 प्रतिशत वेतन कम करने की खबरें तो पहले ही आ चुकी हैं। रेस्टोरेंट्स बंद हैं। मानव जाति वर्ग के लोग घूमने के लिए अपने घर से बाहर नहीं निकल रहे हैं। नया सामान या वस्तु नहीं खरीद रहे हैं, लेकिन कई कम्पनियों को किराया, वेतन और अन्य आवश्यक खर्चों का भुगतान तो करना ही होगा। ऐसी परिस्थिति में इस तरह का नुकसान झेल रही कम्पनियां ज्यादा समय तक भार सहन नहीं कर पाएंगी और इसका सीधा असर नौकरियों पर पड़ेगा। हांलाकि सरकार ने पहले ही कम्पनियों से कर्मचारी, श्रमिक व अन्य को नौकरी से नहीं निकालने की अपील की है, लेकिन इस अपील का बहुत ज्यादा असर नहीं होगा।

“विश्व बैंक” के मुख्य अर्थशास्त्री हैंस टिम्बर ने कहा कि भारत का परिदृश्य अच्छा नहीं है। टिम्बर ने कहा कि यदि भारत में लॉकडाउन अधिक समय तक जारी रहता है तो यहां आर्थिक परिणाम विश्व बैंक के अनुमान से अधिक बुरे साबित हो सकते हैं। उन्होंने यह भी कहा कि इस चुनौती से निपटने के लिए भारत को सबसे पहले इस कोविड-19 महामारी को ओर फेंकने से रोकना होगा और साथ ही यह भी सुनिश्चित करना होगा कि सभी मानव जाति को खाद्य सुरक्षा या भोजन मिल सके। लॉकडाउन का सबसे ज्यादा प्रभाव अनौपचारिक क्षेत्र पर पड़ेगा और हमारी अर्थव्यवस्था का 50 प्रतिशत सकल घरेलू उत्पाद (जीडीपी) अनौपचारिक क्षेत्र से ही आता है। ये क्षेत्र लॉकडाउन के दौरान काम नहीं कर सकता है। वह कच्चा माल नहीं खरीद सकते हैं। बनाया हुआ माल बाजार में नहीं बेच सकते तो उनकी कमाई बंद हो जाएगी।

भारत में कोविड-19 आपदा के लगभग छः माह पूरे हो चुके हैं और इस छः माह के समय के दौरान मानव जाति को आर्थिक परेशानी से गुजरने पर मजबूर कर दिया है जिसके कारण मानव जाति ने अपनी दिनचर्या, रोजमर्रा, रहन-सहन, कार्यप्रणाली, पारिवारिक समय व्यतीत, अनावश्यक खर्चों पर नियंत्रण, बगीचे का रख-रखाव, खान-पान, साफ-सफाई, योग-प्राणायाम, मानवता धर्मपालन, घरेलू काम-काज में सहयोग आदि ऐसे कई कार्यों में बदलाव आया है जिसकी मानव जाति ने कभी कल्पना ही नहीं की थी। कभी-कभी ऐसा व्यतीत होता है कि कोविड-19 आपदा से लगभग सम्पूर्ण दुनिया में एक नये युग की शुरुआत हुई है जिसमें मानव जाति ने अपनी जीवन-शैली में बदलाव करके नवजीवन को स्थापित किया। उपरोक्त इन सभी बदलाव में मानव जाति ने कही न कही वित्तीय या आर्थिक स्रोतों की कमी को महसूस किया गया है।

कोविड-19 आपदा काल के दौरान भारतीय अर्थव्यवस्था सकल घरेलू उत्पाद (जीडीपी) कितना प्रभाव पड़ा इसकी तुलना अगर हम एक सर्व रिपोर्ट में वर्ष 2009 से वर्ष 2020 तथा वर्ष 2021 के अनुमानित दशाये गये आकड़े के द्वारा करे तो इसमें भी काफी उतार-चढ़ाव की स्थिति को देखा गया है जो विचार करने लायक है।



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उपरोक्त दिखाये गये चार्ट के अनुसार कोविड-19 आपदा काल से पहले वर्ष 2019 में भारत की सकल घरेलू उत्पाद (जीडीपी) 4.23 प्रतिशत थी जो कि कोविड-19 आपदा काल के दौरान वर्ष 2020 में गिरकर 1.87 प्रतिशत रही और अगर हम पिछले वर्ष 2009 से औसत तुलना करके देखे तो यह सकल घरेलू उत्पाद (जीडीपी) दर वर्ष 2021 में बढ़कर लगभग 7.43 प्रतिशत तक रहने की सम्भावना है। इससे यह तो साफ जाहिर होता है कि कोविड-19 आपदा काल से गुजरने के बाद शायद भारत की सकल घरेलू उत्पाद (जीडीपी) में काफी सुधार होने की सम्भावना है, लेकिन साथ ही गौर करने वाली बात यह है कि वर्ष 2019-20 में भारत की सकल घरेलू उत्पाद (जीडीपी) वृद्धि पिछले 11 साल के सबसे निचले स्तर 4.2 प्रतिशत पर आ गई है।

भारत वर्तमान स्थिति का कई स्रोतों से अध्ययन करने से यह तो साफ जाहिर हो रहा है कि कोविड-19 आपदा काल में वित्तीय सेवाओं से सबसे अधिक मानव जाति प्रभावित हुआ है। अतः इस स्थिति को और विस्तार से जानने के लिये हम मानव जाति को दो उपक्रम में विभाजित करेंगे जो इस प्रकार है:-

- सरकारी उपक्रम का मानव जाति पर वित्तीय सेवाओं का प्रभाव:- सरकारी उपक्रम से आशय यह है कि ऐसे उपक्रम जिसका स्वामित्व अधिकार सम्पूर्ण नियंत्रण सरकार के पास सुरक्षित होता है। जिससे उपक्रम में किसी भी प्रकार का संकट या आकस्मिक घटना के घटित होने पर सरकार द्वारा प्रत्यक्ष रूप से उस उपक्रम को सहायता देकर उसको नियंत्रित किया जा सकता है। जैसे:-सरकारी कम्पनी,

अस्तपताल, रेलवे, बस, टेलीफोन सर्विस इत्यादि। सरकारी उपक्रम में नियुक्त कार्यरत मानव जाति (निदेशक, मैनेजर, कर्मचारी, अन्य स्टाफ आदि) का मानदेय वेतन एवं अन्य परिलाभ आदि नियुक्ति के समय सरकारी गाइड लाइन के अनुसार निर्धारित होती है। जिससे सरकारी उपक्रम में कार्यरत मानव जाति को कोई भी आपदा या संकट आने पर वित्तीय सेवाओं से प्रत्यक्ष रूप से प्रभावित नहीं होते हैं अर्थात् कोविड-19 आपदा काल में सरकारी उपक्रम में कार्यरत मानव जाति को आर्थिक चुनौतियों का सामना नहीं के बराबर करना पड़ा है।

- गैर सरकारी उपक्रम का मानव जाति पर वित्तीय सेवाओं का प्रभाव:— गैर सरकारी उपक्रम से आशय ऐसे उपक्रम से है जिसका स्वामित्व अधिकार सम्पूर्ण नियंत्रण सरकार के पास नहीं होता है बल्कि यह उपक्रम सरकारी गाइडलाइन का पालन करते हुए अपने उपक्रम को संचालित करते हैं। जैसे:—निजी कम्पनी, निजी अस्तपताल, निजी रेलवे व बस, निजी टेलीफोन सर्विस, निजी व्यवसाय इत्यादि। गैर सरकारी उपक्रम में कौशल के आधार पर मानव जाति (मैनेजर, कर्मचारी, श्रमिक, अन्य स्टाफ आदि) की नियुक्ति की जाती है तथा वेतन एवं अन्य परिलाभ आदि सरकारी उपक्रम कि तुलना में बिल्कुल अलग या कम होते हैं जो कि कार्य के आधार पर निर्धारित किये जाते हैं। इस उपक्रम में किसी भी प्रकार का संकट या आकस्मिक घटना के घटित होने पर सरकार द्वारा प्रत्यक्ष रूप से उस उपक्रम को कोई सहायता नहीं दी जाती है अर्थात् गैर सरकारी उपक्रम में कार्यरत मानव जाति को कोई भी आपदा या संकट आने पर प्रत्यक्ष रूप से आर्थिक चुनौतियों का सामना करना पड़ता है और अभी हाल ही में कोविड-19 आपदा काल में सबसे अधिक गैर सरकारी उपक्रम में कार्यरत मानव जाति को आर्थिक चुनौतियों का सामना करना पड़ रहा है।

अभी वर्तमान में जो भारत की सकल घरेलू उत्पाद (जीडीपी) में भारी गिरावट गैर सरकारी उपक्रम में मानव जाति की आर्थिक चुनौतिया प्रकट होने के कारण यह स्थिति आई है और जल्द ही अगर भारत सरकार ने गैर सरकारी उपक्रम को नियंत्रण या आर्थिक समस्या का समाधान की ओर कदम नहीं उठाया तो भारत की सकल घरेलू उत्पाद (जीडीपी) में ओर ज्यादा गिरावट आने की सम्भावना उत्पन्न हो सकती है और भविष्य में भारत की सकल घरेलू उत्पाद (जीडीपी) की स्थिति ओर गम्भीर हो जाएगी जिसको नियंत्रण करना भारत सरकार के लिए बहुत कठिन चुनौतियों का सामना करना होगा। अतः भारत सरकार को उपरोक्त स्थिति से बचने के लिए जल्द से जल्द गैर सरकारी उपक्रम के लिए योजना बनाकर शीघ्र ही लागू करनी चाहिए। जिससे भारत की सकल घरेलू उत्पाद (जीडीपी) की गिरती हुई स्थिति को नियंत्रण करने में मदद मिल सके।

कोविड-19 आपदा काल में सरकारी एवं गैर सरकारी उपक्रम में मानव जाति को किन-किन क्षेत्र में वित्तीय चुनौतिया का सामना करना पड़ा और इसका प्रत्यक्ष प्रभाव किस परिस्थिति में पड़ा है। इसका तुलनात्मक अध्ययन हम एक तालिका के द्वारा इसे समझने की कोशिश करेंगे।

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1. आर्थिक स्थिति।	कोविड-19 आपदा काल के लॉकडाउन में मुख्यतः रेलवे व बस उपक्रम ज्यादा प्रभावित हुए हैं। जिससे उन उपक्रम की आर्थिक स्थिति बहुत ज्यादा प्रभावित हुई है।	जबकि गैर सरकारी उपक्रम के लगभग सभी उपक्रम इस कोविड-19 महामारी के लॉकडाउन के दौरान बहुत ज्यादा प्रभावित हुए हैं। जिसका सीधा प्रभाव इनकी आर्थिक स्थिति पर हुआ है।
2. सकल घरेलू उत्पाद (जीडीपी) पर प्रभाव।	कोविड-19 आपदा से भारत की सकल घरेलू उत्पाद (जीडीपी) पर प्रभावित हुई है, लेकिन सरकारी उपक्रम पर इसका प्रभाव गैर सरकारी उपक्रम की तुलना बहुत कम है।	जबकि गैर सरकारी उपक्रम का भारत की सकल घरेलू उत्पाद में सबसे अधिक योगदान रहता है लेकिन कोविड-19 आपदा काल से यह उपक्रम सबसे अधिक प्रभावित हुआ है। जिससे भारत की जीडीपी की गति को विराम लग गया था।

3. वित्तीय सेवा पर प्रभाव।	कोविड-19 आपदा काल के दौरान इन उपक्रम में कार्यरत मानव जाति को वित्तीय सेवा सम्बन्धित परिस्थिति का सामना नहीं के समान करना पड़ा है। जिसका उनकी जीवन-शैली, रोजमर्रा की आवश्यकता पर कोई प्रभाव नहीं पड़ा है।	जबकि गैर सरकारी उपक्रम के मानव जाति को कोविड-19 आपदा काल के लॉकडाउन के दौरान सबसे अधिक वित्तीय सेवा पर प्रभाव पड़ा है, क्योंकि लॉकडाउन के दौरान यह उपक्रम पूर्णतः बंद हो चुके थे। जिससे उनकी जीवन-शैली, रोजमर्रा की आवश्यकता की पूर्ति के लिए कई चुनौतियों का सामना करना पड़ा है।
4. बचत फंड की स्थिति।	कोविड-19 आपदा काल के लॉकडाउन के समय इस उपक्रम में कार्यरत मानव जाति के बचत फंड से कम प्रभावित हुई हैं, क्योंकि सरकार के द्वारा मानदेय में कई तरह के परिलाभ मिलते हैं। जिससे बचत फंड प्रभावित नहीं होता है।	जबकि गैर सरकारी उपक्रम के मानव जाति को कोविड-19 आपदा काल में लॉकडाउन के दौरान बचत फंड प्रत्यक्ष रूप से बहुत अधिक प्रभावित हुआ है, क्योंकि इस आपदा काल में मानव जाति की रोजमर्रा की आवश्यकता बचत फंड से ही पूरी करने पर मजबूर था।
5. निवेश फंड की स्थिति।	कोविड-19 आपदा काल के दौरान इस उपक्रम के मानव जाति के निवेश फंड पर कोई विपरीत प्रभाव नहीं पड़ा है। हालांकि शेयर बाजार जरूर प्रभावित हुआ है।	जबकि गैर सरकारी उपक्रम के मानव जाति को इस कोविड-19 आपदा काल के समय उनके निवेश फंड प्रत्यक्ष रूप से प्रभावित हुए हैं, क्योंकि बचत फंड कम होने से रोजमर्रा की आवश्यकता पूरी न होने पर मजबूरन उन्हें अपने निवेशित धन को निकालकर अपनी रोजमर्रा की आवश्यकता की पूर्ति की।
6. बजट पर प्रभाव	इस उपक्रम के मानव जाति को कोविड-19 आपदा काल के दौरान अपने पारिवारिक बजट से कम प्रभावित हुआ है, क्योंकि सरकारी स्वामित्व होने के कारण वित्तीय सेवा में कटौती असम्भव होती है।	जबकि इस उपक्रम के मानव जाति को कोविड-19 आपदा काल के दौरान अपने घर का सम्पूर्ण बजट की स्थिति अनियंत्रित हो गई है। जिससे उनकी रोजमर्रा की आवश्यकता की पूर्ति करने के लिए कई विपरीत परिस्थितियों का सामना करना पड़ रहा है।
7. उपक्रम के कर्मचारी, श्रमिक व अन्य स्टाफ की स्थिति।	इस उपक्रम में कोई भी आपात काल या कोविड-19 आपदा जैसी स्थिति उत्पन्न होने पर भी उपक्रम का कोई भी कर्मचारी, श्रमिक, अन्य स्टाफ अपने रोजगार एवं वित्तीय सेवा से प्रभावित नहीं होता है।	जबकि इस उपक्रम में कोई भी संकट, आपातकाल या कोविड-19 आपदा जैसी स्थिति उत्पन्न होने पर उपक्रम को प्रत्येक कर्मचारी, श्रमिक, अन्य स्टाफ अपने रोजगार एवं वित्तीय सेवा से प्रत्यक्ष रूप से प्रभावित होता है।
8. रोजमर्रा की आवश्यकता की स्थिति।	इस उपक्रम में कोविड-19 आपदा से मानव जाति की वित्तीय सेवा से रोजमर्रा की आवश्यकता प्रभावित नहीं होती है।	जबकि इस उपक्रम में कोविड-19 आपदा से मानव जाति की वित्तीय सेवा प्रत्यक्ष रूप से प्रभावित हुई है। जिससे उनको रोजमर्रा की आवश्यकता की पूर्ति करने के लिए कई चुनौतियों का सामना करना पड़ता है।
9. कार्य-शैली और दिनचर्या में बदलाव की स्थिति।	कोविड-19 आपदा से इस उपक्रम के मानव जाति की वित्तीय स्थिति बहुत ही कम प्रभावित हुई है, लेकिन उनके कार्य करने की दिनचर्या में बदलाव की स्थिति पैदा हो गई है। जैसे: चेहरे पर मास्क, 2गज की दूरी, हाथ न मिलाना आदि।	जबकि इस उपक्रम में कोविड-19 आपदा से मानव जाति की वित्तीय स्थिति पर प्रत्यक्ष रूप से प्रभावित हुई है। जिससे उनके कार्य करने के तरीके, धन का लेनदेन करने के तरीके, अन्य ऐसे कई जरूरी कार्य हैं। जिसमें बदलाव करना की उचित विकल्प रहा है।
10. परिवार प्रभावित।	कोविड-19 आपदा से कई मानव जाति के परिवार संक्रमण से प्रभावित हुए हैं, लेकिन इस उपक्रम में वित्तीय सेवाओं से मानव जाति बहुत ही कम प्रभावित हुआ है। जिससे उनके परिवार को एक आर्थिक सुरक्षा मिली है।	जबकि इस उपक्रम में भी कोविड-19 आपदा से कई मानव जाति के परिवार संक्रमण से प्रभावित हुए हैं, लेकिन साथ ही वित्तीय सेवाओं से भी मानव जाति बहुत प्रभावित हुआ है। जिससे उनके परिवार को कई तरह की आर्थिक समस्या का सामना करना पड़ रहा है।

11. मानव जाति वर्ग में कोविड-19 संक्रमण पाये जाने पर स्थिति।	इस उपक्रम में कोई भी मानव जाति कोविड-19 संक्रमण से ग्रसित पाये जाने पर उसको सरकार द्वारा डब्लूएचओ की गाइडलाइन के माध्यम से ध्यान रखा जाता है।	जबकि इस उपक्रम में कोई भी मानव जाति कोविड-19 संक्रमण से ग्रसित पाये जाने पर उसको सरकार द्वारा डब्लूएचओ की गाइडलाइन के माध्यम से ध्यान रखा जाता है, लेकिन इस कारण उसकी वित्तीय स्थिति प्रत्यक्ष रूप से प्रभावित हो जाती है।
12. चिंता, कोध, चिडचिडापन, आत्महत्या आदि का मानव जाति वर्ग पर हावी होना।	कोविड-19 आपदा काल के दौरान इस उपक्रम के मानव जाति पर वित्तीय सेवा बहुत ही कम प्रभावित हुई है। जिस कारण इस मानव जाति में चिंता, कोध, चिडचिडापन, बैचेनी, आत्महत्या आदि का असर नहीं के बराबर हुआ है।	जबकि इस उपक्रम में कोविड-19 आपदा का मानव जाति की वित्तीय सेवाओं पर प्रत्यक्ष प्रभाव अधिक पड़ा है। जिसके कारण इस मानव जाति को चिन्ता, कोध, चिडचिडापन, बैचेनी, आत्महत्या आदि का प्रत्यक्ष रूप से शिकार हुआ है।

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कोविड-19 आपदा का मानव जाति पर वित्तीय सेवाओं का बहुत ही गहरा प्रभाव गैर सरकार उपक्रम पर दिखाई दे रहा है। साथ ही सरकारी उपक्रम के मानव जाति पर इसका असर दिखा है, लेकिन गैर सरकारी उपक्रम की तुलना में बहुत कम है और इसी वजह से आज भारत में ही नहीं बल्कि कई देश भी वित्तीय सेवाओं से प्रभावित हो रहे हैं। जिस कारण से उन देशों की अर्थव्यवस्था पर भी प्रत्यक्ष प्रभाव पड़ा है। साथ ही उन देशों की सकल घरेलू उत्पाद (जीडीपी) में कमी को दर्ज किया गया है।

अतः हमें इस अकल्पनीय संकट की घड़ी में संयम, धैर्य, उच्च मनोबल का सहारा लेते हुए सरकार द्वारा डब्लूएचओ के निर्देशों की पालना सख्ती से करनी होगी। साथ ही इस आपदा काल के समय जहां तक जरूरी है। हमें अपने रोजमर्रा की जीवन-शैली में आत्म निर्भरता से कार्य करने पर जोर देना होगा। जैसा कि हमने कई जाने माने विशेषज्ञ से सुना है कि मानव जाति के जीवन में बदलाव आना ही प्रकृति का नियम है और आज दुनिया में जो महामारी कोविड-19 द्वारा फैली है जिस कारण हर देश-दुनिया की मानव जाति की जीवन-शैली, कार्य-शैली में कई तरह के बदलाव आये हैं। भारत सरकार कोविड-19 आपदा से ग्रसित गैर सरकारी उपक्रम के मानव जाति के लिए जल्द से जल्द वित्तीय सेवाओं को पुनः सुचारु रूप से चलाने के लिए दृढ़ योजना बनाकर शीघ्र लागू किया जाना चाहिए। जिससे भारत की अर्थव्यवस्था को पुनः पटरी पर लाकर सकल घरेलू उत्पाद (जीडीपी) को गति प्रदान कि जा सकें।

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