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DETERMINANTS OF CAPITAL STRUCTURE OF COMMERCIAL BANKS IN ETHIOPIA: A COMPARATIVE STUDY OF PUBLIC AND PRIVATE BANKS

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ABSTRACT

Determining the optimal capital structure is one of the policy decisions of corporate finance manager, since optimal debt ratio influences firm's value. Different firms determine capital structures at different levels to maximize the value of their firm and therefore, this study attempted to analyze the determinants of capital structure in both public and private commercial banks in Ethiopia. To discover what determines capital structure, eight explanatory variables were selected and regressed against the appropriate capital structure measure (Debt to Equity Ratio). A sample of eight private commercial banks and one public bank (CBE) were taken for analysis and to investigate a mixed research approach was adopted. Consequently, multivariate regression analysis with fixed effect model was applied on financial data over the study period of 2006 - 2015. The major findings of the study indicated that six of the explanatory variables (profitability, size, age, tax-shield, growth and inflation) for public bank and the six of the explanatory variables (profitability, size, age, tax-shield, GDP and inflation) for private banks were the significant determinants of capital structure. On the other hand, profitability, growth, size, tax-shield and GDP were found to be negatively related while age and inflation were found to be positively related to debt to equity ratio (der) for public bank. For private banks, profitability, growth, age and dividend payout were found to be negatively related while size, tax-shield, GDP and inflation were found to be positively related to debt to equity ratio. Therefore, commercial banks should pay greater attention on significant variables in determining their optimal capital structure decision and also the Bank's Management should place greater emphasis on the facilitation of total capital to expand their branch network which in turn creates market share for them.

Key words: Leverage, Profitability, Bank Size, Growth, Age, Dividend Payout, Tax - Shield, GDP and Inflation.

Introduction and Background

Capital structure of a firm describes the way in which a firm raises capital needed to establish and expand its business activities. It is a mixture of various types of equity and debt capital that a firm maintains resulting from its financing decisions. Most of the efforts of the financial decision making process is centered on the determination of the optimal capital structure; where the firms' value is maximized and cost of capital is minimized. But, what are the potential determinants of such optimal capital structure? This was the key question that has been answered by this research in the case of both public and

private commercial banks in Ethiopia.

Trade-off theory proposes that the optimal debt ratio is set by balancing the trade-off between the benefit and cost of debt. According to this theory, the optimal capital structure is achieved when the marginal present value of the tax shield on additional debt is equal to the marginal present value of the financial distress cost on additional debt (Myers, 1984). Pecking Order Theory emphasizes the information asymmetry between the firm insiders and the outside investors suggesting that firms use debt only when the internal financing is not available (Myers and Majluf, 1984). Agency Cost Theory predicts the capital structure choice is based on the existence of agency cost. This theory investigates the relationship between the manager of the firm, and the outside equity and debt holders (Jensen and Meckling, 1976).

Statement of the Problem & the Objectives of the Study

Myers (1984) states that the theories on capital structure are based on certain circumstances. Ethiopia differs from other developing countries in such a way it has no secondary capital market which makes things easier for firms to raise funds and choose the best mix of debt and equity sources. The unique financial features of public and private banks and the environment in which they operate, there is a strong ground to conduct comparative study on capital structure determinants in public and private banks. Therefore, this paper narrows the gap and meant to find the different determinants of capital structure in the Ethiopian banking industry.

Hence, the present comparative study's general objective is to examine capital structure of public and private commercial banks of Ethiopia by analyzing the internal (firm specific) and external factors determining capital structure decisions. Accordingly, the specific objectives were framed as (i) to examine the relationship between bank specific variables (profitability, size, growth, age, dividend and tax-shield) and external variables (GDP, Inflation) on the leverage (debt to equity ratio) among public and private commercial banks. (ii) to identify the determinants affecting the leverage (debt to equity ratio) among public and private commercial banks. The following hypothesis were made for the study:

i) H_1 = There is a negative relationship between profitability and leverage ratio.
ii) H_1 = There is a positive relationship between the firm's size and its leverage ratio.
iii) H_1 = There is a positive relationship between growth and leverage ratio.
iv) H_1 = There is a positive relationship between a firm's age and its leverage ratio.
v) H_1 = There is a positive relationship between dividend payout and leverage ratio.
vi) H_1 = There is a positive relationship between tax-shield and leverage ratio.
vii) H_1 = There is a positive relationship between Gross Domestic Product (GDP) growth and leverage ratio.
viii) H_1 = There is a negative relationship between inflation and leverage ratio.

Review of Literature

Modigliani and Miller (1958) argued that capital structure is irrelevant to the value of a firm under perfect capital market conditions with no corporate tax and no bankruptcy cost. This implies that the firm's debt to equity ratio does not influence its cost of capital. Miller and Modigliani (1963) argued that in the presence of corporate taxes, a value-maximizing company can obtain an optimal capital structure. If the market is not perfect, as result of, say the existence of taxes, or of underdeveloped financial markets, or of inefficient case, firms must consider the costs entailed by these imperfections. Debt enables the possibility to deduct interest charges raising incentive for higher leverage in order to maximize the tax shield. By doing this the firm value increases with the value of the tax shield (Graham, 2000). Damodaran (2001) stretches the increased financial discipline for managers as a consequence of higher debt levels. Another cost of debt is the agency conflicts that can arise between stockholders/shareholders and

bondholders/, debt holders (Fama and French, 2002). In the case of Ethiopia, there have been a few studies on determinants of capital structure, like Ashenafi (2005), Mintesinot (2010), Kibrom (2010), Amanuel (2011), Bayeh (2011) and Weldemikael (2012).

In this study, to identify the determinants of Capital Structure in the Ethiopian Commercial Banking, the researcher concentrated on 8 (eight) key variables of which 2 (two) are external variables as identified in studies by Titman and Wessels (1988) in USA, Ashenafi (2005) in Ethiopia, Buferna et al (2005) in Libya, Rajan and Zingales (2006) in G7 countries, Gropp and Heider (2007) in developed countries, Octavia and Brown (2008) in developing countries, Al-Dohaiman (2008) in Saudi Arabia, Kokobe (2015) in Ethiopia. The selected eight variables are Profitability, Size, Growth, Age of the Firm, Dividend payout, Tax-shield, GDP growth and Inflation.

Methodology

Quantitative research is a means for testing objective theories by examining the relationship among variables (Creswell, 2009). This study is an explanatory research and has employed quantitative analysis by using multivariate regression model.

Sampling Method and Data Source

The population of the study was all public and private commercial banks registered by NBE. Currently, as per NBE (2015/16) annual report 16 private and 2 public banks (in which, one is not commercial namely Development Bank of Ethiopia) are operating in Ethiopia. For this study, ten years' data (2006-2015) were considered. Therefore, those banks which were established after 2006 and started to provide financial statements in the succeeding fiscal year were not included in this study. Accordingly, only eight private banks from the population of sixteen private commercial banks and one public commercial bank's information were considered for this study to examine the determinants of capital structure. Thus, sample size represents 50 and 100 per cent of the existing private and public commercial banks respectively. In other words, the entire population of commercial banks that exists, at least for the last ten years (2006-2015) were selected. The study considered secondary sources of data i.e. audited financial statements of nine commercial banks aged ten years and above and the external variables data were obtained from Ministry of Finance and Economic Development of Ethiopia (MoFED).

Data analysis method

The data collected through document review was analyzed statistically using both descriptive and inferential statistics. In addition, correlation matrix was used to identify the relationship of each variable among them and with dependent variable. By using statistical software 'STATA' OLS (Ordinary Least Squares) multiple regression and t-statistic were carried out to the relationship between leverage and their potential determinants and also to determine the most significant and influential explanatory variables affecting the capital structure of public and private banks in Ethiopia. In this regard, the model for the study was framed as shown below:

LEVERAGE = Function of (Profitability, Size, Growth, Age, dividend, Tax-Shield, GDP, Inflation)

Therefore the Specified Model is:

$$Leverage = \beta 0 + \beta 1(Prof) + \beta 2(Size) + \beta 3(Grow) + \beta 4(Age) + \beta 5(dividend) + \beta 6(Tax\text{-}shield) + \beta 7(GDP) + \beta 8(Inflation) + \varepsilon$$

$$DER = \beta 0 + \beta 1(PR) + \beta 2(SZ) + \beta 3(GR) + \beta 4(AG) + \beta 5(Dvnd) + \beta 6(TXS) + \beta 7(GDP)\ \beta 8(Inf) + \varepsilon$$

Where:

β0 = Coefficient of Intercept (Constant)	β4 = Coefficient of Age

β1 = Coefficient of Profitability	β5 = Coefficient of dividend
β2 = Coefficient of Firm Size	β6 = Coefficient of Tax-shield
β3 = Coefficient of Growth	β7 = Coefficient of GDP
ε = the Error Term	β8 = Coefficient of Inflation

Dependent Variable

DER - denotes leverage as a measure of Debt to Equity ratio and was computed as total Liabilities divided by total Equity

Independent Variables

PR- denotes profitability which was measured by using the ratio of operating income over total assets,

SZ- denotes size which was measured by the natural logarithm of total assets,

GR- denotes Growth which was measured by the percentage change of total assets,

AG- denotes Age which was measured by the number of years of stay in business operation,

TXS- denotes Tax-shield that was measured by the product of interest expenses & corporate tax rate.

Dvnd- denotes dividend payout which was measured by the ratio of total dividends to total net earnings,

GDP- denotes growth domestic product of the country which was measured by the ratio of current year GDP to last year GDP minus one,

Inf- denotes Inflation rate of the country which was measured by subtract last year's Consumer Price Index (CPI) from the current index and divide by last year's and multiply the result by 100 and add a % sign.

Summary of Variables and their Measures

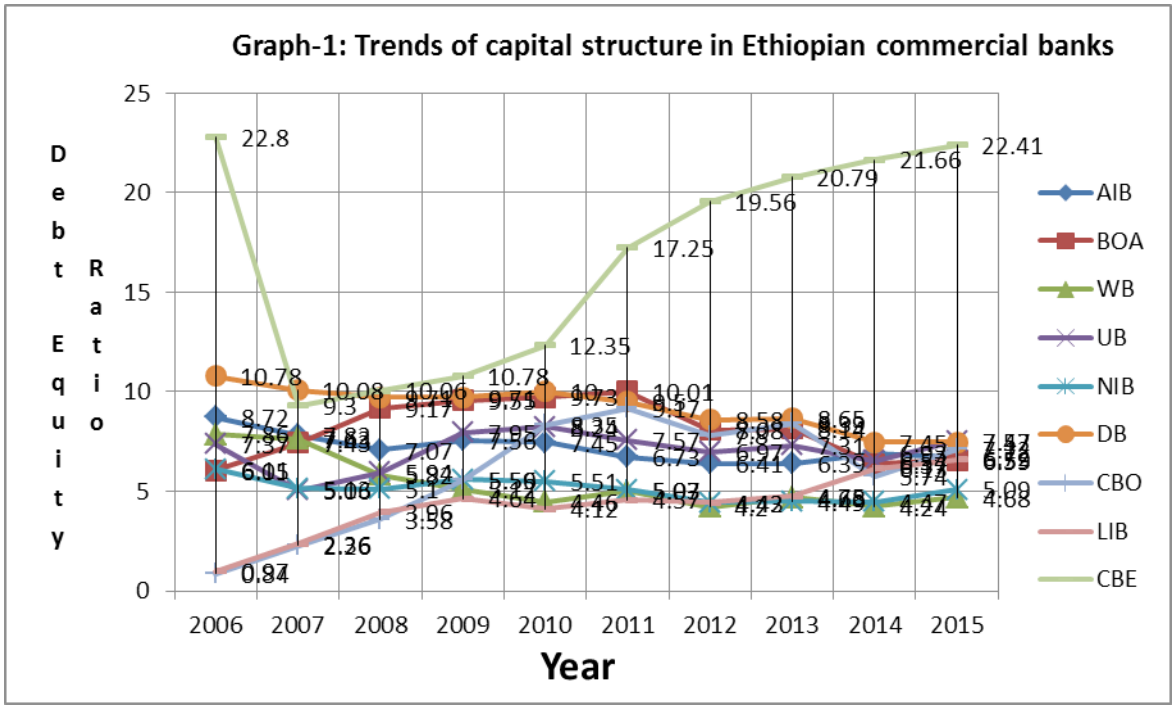
Variables		Definition	Mathematical Expression	Expected sign
Dependent Variable	Debt to Equity Ratio	Ratio of Total liability to Total equity Total Liability	Total Liability / Total Equity	
Explanatory Variables	Profitability	Ratio of Operating income to Total assets	Operating Income / Total Assets	-
	Size	Natural Logarithm of Total Assets	Natural Logarithm of TOTAL ASSETS = ln(Total Assets)	+
	Growth	Percentage increase (change) in total assets	Growth Percentage Increase (change) in total Assets % changes in Total Assets (TA)= $(TA_{cur.year}$- $TA_{pre.year})x100$	+
	Age	Number of years stay in Business	Number of years in business	+

	Tax-Shield	Measured with the product of interest expense and corporate tax rate	(Interest expense) X (Corporate Tax Rate)	+
	Dividend payout	the ratio of total dividends to total net earnings,	Total dividends/Total net earnings	+
	GDP	the ratio of current year GDP to last year GDP minus one,	(current year GDP/ last year GDP) minus one	+
	Inflation rate	measured by subtract last year's Consumer Price Index from the current index and divide by last year's CPI and multiply the result by 100 and add a % sign.	((Current year CPI-last year CPI)/last year CPI)*100	-

Source: Researcher Compiled

Results and Analysis

The trends of capital structure of Ethiopian Commercial Banks shows that almost all the private commercial banks are in the range of around 5 to 10 debt to equity ratio, while the only public commercial bank has been highly intensified with debt during 2010-15. The public bank's (CBE) debt to equity ratio declines almost by half in the year (2006-2007) and then onwards showed an increased trend reached at around 23 by the end of 2015. The observed changes in capital structure of Ethiopian Commercial Banks have motivated the researcher to understand and analyze the significance of influencing factors.



The descriptive statistics of the dependent and explanatory variables for the sample public bank and private banks were summarized in Tables 1 and 2. The total observation for each dependent and explanatory variables for selected private banks and public bank was 80 and 10 respectively.

Table-1: Summary of descriptive statistics for dependent and explanatory variables observation, mean, SD, minimum and maximum (for public bank).

Variable	Obs	Mean	Std. Dev.	Min	Max
der	10	16.7	5.50	9.3	22.8
pr	10	0.03	0.00	0.02	0.03
sz	10	25.31	0.76	24.3	26.38
gr	10	0.25	0.13	0.09	0.54
ag	10	47.5	3.03	43	52
txs	10	5.62e+08	4.35e+08	1.05e+08	1.26e+09
gdp	10	0.10	0.01	0.09	0.12
ifn	10	0.17	0.11	0.03	0.36

Source: Structured review of financial statements and own computations

Table-2: Summary of descriptive statistics for dependent and explanatory variables observation, mean, SD, minimum and maximum (private banks)

Variable	Obs	Mean	Std. Dev.	Min	Max
der	80	6.516375	2.110118	0.84	10.78
pr	80	0.066775	0.0141269	0.014	0.106
sz	80	22.33763	1.004401	19.23	23.93
gr	80	0.3246687	0.2113064	0.0355	1.1579
txs	80	5.03e+07	5.34e+07	60000	3.12e+08
ag	80	11.5125	4.904128	1	22
dvnd	80	0.8611125	0.3978333	0	3.573
gdp	80	0.10582	0.0088933	0.087	0.118
ifn	80	0.1724	0.1083961	0.028	0.364

Source: Structured review of financial statements and own computations

Note: der refers to total leverage. Profitability (Pr), growth (Gr), age (ag), Tax-shield (txs), Size (Sz), dividend payout (dvnd), Growth domestic product (gdp) and inflation (ifn).

The descriptive statistics summarized in the above two tables are a collection of measurements of two things, location and variability. Location tells one the central value of the variables (the mean is the most common measure of this) and Variability refers to the spread of the data from the center value (standard deviation).

From the Tables 1 and 2, the researcher has discussed the following issues:

The average (mean) debt to equity ratio (DER) of Ethiopian private and public commercial banks is found to be 6.51 and 16.7 respectively. This indicates public commercial bank is financed (leveraged) with debt at approximately seventeen times greater than equity option while private commercial banks are financed (leveraged) with

debt approximately six times greater than equity option. This signifies public bank financing decision is inclining to deposit mobilization than to the equity financing much greater than private banks. Even the standard deviation shows that the public bank has, during past ten years, focused more on debt financing than on equity financing compared to private banks.

The average annual profitability of the private banks under investigation is found to be around 7 per cent. Since profitability was measured by the ratio of operating income to total assets, the maximum attained average profitability rate is 11 per cent whereas the lowest recorded average profitability rate is 1 per cent and the dispersion other values of profitability rate is 1 per cent which indicates the individual private banks have varied profitability rate every year while the average annual profitability of the public bank under investigation is found to be 3 per cent and the maximum attained average profitability rate is 3 per cent whereas the lowest recorded average profitability rate is 2 per cent and the dispersion other values of profitability rate is zero per cent which indicates the public bank has constant profitability rate every year. It reveals that the average annual profitability of the private banks is greater than the public bank.

The private and public banks' total assets have an average growth rate of 32 and 25 per cent respectively for the ten years of study period. For the private banks the asset growth ranges approximately from 3 per cent (minimum growth rate) to 115 per cent (maximum growth rate) which in turn strengthen the acceptance of value of std. dev. of the variable while for the public bank the asset growth ranges approximately from 9 per cent (minimum growth rate) to 54 per cent (maximum growth rate) which in turn strengthen the acceptance of value of std. dev. of the variable. This shows the average growth rate of private banks is greater than the public bank and also the std. dev. of growth rate for public bank is lower than private banks.

The age of the private banks varies from 1 year to 22 years and the older one is Awash International Bank (AIB). The standard deviation of age variable reveals that the age values are highly dispersed. The public bank (CBE) which is 52 years is the oldest of all commercial banks in Ethiopia. The mean of the private and public banks' size which was represented by the natural logarithm of total assets was 22.34 and 25.31 respectively. There is large variation between the eight sampled private banks and the public bank size where the public bank (CBE) is more than 1.13 times as large as the eight sampled private banks.

During the ten years of the study period, the tax-shield variable values show that the private and public banks have been taking an advantage of tax-shield from the interest payments on debt on behalf of the owner at an average value of Birr 50,300,000 and 562,000,000 every year respectively. This indicates that the interest expense of the public bank (CBE) on average is approximately 11 times as large as the eight sampled private banks. The average annual dividend payout of the private banks under investigation is found to be 0.86. The dividend payout was measured by the ratio of total dividends to total net earnings, the maximum attained average dividend paid is 3.573 whereas the lowest recorded average dividend paid is 0 and the dispersion other values of dividend paid is 0.40 which indicates the individual private banks have highly varied dividend paid every year. In the case of public bank (CBE) there is no dividend payment. Lastly, since both GDP and inflation are external for both private and public commercial banks statistically the effect is almost the same.

Test of Model Specification

A typical specification error occurs when the estimated model does not include the correct set of explanatory variables. This specification error takes two forms omitting one or more relevant explanatory variables or including one or more irrelevant explanatory variables. Either form of specification error results in problems with OLS

estimates. Therefore, the model is tested whether it is specified correctly or not, and then after, to estimate the regression model properly. In this study, two methods (Ramesy RESET test and Link test) are used to detect specification errors. RESET is used for omitted variables and Link test is used for specification error.

Ramsey RESET Test for Omitted Variables

RESET stands for Regression Specification Error Test and was proposed by Ramsey in 1969. This test is made on the basis of null hypothesis that says "model has no omitted variables".

RESET Test for Omitted Variables (for public bank)

Ramsey RESET test using powers of the fitted values of der

Ho: model has no omitted variables
F (3, 1) = 26.67
Prob > F = 0.1412

Source: Researcher's own computation based on the financial statements

RESET Test for Omitted Variables (for private banks)

Ramsey RESET test using powers of the fitted values of der

Ho: model has no omitted variables
F (3, 68) = 0.61
Prob > F = 0.6095

Source: Researcher's own computation based on the financial statements

The RESET result for both private and public banks in which the p-value for OV Test is greater than 0.05, accepts the null hypothesis of no omitted variables indicating no model specification error.

Link Test for Specification of der Model

Link Test performs model specification test for single-equation models. In this study, to test the model specification using STATA, the link test method generated two new variables. These variables are the variable of prediction (_hat) and the variable of squared prediction (_hatsq). The model was then refitted (regressed) using these two variables as predictors for both private and public banks.

Theoretically, the variable of prediction (_hat) should be significant since it is the predicted value and the variable of squared Prediction (_hatsq) should not be significant, because if the model is specified correctly.

Table-3: Link test for Specification of der model (for public bank)

Source	SS	df	MS	Number of obs = 10
Model	0.005707298	2	0.002853649	F(2, 7) = 4505.69
Residual	4.4334e-06	7	6.3334e-07	Prob > F = 0.0000
Total	0.005711732	9	0.000634637	R-squared = 0.9992
				Adj R-squared = 0.9990
				Root MSE = 0.0008

der	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
_hat	1.01555	0.1190918	8.53	0.000	0.7339422	1.297157
_hatsq	-0.1056899	0.8062833	-0.13	0.899	-2.012247	1.800867
_cons	-0.0005074	0.0039432	-0.13	0.901	-0.0098317	0.0088169

Source: Researcher's own computation based on the financial statements

Table-4: Link test for Specification of DER model (for private banks)

Source	SS	df	MS	Number of obs = 80
Model	176.508705	2	88.2543526	F (2, 77) = 38.78
Residual	175.246548	77	2.27592919	Prob > F = 0.0000
Total	351.755253	79	4.45259814	R-squared =0.5018
				Adj R-squared = 0.4889
				Root MSE =1.5086

der	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
_hat	1.038408	.500003	2.08	0.041	.0427752	2.034042
_hatsq	-.0031434	.039852	-0.08	0.937	-.0824989	.0762121
_cons	-.1098688	1.586253	-0.07	0.945	-3.268502	3.048764

Source: Researcher's own computation based on the financial statements

Practically for both private and public banks, our Link test result confirmed that the predicted value, the variable of prediction (_hat), is significant variable and the variable of squared Prediction (_hatsq) is not. Hence, the null hypothesis is accepted which reveals the model is specified correctly.

Random Effect versus Fixed Effect Models

Table-5, presents the Hausman specification test which suggests the fixed effects model was better than random effects model as the p-value (0.0257), is less than 0.05 for dependent variables which imply that the random effects model should be rejected and thus, the analysis is based on the fixed effects estimates.

Table-5: Hausman fix ran test

	---- Coefficients ----			
	(b)	(B)	(b-B)	sqrt (diag (V_b-V_B))
	fix	ran	Difference	S.E.
pr	-10.30673	-6.332177	-3.974553	5.483263
sz	3.266749	2.54391	0.7228382	0.3416957
ag	-.7884105	-0.4980899	-0.2903205	0.1051356
dvnd	.0019724	0.0020528	-0.0000804	0.0018031
gdp	-4.48203	21.35214	-25.83417	3.740083
ifn	-.8523801	0.5329196	-1.3853	.
gr	-.9852881	-1.021738	0.0364497	.
txs	-2.08e-09	-4.47e-09	2.39e-09	.

b = consistent under Ho and Ha; obtained from xtreg

B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test: Ho: difference in coefficients not systematic

chi2 (7) = (b-B)'[(V_b-V_B) ^ (-1)] (b-B)

= 15.94

Prob>chi2 = 0.025

(V_b-V_B is not positive definite)

Source: Structured review of financial statements and own computations

Results of Regression analysis

The model used to find out and explain the association between the dependent variable and the independent variables was:

$Lev(der)_{i,t} = \beta0+\beta1_{i,t}(Pr)+\beta2_{i,t}(Sz)+\beta3_{i,t}(Gr)+\beta4_{i,t}(Ag)+\beta5_{i,t}(Txs)+ \beta6_{i,t}(Dvnd)+\beta7_{i,t}(GDP)+\beta8_{i,t}(Ifn) + \varepsilon_{i,t}$

Where:

LEV= leverage	Pr = profitability
Gr = growth	Txs = tax-shield
Sz = size	Ag = Age
Dvnd= dividend payout	Ifn = inflation
GDP =growth domestic product	

This study used panel data model where the random effect and fixed effect models could be used to estimate the relationships among variables. According to Hausman test results shown in table-5, the fixed effects were found to be more appropriate for the model at the 5 per cent level. Thus, the relationship between leverage and the explanatory variables were examined by the fixed effects model in this study. The results obtained by the fixed effect model is reported in Tables 6 and 7.

Table-6: Fixed effect model estimates (For Public Bank)

Source	SS	df	MS	Number of obs	= 10
Model	0.005707287	7	.000815327	F (7, 2)	= 366.91
Residual	4.4443e-06	2	2.2221e-06	Prob > F	= 0.0027
Total	0.005711732	9	.000634637	R-squared	= 0.9992
				Adj R-squared	= 0.9965
				Root MSE	= 0.00149

der	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
pr	-4.529292	0.4773329	-9.49	0.011	-6.583089	-2.475494
gr	-0.1050598	0.0060011	-17.51	0.003	-0.1308805	-0.0792391

sz	-0.0416407	0.0084355	-4.94	0.039	-0.0779357	-0.0053456
ag	0.0143019	0.0020288	7.05	0.020	0.0055725	0.0230312
txs	-5.67e-11	2.32e-12	-24.47	0.002	-6.67e-11	-4.67e-11
gdp	-0.4344527	0.1825204	-2.38	0.140	-1.219775	0.3508693
ifn	0.096494	0.0090948	10.61	0.009	0.0573622	0.1356259
_cons	0.6528836	0.1346742	4.85	0.040	0.0734272	1.23234

Source: structured review of financial statements and own computations

Table-7: Fixed effect model estimates (For Private Banks)

Source	SS	df	MS	Number of obs = 80
				F(8, 71) = 8.94
Model	176.494531	8	22.0618164	Prob > F = 0.0000
Residual	175.260722	71	2.46846087	R-squared = 0.5018
				Adj R-squared = 0.4456
Total	351.755253	79	4.45259814	Root MSE = 1.5711

der	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
pr	-32.45811	15.63938	-2.08	0.042	-63.64215	-1.274071
gr	-0.0850027	0.0595815	-1.43	0.158	-0.2038048	0.0337994
sz	1.091059	0.5299366	2.06	0.043	0.0343957	2.147723
ag	-0.1955055	0.059015	-3.31	0.001	-0.3131782	-0.0778329
txs	1.020794	0.3349092	3.05	0.003	0.3530042	1.688584
dvnd	-0.0002838	0.0028891	-0.10	0.922	-0.0060446	0.0054769
gdp	68.12404	26.51183	2.57	0.012	15.26096	120.9871
ifn	3.875045	1.917073	2.02	0.047	0.0525102	7.697579
_cons	-38.39311	8.664666	-4.43	0.000	-55.66996	-21.11625

Source: Structured review of financial statements and own computations

Table-8. Firm Specific and External Factors Analysis of Determinants of Capital Structure (for both private and public banks)

Independent Variables	Dependent Variable debt to equity ratio(DER)					
	Public Bank			Private Banks		
	Values of coefficient	t- statistics	Significance level	Values of coefficient	t- statistics	Significance level
Pr	-4.53 (0.477)	-9.41 (0.011)	Significant at 5%	-32.46 (15.63)	-2.08 (0.042)	Significant at 5%
Sz	-0.04 (0.008)	-4.94 (0.003)	Significant at 5%	1.09 (0.529)	2.06 (0.043)	Significant at 5%
Gr	-0.10 (0.006)	-17.51 (0.039)	Significant at 5%	-0.08 (0.059)	-1.43 (0.158)	Insignificant

Ag	0.01 (0.002)	7.05 (0.020)	Significant at 5%	-0.19 (0.059)	-3.31 (0.001)	Significant at 5%
Txs	-0.00 (2.32e-12)	-24.47 (0.002)	Significant at 5%	1.02 (0.334)	3.05 (0.003)	Significant at 5%
Dvnd	NA	NA	NA	-0.00 (0.003)	-0.10 (0.922)	Insignificant
GDP	-0.43 (0.182)	-2.38 (0.140)	Insignificant	68.12 (26.51)	2.57 (0.012)	Significant at 5%
Ifn	0.10 (0.009)	10.61 (0.009)	Significant at 5%	3.87 (1.91)	2.02 (0.047)	Significant at 5%

Number of observation=10 Number of observation=80

Prob > F = 0.0027 Prob > F = 0.0000

R2 = 0.99 (99%) R2 = 0.5018 (50.18%)

Source: Researcher's own computation based on the financial statements

Notes:

- Standard errors associated with the coefficients are in the parentheses under the values of coefficients.
- P-value of the t-statistics is shown in the parentheses under t-statistics value.
- "NA"- means not applicable.

Interpretation of Results

The fixed effect result in tables 6 and 7 indicates that profitability was statistically significant at 5% level and had negative relation with leverage ratio for both private and public banks. In the same way, inflation was statistically significant at 5% level and had positive relation with leverage ratio. Besides, the fixed effect result in table-6 reveals that for the public bank growth and tax-shield were statistically significant at 5% level and had negative relation with leverage ratio while age was statistically significant at 5% and had positive relation with leverage. But GDP has insignificant relationship with leverage with a p-value of 0.140. On the other hand, the fixed effect result in table-7 shows that for private banks size, tax-shield and GDP were statistically significant at 5% level and had positive relation with leverage ratio while age was statistically significant at 5% and had negative relation with leverage. But growth and dividend payout have insignificant relationship with leverage with a p-value of 0.158 and 0.922 respectively.

Furthermore, the table-6 for public bank shows that the R square is 0.99 which indicates that about 99 per cent of the variability in leverage is explained by the selected internal and external factors while the table-7 for private banks shows that the R square is 0.50 which indicates that about 50 per cent of the variability in leverage is explained by the selected internal and external factors (Profitability, Age, Growth, Tax-shield, Dividend payout, Size, GDP and Inflation).

Conclusions and Suggestions

The explanatory variables profitability, size, age, tax-shield and inflation rate are the significant determinant factors of capital structure for both public and private banks. On the other hand, profitability, growth, size, tax-shield and GDP variables are found to be negatively related while age and inflation variables are found to be positively related to debt to equity ratio(der) for public bank. For private banks, profitability,

growth, age and dividend payout variables are found to be negatively related while size, tax-shield, GDP and inflation variables are found to be positively related to debt to equity ratio for private banks. Therefore, testing the hypotheses, the regression results of the coefficients of capital structure determining factors went for the acceptance of the first and fourth null hypotheses for public bank while private banks accept the first, second, six and seventh null hypotheses.

Both Public and Private Commercial Banks must pay greater attention to these significant variables in determining their optimal capital structure decision and the management of Banks should place greater emphasis on the facilitation of equity capital in order to obtain sufficient capital to expand their branch network which in turn creates greater market share for them.

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STATUS OF CASHLESS TRANSACTIONS – A CASE STUDY OF MAHABUBNAGAR DISTRICT

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ABSTRACT

According to a household survey, the aggregate household expenditure in India during 2015-2016 was about Rs. 42.2 trillion. The rural households accounted for 57% whereas urban households registered at 43%. Till the announcement of demonetization, in India, majority of the households have been using the 'cash' as a payment mechanism for various transactions in the regular life. Out of total expenditure in India, only 10% of the transactions payment was occurring through cash less mode. The ratio of the cash to Gross Domestic Product (GDP) is one of the highest in the world i.e. 12.42% in 2014 compared to 9.47% in China and 4% in Brazil. 'Cashless India' is a mission launched by the government of India to reduce the cash dependence and to curb the block money by bringing transparency among the transactions. Cashless transaction slogan has turned into popular after the demonetization decision by the Government of India. Since demonetization, the Indian government has been showing lot of interest in converting the nation into paperless, cashless, faceless services with a special focus on rural and remote parts of India. The Government of India, Ministry of Electronic and IT has been initiating various programmes to create the awareness and launching different schemes pertaining to payment mechanism to promote cashless transactions. The present paper is a modest attempt to explore the status of cashless transactions and to analyze the reasons.

Relevance, Anticipated Outcomes and Proposed Outputs from the Research

The present study is aimed at examining the status of cashless transactions is very relevant for policy making purposes. The anticipated outcome in the form of present scenario and problems pertaining to cashless transactions will throw light on the future plans of the government. The expansion of technology usage in the rural areas is very much essential to integrate the rural people with mainstream. The outcome of the present research may enable the policymakers to design appropriate mechanism to drive the rural public into cashless mode. The perceptions of respondents may be quite useful in designing the new schemes as well as programmes in the process of building Digital India.

Key words: Gross Domestic Product, Information Technology, Digital payments, Electronic Commerce, Bharat Interface Money, Compound Annual Growth Rate, Reserve Bank of India

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Introduction

According to a household survey, the aggregate household expenditure in India during 2015-2016 was about Rs. 42.2 trillion. The rural households accounted for 57% whereas urban households registered at

43%. Till the announcement of demonetization, in India, majority of the households have been using the 'cash' as a payment mechanism for various transactions in the regular life. Out of total expenditure in India, only 10% of the transactions payment was occurring through cash less mode. The ratio of the cash to Gross Domestic Product (GDP) is one of the highest in the world i.e. 12.42% in 2014 compared to 9.47% in China and 4% in Brazil. 'Cashless India' is a mission launched by the government of India to reduce the cash dependence and to curb the block money by bringing transparency among the transactions. Cashless transaction slogan has turned into popular after the demonetization decision by the Government of India. Since demonetization, the Indian government has been showing lot of interest in converting the nation into paperless, cashless, faceless services with a special focus on rural and remote parts of India.

Statement of Problem

In fact, every 90 people out of 100 are using cash as payments option while dealing the transactions. These cash transactions are not only giving scope for evasion of various taxes to the government but also giving lot of scope for black money. The government has recognized many of such problems by the cash payment mechanism. Since demonetization on November 8th 2016, the Indian government has been putting enormous efforts to bring the paperless, cashless, faceless services across the nation, with a special focus on rural and remote parts of India. The Government of India and Ministry of Electronic and IT has been preparing various programs to create the awareness and launching various schemes as a payment mechanism to promote cashless transactions. In this context, it is very essential to study the preferred mode of payment mechanism adopted by the rural and urban people after the demonetization. In addition, the study of differences between rural and urban will help the policy makers to design suitable strategies of increased digital payments.

Literature Review

The Payment and Settlement Act, 2007 has defined Digital Payments. As per this any "electronic funds transfer" means any transfer of funds which is initiated by a person by way of instruction, authorization or order to a bank to debit or credit an account maintained with that bank through electronic means and includes point of sale transfers; automated teller machine transactions, direct deposits or withdrawal of funds, transfers initiated by telephone, internet and, card payment. (NITI AYOG's book "Digital Payments" July, 2018, Page: 9)

Sarma E. J., (1989)[1], used the 'Lifestyle' concept to understand the users of credit card psycho graphically in 1989. In the study it was found that "the users of credit cards when compared to non-users exhibit a contemporary state of mind and reject conservative traditional concepts, can indicate that the type of purchases that can be made on credit cards could be viewed as 'luxury or necessity' based on the lifestyles rather than broadly classifying them for all groups. Therefore, the old-fashioned orientation towards cash which can be a main barrier to the use of credit cards must be tackled by marketing credit cards by banks through better marketing". Sarma further concluded that "the major problem with the banks today is not only of popularizing the credit card concept but also of increasing the credit card usage." Even after two decades much has not changed, it implies that there is enormous scope for expansion of credit cards business, which ultimately results in increased cash less transactions.

Yeo (1990)[2], in his Doctoral work tried to identify household credit card choice and usage behavior of cardholders. In the study it was found that several factors were significant in determining the choice between the bank and retail credit cards in USA. The important factors are: (i) level of family income, (ii) the household age, (iii) the number of bank card holdings, (iv) the number of store card holding the related interest rate, (v)

the relative membership fees and (vi) the card preference. While selecting the credit cards, the above mentioned factors will also be considered by the banks to decide the credit limits and to offer extra facilities.

Parimala (2001)[3], in her Ph. D. thesis highlighted the marketing environment of credit cards in Trichirappall, Tamilnadu State. Her major findings are: insufficient merchant establishments to accepting credit cards, in addition to that, the cardholders were not aware of all services offered by the issuers, lack of advertisement and publicity. To overcome these issues, she suggested the following: reduce charges for penalty, interest, annual charges, enhance the awareness among the public by different promotion tools. By following this, there is lot of scope for increasing the customer base and business volume. As the information technology is advancing, there is much scope for growth and expansions of credit cards market. **Swarnalatha** (2002)[4], in her doctoral work, tried to analyze credit cards services. The study was based on the perceptions of selected credit cardholders of few issuing banks in Chennai city. This research finding and conclusion based on the hypothesis that single cardholders are less satisfied compared to multiple cardholders. Further, the results also stated that there are cardholders holding cards both in Indian and foreign banks are more aware of the services and expressed their greater satisfaction. In general also, awareness about various services and facilities will increases the satisfaction.

Joji, Alex N (2010)[5], the study attempts to study the impact of retailing and the credit card environment on materialism, compulsive buying, credit card usage pattern and credit default among shoppers in Kochi, in the state of Kerala. The goals of the study are to understand the extent of materialism and compulsive buying among shoppers in Kochi. The study has also attempted to understand whether the presence of credit cards has in any way changed the pattern of spending and also refine the understanding of what influences credit card usage pattern. The final objective of the study is to find the extent of influence of the above mentioned variables on credit default.

In a study undertaken by Capgemini, a leading financial service consulting firm (2018)6 the following 10 trends are observed in the payments arena. (for full report: https://www.capgemini.com/wp-content/uploads/2017/12/payments-trends_2018.pdf)

Trend - 1: Banks becoming platform players to aid collaboration retain payments' role.

Trend – 2: Infrastructure rationalization is likely as payments intermediaries come together or evolve.

Trend – 3: Payment vendors and banks are expected to consolidate their operations to form larger groups.

Trend – 4: Open APIs enable stakeholder collaboration.

Trend – 5: Alternate payment channels such as contact less and wearables gain acceptance.

Trend – 6: Banks and FinTechs explore distributed ledger technology to transform cross-border payments.

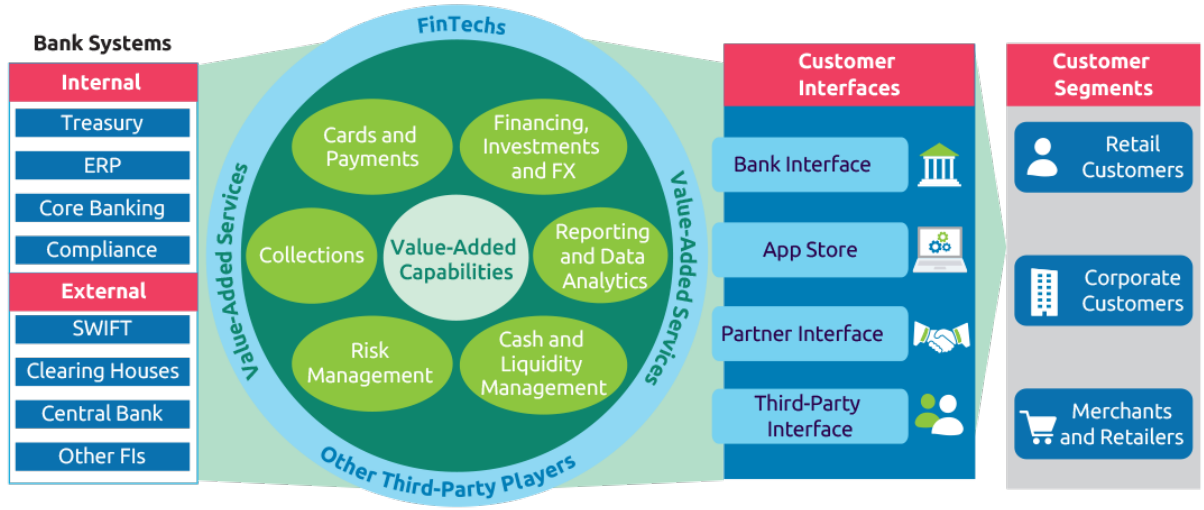
Trend – 7: Instant payments processing likely to become the 'new normal' for corporate treasurers, industry at large.

Trend -8: As global cyber-attacks rise, regulators focus on data-privacy law compliance.

Trend -9: Robotic process automation, machine learning help payment service providers in fraud detection.

Trend -10: Payments firms continue to invest in advanced authentication technologies to fight fraud and data breaches.

Bank-Orchestrated Ecosystem



Source: Capgemini Financial Services Analysis, 2018.

The development of Information and Communication Technology (ICT) had completely changed the lives and operations of individuals and organizations respectively. ICT and Digital technologies had made great evolutionary development in functional areas such as finance, marketing, operational costs **(Slozko & Pello, 2015)**[7] and improved organizational performance (Ali, 2010). The era of ICT and digital innovations has come along with a dynamic change in the global business environment, whereby business transactions are constantly shifting from cash-based transactions to electronic-based ones (Cash to Cash less) **(Mohamad, Haroon, & Najiran, 2009)**[8] Also, the global proliferation of the internet and its rapid use over the years had contributed much in facilitating electronic commerce as well as cash less payments in global business environment **(Fernandes, 2013)**[9].

Table: 1– A brief timeline of payments

Year	Particulars
960	First Paper Currency Appears in China
1408	Casa delle compere e dei banchi di San Giorgio becomes Europe's fi¬rst modern bank.
1575	French copper coins become the fi¬rst true minted coins in the West.
1717	The United Kingdom adopts the gold standard.
1834	The United States informally starts to use the gold standard
1873	The United States formally moves onto the gold standard.
1891	American Express launches the Traveler's Check.
1914	U.S. Federal Reserve System setup as central bank of the United States
1929	Start of Great Depression
1930	The Bank of International Settlements is established in Basel Switzerland.
1933	Suffering from the Great Depression, US gives up on gold standard, USD depreciates 33%.
1949	International Monetary Fund launches; form of gold standard effectively resumes.
1980s	POS and RTGS launches in many countries
1994	Amazon launches, The Fi¬rst online purchase is made to buy a Pizza Hut pizza.

1997	First mobile payment is sent via SMS to a Coca-Cola vending machine.
1998	PayPal is founded.
1999	The Euro currency is introduced.
2004	Alibaba launches Alipay
2007	EU Parliament adopts Payment Service Directive (PSD), IOS and Android mobile operating systems launch, Master card introduces RFID based PayPass payments.
2008	Satoshi Nakamoto publishes the Bitcoin whitepaper
2011	Google launches Google Wallet, a mobile wallet.
2015	EU Parliament adopts Payment Service Directive 2 (PSD2).
2017	Master card issues block chain payment system for B2B transactions; IBM launches a cross-border payment system on block chain technology.

Source:https://www.finastra.com/sites/default/files/documents/2018/03/brochure_the-future-history-payments-how-world-is-moving-away-from-cash.pdf

Objectives of the study

1. To examine the status of awareness about cashless payments system.
2. To study the payment practices (cash V/s Cashless)
3. To study the impact of education in cashless payments.

Scope of the study

The scope of the present study is confined to present the theoretical framework of cashless payment methods available in India. This study is geographically limited to the payment mechanisms adopted by the urban and rural people after the demonetization in Mahabubnagar district. The urban and rural samples were selected from Mahabubnagar district of Telangana state.

Research methodology

The study is based on both primary and secondary data. The secondary data gathered from the Government of India reports, Telangana state level bankers committee reports and various other resources like press and different websites etc. whereas the primary data has been collected directly from the people/customers from urban and rural areas using structured questionnaire. The sample size of the study is 200 respondents which includes100 from rural and 100 from urban areas and 'purposive sampling' technique has been adopted while selecting the samples. To have a proper reflection of facts, every care taken while selecting the samples. The primary data collected from rural and urban respondents has been tested by using various statistical tools like mean, standard deviation, Chi-square to get the results in a scientific way.

Data Analysis

Table: 2 - Profile of the respondents (Gender wise)

Gender	Rural	Urban	Total
Male	83	81	164
Female	17	19	36
Total	100	100	200

Source: Compiled from Primary Data

Table: 3 – Profile of the Respondents (Educational qualification wise)

Edu. Qualification	Rural	Urban	Total
No formal Schooling	8	5	13
Primary Education	10	5	15
Secondary Schooling	13	12	25
Intermediate	34	18	52
Undergraduate	22	40	62
Postgraduate & above	13	20	33
Total	100	100	200

Source: Compiled from Primary Data

Table: 4 – Profile of the Respondents Customers category (Annual Income)

Annual Income	Rural	Urban	Total
Rs. Less than 50,000	14	21	35
Rs. 50,001 to 2,00,000	42	43	85
Rs. 2,00,001 to 6,00,000	37	30	67
Rs. 6,00,000 and above	7	6	13
Total	100	100	200

Source: Compiled from Primary Data

Table: 5 – Awareness about cashless payments

Awareness	Customers category		Total
	Rural	Urban	
Yes	91	94	185
No	9	6	15
Total	50	50	200

Source: Compiled from Primary Data

Hypothesis:

Null Hypothesis: There is no significant difference between the rural and urban respondents of the Mahabubnagar District with respect to the awareness about cashless payment system/ modes. (There is no association)

Test employed: Chi-Square test, Level of Significance: 5% or 0.05, Degrees of Freedom: 1

Total Number of Respondents: 200

Table: 6 (a) – Observed Frequencies

	Aware	Unaware	Total
Rural	91	9	100
Urban	94	6	100
Total	185	15	200

Source: Primary Data

Table: 6 (b) – Expected Frequencies

	Aware	Unaware	Total
Rural	92.5	7.5	100
Urban	92.5	7.5	100
Total	185	15	200

Source: Compiled from Primary Data

From the following table (table 4.12 I), it is clear that the calculated value (i.e. 1.086) is less than the table value at .05 level of significance at 1 degree of freedom (i.e. 3.841). Hence, the null hypothesis may be accepted. This means there is no significant difference between rural and urban respondents with regard to awareness about cashless payment methods. It can be concluded that awareness and area of living are independent. (There is no association)

Table: 6 (c)– Chi-Square descriptives

Observed frequencies – Expected Frequencies	$(O - E)^2$	$(O - E)^2/E$
92.5 – 91	2.25	.243
92.5 – 94	2.25	.243
7.5 – 9	2.25	.3
7.5 – 6	2.25	.3
Total		1.086

Source: Primary data processed

Table: 7 - Frequency of cash transactions

	Customers category		Total
	Rural	Urban	
Every day	81	77	158
One to two times a week	1	7	8
Three to six times a week	6	7	13
Once in Fortnight	0	1	1
Once every few months	3	6	9
Don't know	9	2	11
Total	50	50	200

Source: Primary Data

The above table depicts clearly that the frequency of cash payments is very high. 158 respondents out of 200 which constitute 79% of the respondents responded that they are using cash for payments every day. Which means, though, they are aware of cashless payments but not doing payments in cashless mode.

Table:8 - Frequency of cashless transactions

	Customers category		Total
	Rural	Urban	
Every day	18	33	51
One to two times a week	36	35	71
Three to six times a week	4	2	6
Once in Fortnight	2	0	2
Once every few months	22	21	43
Don't know	18	9	27
Total	100	100	200

Source: Primary Data

In terms of cashless transactions, it is seen that only 25.5% of the respondents have responded that they are transacting every day in cashless mode. 35.5% of the respondents revealed that one or two times in a week they are transacting in cashless mode.

Table: 7 – Descriptives

I would consider making payments in cashless mode (using my mobile phone/smartphone in future)

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
No formal schooling	13	2.6154	.96077	.26647	2.0348	3.1960
Primary Education	15	3.4000	1.29835	.33523	2.6810	4.1190
Secondary Schooling	25	2.5200	1.04563	.20913	2.0884	2.9516
Intermediate	52	2.0577	.72527	.10058	1.8558	2.2596
Undergraduate	62	2.0161	.68931	.08754	1.8411	2.1912
Postgraduate & above	33	1.9394	.82687	.14394	1.6462	2.2326
Total	200	2.2200	.92514	.06542	2.0910	2.3490

Source: Primary data compiled using SPSS.

Table: 8 – ANOVA

	Sum of Squares	Degrees of Freedom	Mean Square	F	Sig.
Between Groups	31.713	5	6.343	8.878	.000
Within Groups	138.607	194	.714		
Total	170.320	199			

Source: Primary data compiled using SPSS.

Table - 8 shows the significant difference between rural and urban respondent's education level and preference towards cashless mode. According to the ANOVA results, the calculated p value 0 .000 is more less than the suggested value 0.05 at 5% level of significance. Hence, the null hypothesis is rejected and it can be concluded that that there is a difference between education level and preference towards cashless mode.

Conclusion

From the above details, it can be concluded that almost all the people aware of cashless payments. In this regard it is also found that there is no significant difference between the rural and urban (There is no association between the area and awareness about cashless payments).

With regard to transactions, majority of the respondents are transacting in cash mode. Fear of loss of information, lack of confidence, lack of practical knowledge and technical problems are the few cited reasons for this. In the present study, it is also found that there is significant difference between the respondents based on educational qualifications.

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CONSUMER PERCEPTION ON DIGITAL MARKETING GENDER BASED ANALYSIS

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ABSTRACT

Digitization being a key economic driver in the present world it is important to integrate the economy by creating digital markets. This revolution has been aided by the advent of the Internet in a big way. Internet is fast changing the way people used to do things. Naturally, the same would have an impact on the advertisers. The Internet has been accepted as the most powerful media for advertising due to the absence of geographical barriers. The advent of the Internet and its subsequent acceptance has once again challenged the traditional forms of advertising. Advertisers are trying to use the 'net' to advertise their products and hence 'net' their customers. Thus, with the Internet gaining prominence, advertising equations are fast changing. The present paper is guided by the objective to study the impact of online marketing on Indian economy, the growth pace and its benefits and challenges.

Key words: Digital Marketing, Consumer Perception.

Introduction

Online marketing is the wave of the future Internet marketing, also referred to as e-Marketing, online marketing or Digital Marketing, is the marketing of products or services over the Internet. Internet marketing ties together creative and technical aspects of the Internet, including design, development, advertising, and sale. The Internet has brought many unique benefits to marketing, one of which being lower costs for the distribution of information and media to a global audience. The interactive nature of Internet marketing, both in terms of providing instant response and eliciting responses, is a unique quality of the medium. Internet marketing is sometimes considered to have a broader scope because it not only refers to digital media such as the Internet, e-mail, and wireless media; however, Internet marketing also includes management of digital customer data and electronic customer relationship management (ECRM) systems.

DEFINITION "Digital Marketing is the process of promoting a brand, products or services over the Internet. Its broad scope includes email marketing, electronic customer relationship management and any promotional activities that are done via wireless media."

OBJECTIVES OF THE STUDY The basic objective of present study is to have a macro re-look at the scenario of Digital Market in India. However, study is guided by the following sub Objectives.

- To study the digital marketing.
- To know the various factors that influence digital consumer perception.
- To study the impact of the digital marketing antecedents on the consumer buying behaviour.

METHODOLOGY OF THE STUDY: For the purpose of this research,

- **Primary Data:** primary data were sourced with the use of questionnaire. The questionnaire comprised close-ended questions only. The completed questionnaires were drawn based on the research questions under study. Quantitative research is designed to disclose a target audience's range of behavior and perception that drive it with specific references. Data collection and survey analyzes done through Google Form questionnaire survey collection.
- **Secondary Data:** Secondary data can play a substantial role in explanatory phase; this data will be collected through secondary sources like research reports, websites, standard text books, newspapers, magazines etc.

Hypothesis:

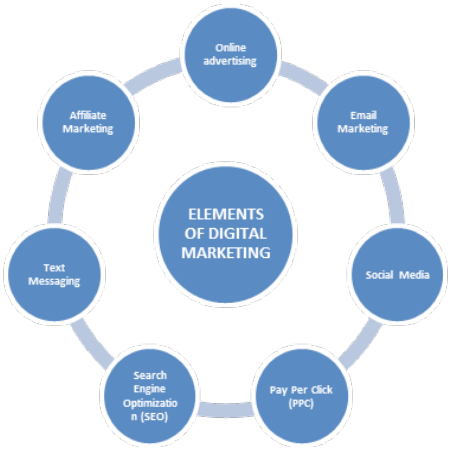
Ho: There is no significant difference between Male and Female (Gender Factor) responses towards digital marketing.

H1: There is a significant difference between Male and Female (Gender Factor) responses towards digital marketing.

REVIEW OF LITERATURE: According to Chaffey (2011), digital media marketing involves "encouraging customer communications on company's own website or through its social presence". Digital marketing, electronic marketing, e-marketing and Internet marketing are all similar terms which, simply put, refer to "marketing online whether via websites, online ads, opt-in emails, interactive kiosks, interactive TV or mobiles" (Chaffey & Smith, 2008). Giese and Gote (2000) finds that customer information satisfaction (CIS) for digital marketing can be conceptualized as a sum of affective response of varying intensity that follows consumption and is stimulated by focal aspects of sales activities, information systems (websites), digital products/ services, customer support, after-sales service and company culture. Waghmare (2012) pointed out that many countries in Asia are taking advantage of e-commerce through opening up, which is essential for promoting competition and diffusion of Internet technologies.

ELEMENTS OF DIGITAL MARKETING

There are various elements by which digital marketing is formed. All forms operate through electronic devices. The most important elements of digital marketing are given below:



- **Online advertising** Online advertising is a very important part of digital marketing. It is also called internet advertising through which company can deliver the message about the products or services. Internet-based advertising provides the content and ads that best matches to consumer interests. Publishers put about their products or services on their websites so that consumers or users get free information. Advertisers should place more effective and relevant ads online. Through online advertising, company well controls its budget and it has full control on time.
- **Email Marketing** When message about the products or services is sent through email to the existing or potential consumer, it is defined as email marketing. Direct digital marketing is used to send ads, to build brand and customer loyalty, to build customer trust and to make brand awareness. Company can promote its products and services by using this element of digital marketing easily. It is relatively low cost comparing to advertising or other forms of media exposure. Company can bring complete attention of the customer by creating attractive mix of graphics, text and links on the products and services.
- **Social Media** Today, social media marketing is one of the most important digital marketing channels. It is a computer-based tool that allows people to create, exchange

ideas, information and pictures about the company's product or services. According to Nielsen, internet users continue to spend more time with social media sites than any other type. Social media marketing networks include Facebook, Twitter, LinkedIn and Google+. Through Facebook, company can promote events concerning product and services, run promotions that comply with the Facebook guidelines and explore new opportunities. Through Twitter, company can increase the awareness and visibility of their brand. It is the best tool for the promotion of company's products and services. In LinkedIn, professionals write their profile and share information with others. Company can develop their profile in LinkedIn so that the professionals can view and can get more information about the company's product and services. Google+ is also social media network that is more effective than other social media like Facebook, Twitter. It is not only simple

- **Text Messaging** social media network but also it is an authorship tool that links web-content directly with its owner. It is a way to send information about the products and services from cellular and smart phone devices. By using phone devices, company can send information in the form of text (SMS), pictures, video or audio (MMS). Using SMS for campaigns get faster and more substantial results. Under this technique, companies can send marketing messages to their customers in real-time, any time and can be confident that the message will be seen. Company can create a questionnaire and obtain valuable customer feedback essential to develop their products or services in future.
- **Affiliate Marketing:** Affiliate marketing is a type of performance-based marketing. In this type of marketing, a company rewards affiliates for each visitor or customer they bring by marketing efforts they create on behalf of company. Industry has four core players: the merchant (also known as "retailer" or "brand"), the network, the publisher (also known as "the affiliate") and the customer. There are two ways to approach affiliate marketing: Company can offer an affiliate program to others or it can sign up to be another business's affiliate. If company wants to drive an affiliate program, then, the company owner has to pay affiliates a commission fee for every lead or sale they drive to company's website. Company's main goal here is to find affiliates who can reach untapped markets.
- **Search Engine Optimization (SEO)** Search engine optimization (SEO) is the process of affecting the visibility of a website or a web page in a search engine's "natural" or un-paid ("organic") search results. In general, the earlier (or higher ranked on the search results page), and more frequently a website appears in the search result list, the more visitors it will receive from the search engine users. SEO may target different kinds of search including image search, local search, video search, academic search, news search and industry-specific vertical search engines.
- **Pay Per Click (PPC)** Pay-per-click marketing is a way of using search engine advertising to generate clicks to your website rather than "earning" those clicks organically. Pay per click is good for searchers and advertisers. It is the best way for company's ads since it brings low cost and greater engagement with the products and services.

Benefits of Digital Marketing

The main benefit from the customers' point of view is significant increase and saves of time and eases access from anywhere in the globe. Customer can place a purchase order at any time. The main benefits of Digital Marketing for customers are as follows:

- Reduced transaction costs for participating exchange in a market.
- Increased comfort - transactions can be made 24 hours a day, without requiring the physical interaction with the business organization.
- Time saving- Customer can buy or sell any product at any time with the help of internet.
- Quick and continuous access to information- Customer will have easier to access information check on different websites at the click of a button.
- Convenience-All the purchases and sales can

be performed from the comfort sitting a home or working place or from the place a customer wants to.

- Switch to others companies-Customer can easily change the company at any time if the service of a company is not satisfactory.
- Customer can buy a product which is not available in the local or national market, which gives customer a wider range of access to product than before.
- A customer can put review comments about a product and can see what others are buying or see the review comments of other customers before making a final buy.

CONSUMER BEHAVIOUR: Consumer behaviour is defined as a study to gain insight how individuals or groups buy, use and dispose of products, services or experiences to satisfy their needs. The decision making of the consumer is determined by the pre-purchase behaviour, which is preceded by the intention to buy/consume and a host of other antecedent factors. Some of these factors are intrinsic to the consumer like the personal aspects –beliefs/evaluation based attitude towards the act(purchase),while the extrinsic variables like social aspects- subjective norms and the perceived /actual behavioural control etc., conditioned within the situational construct, influence the consumer's behavioural intention. Attitude–behaviour consistency has been of great interest to researchers since the 1930s. The consumer decision-making process is a sequential and repetitive series of psychological and physical activities ranging from problem recognition to post-purchase behaviour. Market dominated variables (such as the environment and advertising) and consumer-dominated variables (such as needs, motives, personality and perception) simultaneously interact to influence the consumer's purchasing decision. Consumer decision process is the decision making process undertaken by consumers in regard to a potential market transaction before, during and after the purchase of the product or service. More generally decision making process is the cognitive process of selecting a course of action from among multiple alternatives. Common examples include shopping, deciding what to eat etc. Decision making is said to be a psychological construct. This means that although we can never see a decision, we can infer from observable actions, we assume that people have made a commitment to effect the action. In general there are two ways of analysing consumer buying decisions. viz.,

Economic models: These models are largely quantitative and are based on the assumptions of rationality and perfect knowledge. The consumer is seen to their maximum utility.

Psychological models: These models concentrate on physiological and cognitive processes such as motivation and need recognition. They are qualitative rather than quantitative and build on sociological factors like cultural influences and family influences.

THE BUYING DECISION PROCESS: The buyer decision making process consists of the following steps

1. Need Recognition: The buying process starts when the buyer recognizes problem or need triggered by internal or external stimuli According to the buyers' decisions are affected by numerous stimuli from their environment. The commercial environment consists of the marketing activities of various firms by which they attempt to communicate the buyers From the buyer's point o f view, these communications come to the buyer through either brand objects such as price, quality, service, distinctiveness and availability, or through brand representation such as media or salesman The buyers are also stimulated by their social environment which provides a purchase decision and the most obvious example is word-of-mouth (WOM) communication The significance of WOM in influencing consumer decision making has been well recognised m marketing and advertising literature.
2. Information Search: The buyer may enter an active information search by looking for reading material, asking friends, going online and visiting shops to learn about the active

seeking of information occurs when the senses ambiguity of brand meaning and that exists, because the buyer is not certain and has not learned enough yet about the purchase outcome of each alternative (Kotler et al (2009) have identified major information sources to which the consumers are Personal family, friends, neighbours, acquaintances, Commercial advertising, websites, salespeople, dealers, packaging, displays, Experiential handling, examining, using the product.

3. Evaluation of Alternatives: Howard and Sheth (1969) state that through a learning process, the buyers obtain and store knowledge of each brand's potential and then ranks them according to potential to satisfy their needs, so this is a set of alternatives to be evaluated the beliefs as a descriptive thought that a person holds about something and the attitudes as a person's enduring favourable and unfavourable evaluations, emotional feeling and action tendencies toward some idea.
4. Purchase: The evaluation of alternative brands may lead the consumer to form preferences for brands in the choice set. Although the consumers form brand evaluations, there can be intervening factors between the purchase intention and the purchase decision The purchase decision may also be subject to various anticipated situational factors such as temporary cash-flow problems, time availability and stock levels. In most circumstances, a consumer's decisions can be associated with the perceived risk and the consumer may modify, postpone and avoid a purchase decision because o f the perceived risk. The consumers may perceive many types o f risk in their buying decision.

   Functional risk the product does not perform up to expectations. Physical risk the product poses a threat to the physical well-being or health of the user or others. Financial risk the product is not worth the price paid. Social risk the product results in embarrassment from others. Psychological risk the product does not conform to the consumer's perceived self-image. Time risk the failure of the product results in an opportunity cost o f finding another satisfactory product. The consumers can reduce the uncertainty and negative consequences of risk by gathering information from friends and preferences for national brand, so the marketers should understand the factors o f a feeling of risk m consumers and provide information to reduce perceived risk.
5. Post-purchase Behaviour: The buyer's satisfaction is a function o f the closeness between the buyer's expectations and the product's perceived performance. If the performance is below expectations, then the customer will be dissatisfied and will suffer from the mismatch, if it meets expectations, then the customer will be satisfied, if it exceeds the expectations, the customer will be delighted. The word-of-mouth transmissions are influential m the pre- and post-purchase stages. In the post-purchase period, consumer word-of-mouth transmissions provide informal communications which are directed at other consumers about the ownership, usage and experiences o f goods and services.

DATA ANALYSIS AND INTERPRETATION

Table No: 1

Demographic profile of respondents

Respondents age wise	Age / Category	Male					female					Grand Total
		15-20	21-30	31-40	> 40	Sub.Total	15-20	21-30	31-40	> 40	Sub.Total	
	Male	13	23	6	0	42	3	23	7	5	38	80
Occupation	Category	Male					female					Grand Total
		15-20	21-30	31-40	> 40	Sub.Total	15-20	21-30	31-40	> 40	Sub.Total	
	student	12	7	0	0	19	2	3	0	0	5	24

	Employee	0	9	6	0	15	0	12	3	1	16	31
	profession	0	2	0	0	2	0	2	4	4	10	12
	business	1	3	0	0	4	1	0	0	0	1	5
	others	0	2	0	0	2	0	6	0	0	6	8
	Sub.Total	13	23	6	0	42	3	23	7	5	38	80
qualification	Category	Male					female					Grand Total
		15-20	21-30	31-40	> 40	Sub.Total	15-20	21-30	31-40	> 40	Sub.Total	
	SSC or Below	1	0	0	0	1	0	0	0	0	0	1
	intermediate	4	4	0	0	8	0	0	0	0	0	8
	graduation	8	7	2	0	17	2	9	0	0	11	28
	PG	0	12	4	0	16	1	14	7	5	27	43
	others	0	0	0	0	0	0	0	0	0	0	0
	Sub.Total	13	23	6	0	42	3	23	7	5	38	80
Monthly income	Category	Male					female					Grand Total
		15-20	21-30	31-40	> 40	Sub.Total	15-20	21-30	31-40	> 40	Sub.Total	
	less than 20k	12	17	0	0	29	2	19	3	0	24	53
	20k-40k	1	6	5	0	12	1	4	4	4	13	25
	40k-60k	0	0	1	0	1	0	0	0	1	1	2
	Above 60k	0	0	0	0	0	0	0	0	0	0	0
	Sub.Total	13	23	6	0	42	3	23	7	5	38	80

Source: Primary Data

Table No: 2

Responses towards Digital marketing

S.no	Particulars	Category	Male					Female					Grand Total	Annova / t-test Results
		Age	15-20	21-30	31-40	> 40	Sub. Tot	15-20	21-30	31-40	> 40	Sub. Tot		
1	Awareness on Digital Marketing	Yes	13	20	6	0	39	2	22	7	5	36	75	m value=18.75 P(T<=t)one-tail=2.457 P value=0.046 t Critical one-tail = 2.3533
		No	0	3	0	0	3	1	1	0	0	2	5	
		Sub. Tot	13	23	6	0	42	3	23	7	5	38	80	
2	Products usually preferred to purchase Digitally	Electronic items	4	9	6	0	19	0	8	0	2	10	29	F-Value-2.1848 P-value-0.09095 F-crit 2.6414
		Apparels	1	4	0	0	5	0	5	5	1	11	16	
		Jewellery	0	0	0	0	0	1	1	0	0	2	2	
		Bookings	5	7	0	0	12	1	4	2	2	9	21	
		Others	3	3	0	0	6	1	5	0	0	6	12	
		Sub. Tot	13	23	6	0	42	3	23	7	5	38	80	
3	Frequency of Online shopping By respondents	Regularly	4	6	2	0	12	1	2	1	3	7	19	f-Value1.9026 P-value-0.1520 F-crit 2.946
		Rarely	3	4	1	0	8	0	4	1	0	5	13	
		Need base	4	12	3	0	19	1	14	2	1	18	37	
		Offers& discounts	2	1	0	0	3	1	3	3	1	8	11	
		Sub. Tot	13	23	6	0	42	3	23	7	5	38	80	
4	Sources s to gather information	Search engines	6	8	3	0	17	1	6	2	1	10	27	f-Value-4.2445 P-value-0.0032 F-crit 2.4376
		Product catalogues	1	5	2	0	8	0	3	1	2	6	14	
		Friends& Family	5	7	1	0	13	2	7	2	2	13	26	
		Advertisements	1	2	0	0	3	0	2	2	0	4	7	

		Promotional mails	0	1	0	0	1	0	3	0	0	3	4	
		Others.	0	0	0	0	0	0	2	0	0	2	2	
		Sub. Tot	13	23	6	0	42	3	23	7	5	38	80	
5	Rating of online products	Excellent	6	2	2	0	10	0	4	2	1	7	17	M value=4.25 P(T<=t) one-tail=0.11 pvalue=-1.53 t Critical one-tail = 2.35
		Good	7	21	4	0	32	3	19	5	4	31	63	
		Sub. Tot	13	23	6	0	42	3	23	7	5	38	80	
6	Payment Methods adopted by Consumers	Debit Card	6	9	3	0	18	1	13	5	1	20	38	
		Credit Card	0	0	1	0	1	0	0	0	2	2	3	f-Value14.1006 P-value-0.01526 F-crit 2.9466
		Net Banking	1	0	2	0	3	0	0	0	1	1	4	
		Cash on Delivery	6	13	1	0	20	2	10	2	1	15	35	
		Sub. Tot	13	22	7	0	42	3	23	7	5	38	80	
7	Frequency of visits to Online stores during last 12 months	1 – 2times	4	3	2	0	9	0	8	0	1	9	18	f-Value-0.6652 P-value-0.6204 F-crit -2.6416
		3 – 5 times	3	6	1	0	10	1	6	4	2	13	23	
		6 – 10 times	1	7	0	0	8	0	6	2	1	9	17	
		10 – 20 times	2	5	1	0	8	1	1	0	1	3	11	
		>20 times	3	2	2	0	6	1	2	1	0	5	11	
		Sub. Tot	13	23	6	0	41	3	23	7	5	38	80	
8	Reasons for choosing online purchases	Convenience	4	9	6	0	19	0	8	0	2	10	29	F-Value-2.1848 P-value-0.09095 F-crit 2.6414
		Quick Delivery	1	4	0	0	5	0	5	5	1	11	16	
		Online goods	0	0	0	0	0	1	1	0	0	2	2	
		Global markets	5	7	0	0	12	1	4	2	2	9	21	
		24×7 Shopping	3	3	0	0	6	1	5	0	0	6	12	
		Sub. Tot	13	23	6	0	42	3	23	7	5	38	80	
9	Consumers perception of risk in Digital Purchases	touch & feel	6	13	5	0	24	0	3	4	2	9	33	f-Value-0.0165 P-value-0.0462 F-crit -2.9466
		Misuse of personal details	6	4	0	0	10	3	1	0	3	7	17	
		mis-match of delivery	3	3	2	0	8	3	7	1	0	11	19	
		Others	0	0	0	0	0	0	0	1	0	1	1	
		Sub. Tot	15	20	7	0	42	6	11	6	5	28	80	

Source: Primary Data

Data Analysis and Interpretation:

Table 1: It is understood from the above table that 52.5% are Male respondents and 47.5% are Female respondents. Most of the male and female respondents fall under the age group of 21-30. Employees occupy the major portion of the respondents in the survey. Under qualification group most of the respondents are post graduates and 66.25% of the total respondents falls under less than 20000 income group.

Table 2: As per the Data shown in table 2 regarding the awareness on digital marketing, the difference of mean value between genders is 18.75, the t-test value is 2.457 which is higher than the critical value 2.35 and the p-value is 0.046. Therefore the result of t-test about the awareness on Digital marketing is not significant and hence Null hypothesis is accepted and Alternative hypothesis is rejected. For the respondents opinion on availability of online information about products, the difference of mean value between genders is 4.25, the t-test value is 0.11 which is lower than the critical value2.35 and the p-value is -1.53. Therefore the result of t-test about the availability of online information is significant and hence alternate hypothesis is accepted and null hypothesis is rejected.

The calculated ANOVA values for the issues relating to products usually preferred to purchase, sources used to gather information, payment methods adopted and reasons for choosing online purchases the p-value is below the critical value 0.05, Therefore Null hypothesis is accepted and alternative hypothesis is rejected.

Results in relating to frequency of online shopping visits, the p-value is higher than the critical value. Therefore Null Hypothesis is rejected and alternative hypothesis id accepted.

Findings and Conclusions:

1. In the study it was found that male respondents are more than the female respondents who were responded for online responses about awareness on digital marketing for designed questionnaire.
2. Study reveals that electronic items are preferred more by the respondents among the online products
3. It is also understood from the study that the respondents are not attracted towards offers and product promotions and purchase according to the need.
4. Based on the survey online source of product information is gathered from internet search engines followed by word of mouth.
5. Debit cards and cash on delivery are the most adopted payments methods by the respondents.
6. Study reveals that reasons for choosing online purchases by consumers are Convenience and access to global markets.
7. It can be understood from the study that the risk factors in the digital purchases are mostly no possibility to touch and feel the product, mis-match of delivery and mis-use of personal details of consumers.
8. The overall satisfaction of the consumers on the digital purchases is rated as good.

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CORPORATE SOCIAL RESPONSIBILITY IN PHARMACEUTICAL COMPANIES IN INDIA- A CASE STUDY OF TELANGANA STATE

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ABSTRACT

Corporate social responsibility is a self regulating business model that helps a company be socially accountable to itself, its stakeholders, and the public. By practicing corporate social responsibility, also called corporate citizenship, companies can be conscious of the kind of impact they are having on all aspects of society including economic, social, and environmental. To engage in CSR means that, in the normal course of business, a company is operating in ways that enhance society and the environment, instead of contributing negatively to them. Corporate social responsibility is a broad concept that can take many forms depending on the company and industry. Through CSR programs, philanthropy, and volunteer efforts, businesses can benefit society while boosting their own brands. As important as CSR is for the community, it is equally valuable for a company. CSR activities can help forge a stronger bond between employee and corporation; they can boost morale and can help both employees and employers feel more connected with the world around them. Pharmaceuticals' CSR programs primarily focus on health and healthy living. They also provide money, medicines and equipment to non-profit organizations that work towards improving health and education in under-served communities.

Corporations around the world are struggling with a new role, which is to meet the needs of the present generation without compromising the ability of the next generations to meet their own needs. Organizations are being called upon to take responsibility for the ways their operations impact societies and the natural environment. They are also being asked to apply sustainability principles to the ways in which they conduct their business. Sustainability refers to an organization's activities, typically considered voluntary, that demonstrate the inclusion of social and environmental concerns in business operations and in interactions with stakeholders. To understand and enhance current efforts, the most socially responsible organizations continue to revise their short and long-term agendas, to stay ahead of rapidly changing challenges. The quality of relationships that a company has with its employees and other key stakeholders-such as customers, investors, suppliers, public and governmental officials, activists, and communities-is crucial to its success, as is its ability to respond to competitive conditions and corporate social responsibility (CSR). These major transformations require national and global companies to approach their business in terms of sustainable development, and both individual and organizational leadership plays a major role in this change. Corporate responsibility or sustainability is therefore a prominent feature of the business and society literature, addressing topics of business ethics, corporate social performance, global corporate citizenship, and stakeholder management.

The CSR practices followed by Indian pharmaceutical companies especially in the state of Telangana. Telangana has many pharma companies such as Biological-e limited, Reddy's lab, Abbott laboratories etc therefore it is essential to study the CSR practices followed by these companies. Pharma companies

have been constantly in news both good and bad on account of reasons such as waste disposal, high cost of medicine distribution/intermediaries, corporate bureaucracy etc. Nevertheless, there is a need to examine the CSR practices of these companies in the light of social issues addressed by them. Pharma companies have come forward and contributed to nation building by spending around 10000 crores of amount on CSR activities.

Introduction

CSR has become increasingly prominent in the Indian corporate scenario because organizations have realized that besides growing their businesses it is also vital to build trustworthy and sustainable relationships with the community at large. This is one of the key drivers of CSR programs. CSR is not a new concept in India. Today, CSR in India has gone beyond merely charity and donations, and is approached in a more organized fashion. It

has become an integral part of the corporate strategy. Companies have CSR teams that devise specific policies, strategies and goals for their CSR programs and set aside budgets to support them. The Spending on CSR was voluntary for companies in India prior to 2012-13. After the enactment of new Companies Act 2013 the companies are compelled to include Business Responsibility Report as a part of their Annual report as a result the companies have started allocating funds for CSR activities specifically. Evolving all the time, it has morphed from a purely philanthropic to a systemic and, finally, strategic activity. India is the first country to have legislated CSR mandates. Others like Sweden, Norway, UK, South Africa, Ghana and Ivory Coast follow some specific codes for sustainable and socially accountable business practices, like Social Labour Plan (SLP) and Local Content Law (LCL). As per section 135 of Indian companies Act 2013 company should constitute Corporate Social Responsibility Committee of the Board if the company has net worth of Rs.500 cores or more, turnover of Rs.1,000 cores or more or net profit of Rs.5 cores or more during the financial year. The company should ensure at least 2% of average net profit of three immediately preceding financial years to be spent on CSR activities every year. The company shall give preference to the local area and the areas around it where it operates, for spending the amount earmarked for Corporate Social Responsibility activities. CSR projects or activities undertaken in India only.

The present societal marketing concept of companies is constantly evolving and has given rise to a new concept of CSR. Many of the leading corporations across the world had realized the importance of being associated with socially relevant causes as a means of promoting their brands. It stems from the desire to do well and get self-satisfaction in return as well as societal obligation of business. The Indian corporate sector is planning to introduce CSR in the small and medium enterprises (SME) sector to increase its reach in remote areas. Also some companies have already start during the CSR as a strategy, which aims at mutual development of company and the community simultaneously.

CSR opened new opportunities for all stakeholders (including the corporate sector, government, not-for-profit organisations and the community at large) to devise innovative ways to contribute to equitable social and economic development. Currently, CSR in India is headed in a positive direction as there already exist a multitude of enabling organiations and regulatory bodies such as the Department of Public Enterprises (DPE), Ministry of Corporate Affairs (MCA), and Indian Institute of Corporate Affairs (IICA). These institutions have already set the wheels in motion and are playing an important role in making CSR a widespread practice and in ensuring success in reducing inequalities without risking business growth. According to Companies Act 2013, he board of directors are required to disclose the contents of their CSR policy, developed and implemented by the company during the

year, in its report. 30 per cent companies have not given any details regarding CSR in their directors' report. While 70 per cent companies have a stand-alone section on CSR, 30 per cent companies have spelt details regarding their CSR vision/mission/ philosophy. CSR is relevant for national policy as the Ministry of Corporate Affairs formulates the rules related to CSR and also this study will help because as per the Companies Act it is mandatory for companies to comply with CSR.

Review of Literature

Christina chale, 2018

The Pharma industry has the potential to drive social change in our society. We need to review our processes, utilise our networks and identify areas where we can contribute and give back to society. These three areas are examples of how we can make that possible. The products we produce are fundamental in the treatment offered to patients, but if the people who need healthcare the most have no access, then our vision to improve global health will fall short. We can advance the progress we make by becoming part of a bigger network, which shares the same vision, and by creating a platform where we can learn from each other and foster scientific advances. Through charitable giving programmes we can effectively tackle complex issues and strengthen the support provided to local communities in areas where improvements are urgently needed.

Shiban Khan (2017)

The conceptual framework shows that CSR in the Indian pharmaceutical industry is placed within the realm of the Gandhian social trusteeship theory. This study was set out with the objective of exploring 'what' is CSR in India, and found that it is but a modern twist on the traditional philosophy of Gandhian social trusteeship, and not so much a replication of Western concepts as the triple bottom line. This paper contributes to CSR's theory-building process and all its various gradations by crystallizing the concept from an emerging market perspective, and shed some much needed light on the context's future research and practice.

Shyama V. Ramani and Vivekananda mukherjee (2014)

It confirms that though firms do not invest in innovation to earn CSR credit, some breakthrough technological innovations, not all, can trigger CSR returns. There are tradeoffs between CSR effort and innovation market value. Higher the consumer surplus generated by the innovation, better the bargaining position of the innovator vis-à-vis contestations. The windows of opportunity for generating market value and CSR value are context specific. A robust business strategy rather than philanthropy is needed for breakthrough technological innovations to be marketed to communities.

Hayley Droppert & Sara Bennett (2012)

Corporate social responsibility differed for each firm particularly with respect to how CSR is defined, organizational structures for managing CSR, current CSR activities, and motivations for CSR. Across the firms studied, the common CSR activities were differential pharmaceutical pricing, strengthening developing country drug distribution infrastructure, Health initiatives, and targeted research and development. Primary factors that motivated CSR engagement were reputational benefits, recruitment and employee satisfaction, better rankings in sustainability indices, entrance into new markets, long term economic returns, and improved population health. In terms of CSR strategy, firms were at different points on a spectrum ranging from philanthropic donations to integrated systemic shared value business models.

Maimunah Ismail 2009

CSR for multinationals (MNCs) grows as a result of global competitions and challenges they faced. This aspect of managerial theory comes into being as a result of the responsibility the managers have to shoulder by defining useful

tools about the CSR for the MNCs to survive in foreign countries. Donalds on refers to the MNCs as moral agents, analyzed on the basis of the moral values when managers make decision in the firms, going beyond profit maximization. The logic of CSR for MNCs is also derived from the fact that when cultural clashes become relevant due to events such as protests, demonstrations, boycotts, strikes and other negative actions against the employers. The answer to these actions is the formulation of code of conduct that should be adopted by MNCs. The success of this initiative, however, depends on client expectation and corporate reputation; the level of trust, acceptance, and cooperation shown by the stakeholders and community of workers.

CHAND SINGH (2009)

CSR policy functions as a built in self regulating mechanism whereby business monitors and ensures its active participation towards the society. The compliances fulfill the gap realized by the absorption of business benefits. The potential benefits of the business – the scale and nature of the benefits of CSR for an organization can vary depending on the nature of the enterprise, as a result it is difficult to quantify. Business solutions are often revealed with the smooth functioning of the philanthropic means. The correlation between social performance and financial performance often originates CSR. Corporate Philanthropy a result that creates charitable efforts to improve their competitive context along with ? the quality of the business environment.

Significance of the study

The Study assumes importance as Pharmaceutical companies are not fulfilling the Corporate Social Responsibilities as stated and much awaited by the deprived society.

Though those companies are earnings huge profit at the cost of ill people.

Therefore this study assumes significance to find out to what extent the pharma companies are contributing for the betterment of society in particular in Telangana State and nation in general.

Objectives of the study

To evaluate the CSR Policy in Pharmaceutical industry in India.

To examine Trends and process of CSR in Pharmaceutical Industry in India.

To examine the current CSR practices followed by Indian pharmaceutical companies in the State of Telangana.

Methodology

The proposal study is an exploratory and it CSR practice in Pharmaceutical Industry in India and Telangana.

To fulfill stated objective data is to be collected from pharma companies in the State of Telangana and it is proposed based.

Both primary and secondary sources primary data will be collected by administering a questionnaire to the respondents from pharma companies and Secondary data will be collected from books, journals, e-resources, newspapers etc.

Evaluation of CSR in Indian Pharmaceutical companies:

Company Name	Net profit (2017-18)	CSR funds	Share of CSR in Net In %	Project Description
Lupin Ltd	2513	17.07	0.68	Social Development Programmes
Cipla Ltd	1468	15.04	1.02	Doorstep health Services
Torrent Pharmaceuticals Ltd	482	14.08	2.92	Pediatric Healthcare Program

Dr Reddys Labs Ltd	566	12	2.12	Grow People with Disabilities Program
Glenmark Pharmaceuticals Ltd.	1014	11	1.08	Social & Economic Development
Ipca Laboratories Ltd	233	8.6	3.69	Education & Skill Development Initiatives
Glaxosmithkline Pharmaceuticals Ltd	351	6.45	1.84	Eliminating Lymphatic Filariasis
Aurobindo Pharma Limited	1813	6.17	0.34	Rural Development

The above table shows that major pharmaceutical companies are contributing their share to CSR. All the companies which are located in India spending CSR funds in to rural India.

Conclusion

CSR holds a very important place in the development scenario of the world today and can pose as an alternative tool for sustainable development. As companies have shown great concerns for their immediate community and the stakeholders, it can be safely concluded that much of the fate of society lies in the hands of the corporate. A successfully implemented CSR strategy calls for aligning these initiatives with business objectives and corporate responsibility across the business principles to make CSR sharper, smarter, and focused on what really matters. Most of the companies, viewed CSR activities as an "expense" but as a partnership with the community, a benefit to the environment and a way to enhance the value of your business. As per the new companies law, CSR activities would have to be within India. They would apply to companies having at least Rs 5 crore net profit, or Rs 1,000 crore turnover or Rs 500 crore net worth. Such companies will need to spend 2 per cent of their three-year average annual net profit on CSR activities in each financial year, beginning 2014-15 fiscal. The companies will take more initiatives towards CSR activities.

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A STUDY ON CUSTOMER'S PERCEPTION ON E-BANKING IN NALGONDA DISTRICT

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ABSTRACT

Internet banking refers to the supply of information or services by a bank to its customers, through a computer, television, telephone or cell phone. It has become a strategic resource to achieve efficiency, control of operations, productivity and profitability. This changed the traditional way of banking. This article looks at Indian Bank customers in nalgonda. The survey concludes that Internet banking services take customers to a large extent.

Key words: Internet Banking, e-bank, 24x7 banking, electronic banking.

Introduction

Electronic Banking (Internet Banking or Internet Banking) refers to the delivery of banking services and products to clients directly through electronic and communication networks. The term electronic banking can be described in many ways. In its simplest form, it means providing information or services to bank customers via computer, television, telephone or mobile phone. It has become a strategic resource for efficiency, performance control, productivity and profitability. This has changed the traditional method of banking transactions. The client does not visit the banking office by e-banking to complete the banking transaction. For example, customers use automated booths (ATMs) instead of cashiers and electronic cash instead of banking transactions (Allegabond and Parissa, 2006). It allows customers to submit applications for various services, query accounts and make suggestions

The bank electronically transfers money into its accounts, pays the bill and performs other banking transactions online. It relies heavily on Information and Communication Technology (ICT) to deliver within 24 hours and deliver financial services quickly.

The Importance of Internet Banking

E-banking is now a global phenomenon. It is an important and important tool for growth, growth, development and contributing to increased competition. Strong financial performance is important in every country and can have a huge impact on helping to raise money through qualified financial services. This has greatly impacted the banking industry. Banks need to develop strategic solutions on how to implement new technologies and improve the quality of online services for their customers. In the absence of face-to-face interactions, banks need to improve the quality of online services to customers in order to achieve and maintain competitive advantage and customer relationships.

Description of the problem

E-Bank is the fastest growing company worldwide. It is considered to be the most relevant and specialized banking system on both sides, banks and consumers. At the same time, many things in this series can be fraud, fraud and abuse. This situation puts e-banking at risk

Objectives:

1. To study the customer information at Bank of India in nalgonda district, telangana
2. Determine the customer satisfaction level of the Bank of India in the study area.

Methodology

It is a small project implemented on a limited basis in the nalgonda district of telangana. Indian Bank customers were contacted by the bank and they were sent with questions. 200 users were selected at once and their responses were analyzed. In contrast, the chi-square test was used in this study.

Demography profile

The sample of users with the following attributes: Gender: [Male - 115, Female - 85]. Age: [Users under 20 years old, 20-30 - 77 users, 30-40 - 46 users, 40-50 - 21 users and 50 - 16 users].

Table-1

Awareness on the E-Banking

S. No.	Source of Awareness	No. of Respondents	Percentage
1.	Banks	26	13
2.	Self knowledge	154	77
3.	Advertise-ments	18	9
4.	Friends	42	21
	Total	200	100

Source: primarydata

Regarding customers 'perceptions of e-banking facilities, this suggests that the majority of consumers (77%) have a source of self-knowledge and that consumers have knowledge through their formal education and self-esteem. 21% of customers have been informed by their friends.

Table-2

Factors of Attractive

S. No.	Attractive Factors	No. of Respondents	Percentage
1.	Convenience	86	43
2.	Time saving	26	13
3.	Speed of transactions	16	8
4.	24 hours service	60	30
5.	Less expensive	5	2.5
6.	Safety	7	3.5
	Total	200	100

Source: Primary data

The above table It is clear that convenience is an attractive factor for the majority of customers (43%). At the same time, 24-hour service is another important factor (30% customer support). Time-saving is mentioned as an attractive factor for 13% of customers. Transaction speed, security and low cost are other factors.

Testing Hypotheses

Testing - 1 Consumer age and overall satisfaction with e-banking services

The null hypothesis (Ho)

There is no significant relationship between the customer's age and overall satisfaction with e-banking services.

Table-3

	Age and Overall Satisfaction Cross Tabulation					
Respondents	Satisfactory Level on towards Internet Banking Services					Total
Opinion about Age	Highly Satisfied	Satisfied	Neutral	Dissatisfied	Highly Dissatisfied	
Below-20	9	13	10	6	2	40
20-30	35	21	15	5	1	77
30-40	9	16	10	8	3	46
40-50	4	8	5	2	2	21
Above-50	6	4	4	2	0	16
Total	63	62	44	23	8	200

Chi-square Test

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	18.738	16	.282
Likelihood Ratio	19.418	16	.248
Linear-by-Linear Association	.319	1	.572
No. of Valid Cases	200		

Degrees of freedom = 16 chi square value = 18.738 table value = 19.418

At the 5% significance level.

Since the calculated value is less than the table value, the null hypothesis is accepted.

Therefore, there is no significant relationship between age and overall satisfaction with e-banking services

Test-2 Customer gender and overall satisfaction with e-banking services

The null hypothesis (Ho)

There is no significant difference between the gender of customers and overall satisfaction with e-banking services

Table-4

Gender and Overall Satisfaction

Gender of the Customers	Overall Satisfaction on E-Banking Services					Total
	Highly Satisfied	Satisfied	Neutral	Dissatisfied	Highly Dissatisfied	
Male	38	33	11	21	12	115
Female	30	26	13	8	8	85
Total	68	59	24	29	20	200

Chi-Square Test

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.160	4	.385
Likelihood Ratio	4.271	4	.371
Linear-by-Linear Association	.806	1	.369
N of Valid Cases	200		

Degrees of freedom = 16, at the 5% significance level.

This means that the calculated value is less than the table value, so the null hypothesis (H0) is accepted.

There is no significant difference between the gender of customers and overall satisfaction with e-banking services.

Findings

1. Regarding customers' perception of e-banking facilities, this indicates that the majority of consumers (77%) have a source of self-knowledge and that consumers have knowledge through their formal education and self-service.
2. Flexibility is an attractive item (43%) that has more customers.
3. There is no significant relationship between age and overall satisfaction with e-banking services
4. There is no significant difference between the gender of customers and overall satisfaction with e-banking services.

Conclusion:

So, the current paper concludes that e-banking will benefit consumers in a big way. At the same time, it gives them maximum flexibility so that they can make banking transactions at any time. Customers will benefit from convenience, 24-hour service and transaction speed.

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MARKETING INTELLIGENCE - THE MOMENT OF TRUTH TO MOMENT OF PROMISE

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ABSTRACT

Marketing Intelligence, a new wave of digitaldriven disruption, encompasses the Robotic Process Automation (RPA), Cognitive Intelligence and Cognitive Enhancement. The promising features and platforms inter alia include Content Creation (Twizoo) and Optimisation (Chatbots), Consumer Intelligence (Conversion) and Service (Conversocial), Influencer Marketing (Insight Pool) and Competitive Intelligence (Unmetric) (John Ellett-Forbes). Industry -4.O is more disruptive with confluence of technologies such as AI, Block Chain, Robotics, 3-D Imaging, Quantum Computing, Gene Mapping etc., The Promises transcend into realities will require a unique 'Customer Experience Management' that spans channels i.e., the then-versus-now story, 'Marketing Intelligence', a scintillating, scientific, spontaneous drive and urge.

Key words: Marketing Intelligence, digital driven disruption, encompasses the Robotic Process Automation (RPA), Cognitive Intelligence, Consumer Intelligence Competitive Intelligence.

Digitalisation permeates everywhere, Digi-era is evolving into the Intelligence- era and Cloud became the cornerstone for the Intelligent Enterprise (www.sap.com). The Artificial Intelligence (AI) emerged from the realms of science fiction and now it's a truth and reality (Infosys, 2019). The term 'Artificial Intelligence' was at first coined by John McCarthy in 1956 and defined it as the science and engineering encompassing Robotic Process Automation (RPA), Cognitive Insight and Cognitive Engagement (HBR). AI is the 'New Electricity' (Andrew Ng) and herald dramatic growth potential for both the economy and for humans (Accenture) contributing $15 trillion to the global economy over the next decade (HBR & PwC). AI arose as a plug-and-play technology with immediate returns. 'Assisted Intelligence' is for today, 'Augmented Intelligence' is emerging and 'Autonomous Intelligence' will be for the future.

Marketing, prima facie, defined as a creation and delivery of standard of living to society (Paul Mazur and Malcom McNair), transformed as a product / service offering, targeted sales and reformed to Service as an Infrastructure (SaaS). The journey enrouted from tangible to intangible, advertising to integrated communications, introversion to extraversion, profiteering to customer engagement, market share to customer's share, global to glocal, shareholder benefit to stakeholder benefit (Philip Kotler). Marketing Intelligence (MI), a revolutionary and radical shift, emerged as a Moment of Promise (SAS, Google) steering prosumers than targeting consumers or users. This galvanizing shift from near sighted Marketing Myopia (Theodre Levitt)

i.e., 'I Want To Know-Go-Do-Buy Moments of Truth' (A.G. Lafley, Pete Blackshaw - P&G, Google) to boot sagging (apple) is merely for the fulfillment of immediate needs and wants, promising augmented and virtual reality.

Marketing Intelligence, a new wave of digital-driven disruption, encompasses the Robotic Process Automation (RPA), Cognitive Intelligence and Cognitive Enhancement. The promising features and platforms inter alia include Content Creation (Twizoo) and Optimisation (Chatbots), Consumer Intelligence (Conversion) and Service (Conversocial), Influencer Marketing (Insight Pool) and Competitive Intelligence (Unmetric) (John Ellett-Forbes). The Promises transcend into realities will require a unique 'Customer Experience Management' that spans channels and device is the then-versus-now story and 'Marketing Intelligence', a scintillating, scientific, spontaneity drive and urge.

Marketing Intelligence - The Augmented Digi-Virtual Reality

Digitalisation permeates everywhere, Digi-era is evolving into the Intelligence-era and Cloud became the cornerstone for the Intelligent Enterprise (www.sap.com). The Artificial Intelligence (AI) evolved from the realms of science fiction and now it's a truth (Infosys, 2019) . AI would contribute $15 trillion to the global economy over the next decade (HBR,2019 , PwC,2019) . AI emerged as a plug-and-play technology with immediate returns. The term 'Artificial Intelligence' was at first coined by John McCarthy in 1956 and defined it as the science and engineering encompasses the Robotic Process Automation (RPA), Cognitive Insight and Cognitive Engagement (Thomas H. Davenport, Rajeev Ronanki, 2018) . In Robotic Process Automation (RPA), 'Robots' act like a human inputting and consuming information from multiple IT systems. The Cognitive Insights are Algorithm Based Machine Learning (ML) Apps termed as 'Analytics on Steroids'. Big Data is the oil for the ML Apps to create, share, analyse, mine, report and interprets voluminous of data (Diebold Francis. X., 2012) . The Natural Language Processing (NLP), Chatbots, Intelligent Agents, and Machine Learning are the basis for 'Cognitive Engagement' that engages AI-Powered Workforce and cater to the needs of clientele'.

Marketing Intelligence -A Transcendence From Moment Of Truth To Moment Promise

Marketing, prima facie, focused on creation and delivery of standard of living to society (Paul Mazur & Malcom McNair), transformed as a product / service offering, targeted sales and reformed to Service as an Infrastructure (SaaS). The journey enrouted from product focus to customer centric, tangible to intangible, advertising to integrated communications, introversion to extraversion, profiteering to customer engagement, market share to customer's share, global to glocal, selling to serving, marketers to companies, shareholder benefit to stakeholder benefit (Philip Kotler) .

Marketing Intelligence (MI) is a new wave of digital-driven disruption, a maturity and a marketing imperative (Godin, Vice President, Yahoo). The Customer Centric Marketing traverse to Consumer Focus and Experience Marketing (CX) (Amy Gallo, 2016) where 'Prosumer' is the 'Hero', feels from inside like real life, like truth. (Chris Milk, How Virtual Reality Can Create the Ultimate Empathy Machine). The automation, optimization, real-time decision-making and event detection empowers consumers 'I Want To Know and I Want To Go' for getting first time impression about a brand, product or service (The Moments Of Truth, A.G. Lafley, 2005) . The 3rd and 4th Moments of Truth driving towards I Want To Do (Pete Blackshaw) , and I Want To Buy Moments (Zero). This galvanizing shift from near sighted Marketing Myopia (Theodre Levitt) to 'Boot Sagging' (apple) is merely for the fulfillment of immediate needs and wants, promising augmented and virtual reality.

Marketing Intelligence (MI), a revolutionary and radical shift, emerged as a Moment of Promise (SAS, Google) steering prosumers than targeting

consumers or users. The 'Customer Success' is the proactive orchestration of a customer's journey that maximizes the value for the end customer across the life cycle (Deloitte, 2020). In the hyper-era of disruption, there is a dire need of personalized, contextualized, experiencing and responsive 'Interactive and Integrated Personalised Marketing' that predicts and analyses the customer's churn, feel and perceptions. MI algorithms enable automated price calculation, predict the customer behavior and real-time product relevancy (ASOS) surging to maximize potential profits (Uber). The MI and Deep Learning integration is often used to predict box-office movies sales (NetFlix), and MI and AR allow customers to try different make-up looks (Sephora Virtual Assistant). The MI is used to enhance in-store retailing (apple), delivers autonomous products via drones (JD.com), offers real-time physical store behavior (facial recognition, voice and body language, buying patterns), integrates IoT (Shelf Scanning Robots) for allowing automatic decisions regarding reordering of products (Google Echo), underpins automation of customer service and assistance (virtual agents, text analytics, NLP, NLG) to engage experiences and also offers ethical issues for marketers in relate to consumer autonomy, diversity, equality, well-being, protection etc., The ORAC (Optimizing , Reasoning, Analogizing, Creating) Model (Wierenga and Van Bruggen,1997, 2000) deals with Integrated Marketing i.e., 4Ps' viz., Product, Price, Place and Promotion while Marketing Intelligence focusing on 'Holistic Marketing' that entails the development, design and implementation of marketing programs, processes and activities including Integrated Marketing (4Ps); Internal Marketing (Cross-Functional), Performance Marketing (Metrics & Measures) and Relationship Marketing (Engagement and Experience).

Marketing Intelligence - The Promising Features and Platforms

The promising features and platforms inter alia include Content Creation (Twizoo) and Optimisation (Chatbots), Consumer Intelligence (Conversion) and Service (Conversocial), Influencer Marketing (Insight Pool) and Competitive Intelligence (Unmetric) (John Ellett-Forbes).

The Automated Intelligence, Assisted Intelligence, Augmented Intelligence and Autonomous intelligence are the Platforms of MI and Predictive Analytics, Cognitive Computing, Smart Robots and Chat Bots are Forms of MI (IBM-WATSON). The Price Optimisation (Rational Global Pricing Strategy), Product Portfolio (Cross Selling and Upselling) and Market Segmentation are Game Changer for Pricing. The Challenges for implementation of MI include (i) Strategy & Governance; (ii) Data Management; (iii) People (Citizen Users, Citizen Developers and Data Scientists) (PwC).

Industry -4.O is more disruptive with confluence of technologies such as AI, Block Chain, Robotics, 3-D Imaging, Quantum Computing, Gene Mapping etc., The Agile and Disruptive Technologies have profound influence and impact on primary, secondary and tertiary sectors of the economy. AI is A (Algorithms) To I (Information) and MI is an Ontology of AI. The agility, accuracy and transparency are the dynamics of MI. Mere 'Humanoids' cannot transform the latent and latest talents and skills. Be ensure the 'Human in the Loop' (augmenting marketing skills by systems to deliver actionable and operational rich insights), ensue Marketing-as-a-Service (Maas), infuse Emotional Intelligence and instill Human Touch. Be a Market Intelligent, Be an Altruist and above all Be a Humane. The Promises transcend into realities will require a unique 'Customer Experience Management' that spans channels i.e., the then-versus-now story, 'Marketing Intelligence', a scintillating, scientific, spontaneous drive and urge.

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WOULD AYUSHMAN BHARAT WORLD'S LARGEST HEALTH SCHEME PROVIDE BETTER CARE TO THE POOREST OF INDIA?

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ABSTRACT

The public health sector in India is the largest and fastest growing sector according to reports of NRHS, Government of India. But it faces immense challenges like high out-of-pocket expenditure, low quality treatment, shortage of staff and medicine, low financial protection, under health insurance coverage and poor infrastructure. To get treatment at corporate hospitals, People of India have to borrow the money or sell their assets to meet the medical expenditure. Government of India has launched a new scheme Pradhan Matri Jan Arogya Yojana (PM-JAY) in 2018. It is also known as AYUSHMAN BHARATH. An attempt is made in this paper to find out whether this scheme would provide better care than another schemes. It is prepared based on secondary data which was collected from various reports of National Health Mission, National Rural Health Mission, National urban Health Mission, Pradan Mantri Swasthya Suraksha Yojana and other annual reports for a period of 2004-05 to 2018-19. It is found out the total treatment cost is 70% has to be meet by the patients and the out of pocket expenditure Compound Annual Growth Rate is 11.4%. It concludes that India lags behand in all public health parameters despite introducing this scheme.

Key words: Out-of- Pocket Expenditure, Source of Finance, Public Apathy, shortfall of functionaries and Infrastructure.

India has achieved significant public health gains and improvements in health care access and quality over the last three decades. The health sector is amongst the largest and fasting growing sectors, expected to reach US$ 280 billion by 2020. At the same time, India's health sector faces immense challenges. It continues to be characterized by high out-of-pocket expenditure, low financial protection, and low health insurance coverage amongst both rural and urban population. It is a matter of grave concern that incurs a high out-of-pocket expenditure on account of health and medical costs. 62.58% of our population has to pay for their own health and hospitalization expenses and are not covered through any form of health protection. Besides using their income and savings, people borrow money or sell their assets to meet their healthcare needs, thereby pushing 4.6% of the population below the poverty line. The Government of India is ensuring that its population has universal access to good quality health care services without anyone having to face financial hardship as a consequence. This paper presents central government budget allocations, and other public health indicators. It examine the what extent the new scheme **Pradhan Mantri Jan Arogya Yojana (PM-JAY)** would help the poorest of India.

Health and health care development has not been a priority of the Indian state. This is reflected in two significant facts. One, the low level of investment and allocation of resources to the health sector over the years – about one percent of GDP with clear declining trends over the last

decade. And second the uncontrolled and very rapid development of an unregulated private health sector. Despite the fact that health is a state subject, though, the Central government through the Council of Health and Family Welfare and various Committee recommendations has shaped health policy and planning in India.

Apart from all earlier policies, National Health Policy (NHP) 2017 has been formulated in March 2017, the policy aims to improve health status through concerned policy action in all sectors and expand preventive, primitive, curative, palliative and rehabilitative services provided through the public health sector with focus on equality. The policy aims to achieve universal health coverage by providing primary health care by utilizing the existing infrastructure and by collaborating with the non-governmental sector. It also aims to achieve improved access to secondary and tertiary services through a combination of public hospitals and private care providers, especially the not for profit providers.

In 2018-19, the Ministry of Health and Family Welfare received an allocation of Rs 54,600 crore (an increase of 2% over 2017-18). The National Health Mission (NHM) received the highest allocation at Rs 30,130 crore and constitutes 55% of the total Ministry allocation (see Table). Interestingly, in 2017-18, expenditure on NHM is expected to be Rs 4,000 crore more than what had been estimated earlier. This may indicate a greater capacity to spend than what was earlier allocated. A similar trend is exhibited at the overall ministry level where the utilization of the allocated funds has been over 100% in the last three years.

Table : Major allocations under the Ministry (Rs. Crore)

Major Heads	2016-17 Actual	2017-18 Revised	2018-19 Budgeted	% Change	% of Ministry's budget
NHM of which:	22454	30802	30130	-2%	55%
NRHM	19826	25459	24280	-5%	
NUHM	491	652	875	34%	
OTHERS	2137	4691	4975	6%	
AUTONOMOUS BODIES(AIIMS PGIMER etc.)	5467	6971	6900	-1%	13%
PMSSY	1953	3175	3825	20%	7%
National AIDS & STD Control programme	1749	2163	2100	-3%	4%
Rashtriya Swasthya Bima Yojana	466	471	2000	325%	4%
Family Welfare Schemes	575	788	770	-2%	1%
Others	6331	8924	8875	-1%	16%
Total	38995	53294	54600	2%	100%

Note: NHM:National Health Mission, NRHM: National Rural Health Mission, NUHM: national urban Health Mission, PMSSY: Pradan Mantri Swasthya Suraksha Yojana.

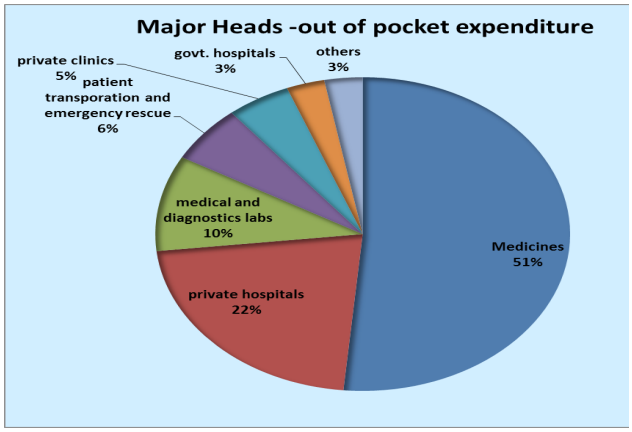
Source: Demand No.42 &43, Ministry of Health and Family Welfare, Union Budget 2018-2019.

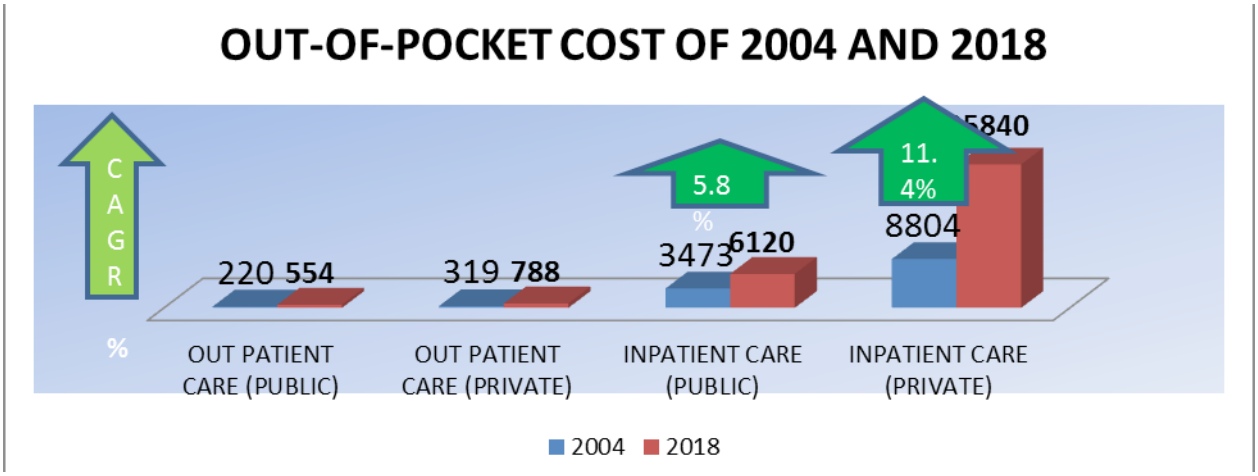
Government of India has much focused on Rashtriya Swasthya Bima Yojana (RSBY) by allocating Rs 2000 crore (325% more than the last year budget), and for National Urban Health Mission Rs 875 crore (34% more than the last year budget) and Pradan Mantri Swasthya Suraksha Yojana Rs 3,825 crore (20% more than the last year budget). IN REALITY, budget allocations have been reduced to NHM (2%), NRHM (5%), National AIDS and STD control program (3%) , family welfare scheme (2%)

and others (1%), THOUGH the Government of India focused in providing quality health care to the Below Poverty Line (BPL) families.

OUT OF POCKET EXPENDITURE

If cumulatively 30% of the total health expenditure is incurred by the public sector, the rest of the health expenditure, i.e. approximately 70% is borne by consumers. Household health expenditures include out of pocket expenditures (95%) and insurance (5%). Out of pocket expenditures– the payments made directly by individuals at the point of services which are not covered under any financial protection scheme– dominate. The highest percentage of out of pocket health expenditure (52%) is made towards medicines. This is followed by private hospitals (22%), medical and diagnostic labs (10%), and patient transportation, and emergency rescue (6%). Out of pocket expenditure is typically financed by household revenues (71%)

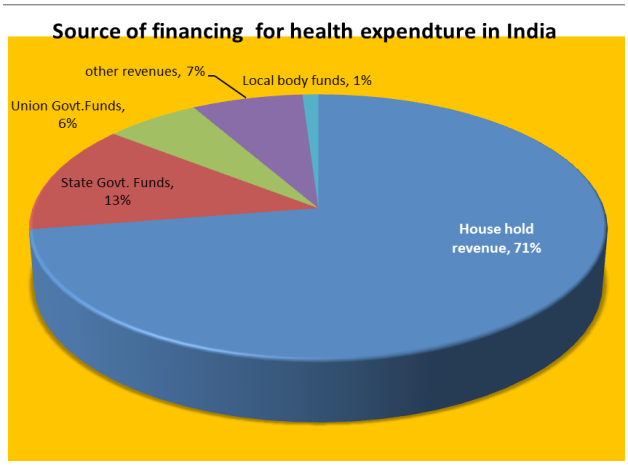




It is also noticed that the out of pocket cost is increasing year after year and THE Compound Annual Growth Rate (CAGR) has been calculated for a period of FOURTEEN years from 2004 to 2018, it shows, there is a 11.4% of Compound Annual Growth Rate is noticed in case of inpatient care in private hospitals, 5.8% Compound Annual Growth Rate is noticed in the public health care centers. The Governments (Central/State) job is to reduced the burden on diseased peoples but unfortunately it has been burdening day by day to the poor patients in India.

SOURCES OF FINANCING

It is noticed that patients are spending huge money towards their health from their own pocket and the following chart shows the sources for huge out- of- pocket cost along with other expenditures.

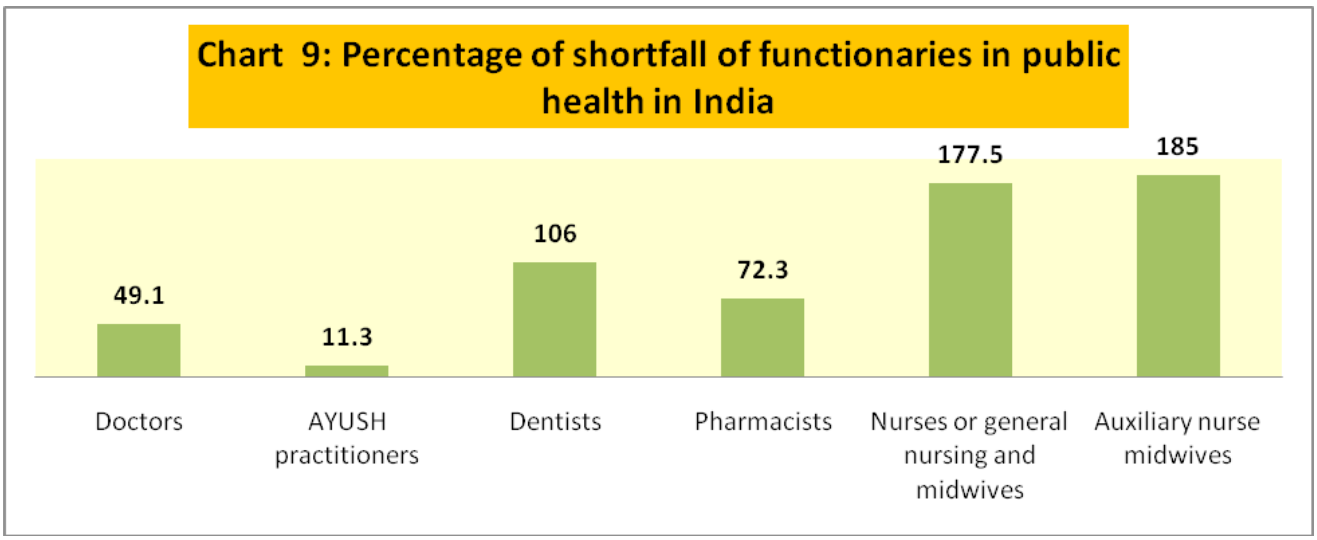


Out of the total income of the patients, 71% is diverted towards his/her health and 13% of funds contributed by the State Governments, Central Government contribution is 6% and local bodies and others contributing remaining expenditure. It resulted to 86% of rural population and 82% of urban population is not covered under any health scheme. Due to high out of pocket healthcare expenditure, about 7% population is pushed below the poverty threshold every year.

Out of the total number of persons covered under health insurance in India, three-fourths are covered under government-sponsored health schemes and the balance one-fourth are covered by private insurers. With respect to the government-sponsored health insurance, more claims have been made in comparison to the premiums collected, i.e., the returns to the government have been negative.

Unequally distributed skilled human resources

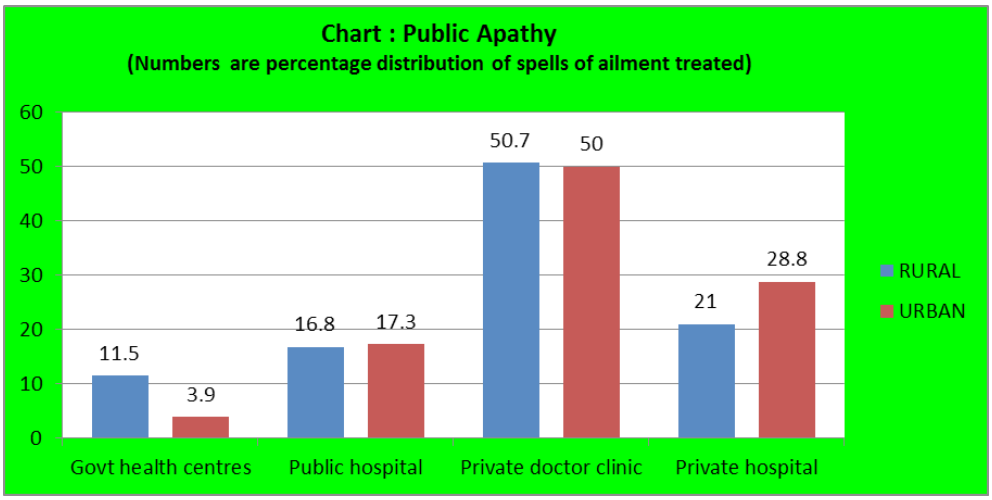
There aren't enough skilled healthcare professionals in India despite recent increases in MBBS programmes and nursing courses. Lancet says this shortage is compounded by inequitable distribution of these resources. In community health centres in rural areas of many states, ranging from Gujarat to West Bengal, the shortfall of specialists exceeds 80%. "India does not have an overarching national policy for human resources for health. The dominance of medical lobbies such as the Medical Council of India has hindered adequate task sharing and, consequently, development of nurses and other health cadres, even in a state like Kerala that has historically encouraged nurse education and has been providing trained nurses to other parts of India and other countries," said the Lancet study.



Source: 12th Five year Plan; (per 1,00,000 population)

Chart shows the shortfall of health professionals. The percentage of shortfall refers to the extra percent of personnel required as a proportion of current availability. So, in case of doctors, current availability is 57 per 1,00,000 people and 49.1% more are required to meet the target of 85. Ayurveda, yoga and naturopathy, Unani, Sidda, Homoeopathy practitioners are also required more than 50 % in each and every segment, it is more so in case of nurses 177.5 % is required.

Large unregulated private sector



SOURCE: NSSO REPORTS AND National Health accounts estimated for India 2017.

Note: Numbers are percentages distribution of spells of aliment treated.

It shows that urban people are less utilising the Govt health care centres, however, rural people are less utilising the private hospitals. In case of public hospital and private docotor clinincs on an average equal number of rural and urban people are visiting the private clinics.

Despite recording several gains in health in recent years, India continues to lag several health indicators such as mortality rates and malnutrition. The country carries a disproportionate burden of the world's sick. Home to 17.5% of earth's population, India accounts for 20% of the global burden of disease, 27% of all neonatal deaths and 21% of all child deaths (younger than five years). In a paper released over the weekend in health journal Lancet, a team of researchers led by Vikram Patel, a professor at London School of Hygiene and Tropical Medicine, identified seven structural problems in India's healthcare system.

CONCLUSION

India's public health sector is facing an immense challenge and pushing 4.6% of population into poverty line. It concludes that out of total medical treatment cost more than 70% has to be borne by the patients. out of it 52% is made towards medicines, 10% is made for diagnosis and remaining 8 % is made for transportation and others. It is astonishing to note that the Compound Annual Growth Rate of treatment cost is 11.4 %. The source of finance is household revenue. The percentage of shortfall of public health functionaries is doctors 49%, pharmacists 72.3%, nursing and allied staff 115%, other services are 118%. It is also noticed where rural public wants to access of public health services Primary Health Centers, which are not available wherein urban people wants to use corporate health services, a greater number of PHC and super specialty hospitals are available. India continues to lag behind several public health indicators despite the fact that launching Ayushman Bharath scheme in 2018. They are i) A week primary health care sector; ii) unequally distributed skilled health human resources; iii) Large unregulated private sector; iv) Low public spending on health sector by the Governments; v) fragmented health information system; vi) irrational use and spiraling cost of drugs and vii) weak governance and accountability. It is suggested that government should establish more number of PHC in rural areas and sufficient public health functionaries must be made available and 4% GDP amount must be spend on Public Health in India to minimize out-of -pocket expenditure of the poor people in India

EMERGING TRENDS IN DIGITAL PAYMENTS IN INDIA – A STUDY

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ABSTRACT

The move towards cashless payment is being fuelled by the worldwide proliferation of technologies such as smartphones and internet access. This is changing the behaviour of consumers and businesses alike, helping to accelerate the shift away from cash and cheques toward cashless payments. Understanding the nature and pace of this global shift is important for most businesses. As on 31st march, 2019, the currency in circulation was Rs. 21,367 billion, the same was Rs. 18,293 billion as on 31st march, 2018. This indicates about 17% increase in currency.

A confluence of factors is helping to drive cashless payment services growth. First is expanding internet access, which continues to grow rapidly due to adoption of mobile devices, especially in developing markets. The spread of internet access propels the growth of e-commerce, which in turn drives cashless payment services because consumers need paperless payment methods to participate in online transactions with retailers and remote transactions with other individuals. The present paper is a modest attempt to examine the trends in digital payments and also studying the digital payments pre and post demonetization.

Key words: NEFT, ECS, Mobile banking, RTGS, Demonetization.

A weak payment system may severely impede the stability and developmental capacity of an economy; its failures will result in ineffective use of financial resources, unfair risk-sharing among agents, actual losses for stakeholders, and finally loss of confidence in the financial system and in the very use of money. Whereas an efficient payment system reduces the cost of exchanging goods and services, and is essential to the smooth functioning of all markets in general and especially interbank, money and capital markets.

As part of strengthening the payments mechanism, on the evening of November 8, 2016, India's Prime Minister Narendra Modi announced that the country's highest-denominations Rs. 500 and 1000 which accounts about 86 percent of the currency in circulation would cease to be legal tender at midnight. He said the move was aimed at combating problems such as fake currency and "black money" earned through illicit activities, and that people would later be able to replace the old notes with soon-to-be-issued replacement banknotes.

The move towards cashless payment is being fuelled by the worldwide proliferation of technologies such as smartphones and internet access. This is changing the behaviour of consumers and businesses alike, helping to accelerate the shift away from cash and cheques toward cashless payments. Understanding the nature and pace of this global shift is important for most businesses. As on 31st march, 2019, the

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A confluence of factors is helping to drive cashless payment services growth. First is expanding internet access, which continues to grow rapidly due to adoption of mobile devices, especially in developing markets. The spread of internet access propels the growth of e-commerce, which in turn drives cashless payment services because consumers need paperless payment methods to participate in online transactions with retailers and remote transactions with other individuals.2 Further, the instant-payment technologies that have emerged to support online transactions, including non-bank peer-to-peer mobile payment apps, digital wallets and virtual currencies, spur further increases in cashless payments by providing payment methods that are widely available even in countries where many consumers lack bank accounts.

Literature Review

Khiaonarong (2000) in the research paper titled "Electronic payment systems development in Thailand" tried to study the creation of modern Electronic Payment System in Thailand. It was also concluded that this creation has helped to facilitate payment transactions as well as business expansion in variety of business fields such as hospitality, transport banking and other services. Pohjola (2002) in a study conducted on Finnish market sector revealed that the use of E-payments and E-filing led to significant rise in the output of the market sector in Finland. Murphy(2004) examined the progress of payment systems in United States concluded that Network providers are increasingly consolidating among themselves leading to concentration risk and opening up issues in the areas of pricing, quality of service and product innovation. Monoharan (2007) studued the Electronic Payment System in India and its impact on Indian banking sector. Venkatesh V and Morris M (2000) in their paper "Age differences in technology adoption decisions: implications for a changing work force" used Technology Acceptance Model to investigate gender differences in the overlooked context of individual adoption and sustained usage of technology in the workplace. From the study it was found that, women were more strongly influenced by perceptions of ease of use and subjective norm. Singhal & Padhmanabhan (2008) in their research paper entitled "A study on Consumer Perception towards Internet Banking: Identifying the Major Contributing Factors" have made an attempt to trace out the factors responsible for internet banking based on consumers' perception on various internet applications.

Teoh et.al (2013) explored the factors influencing Malaysian customers' perception towards electronic payment. The results showed that e-payment is broadly used which reflects the growth of such services in Malaysia. The findings also showed that the three factors i.e. benefits, self-efficacy, and ease of use were significantly associated with consumer's perception toward electronic payment. Moreover, security and trust were not significantly associated with consumers' perception toward electronic payment.

Jalil et.al (2014) studied that customer trust was the main important variable that positively and significantly affected all the other variables. They examined the perception of Malaysian consumers towards online banking. The finding showed that security, trust and website itself had a significant relationship with the consumer's perception towards online banking in a Malaysia. The findings related to customer trust were somewhat inconsistent with prior studies that found a positive impact on customer intentions to use online banking (Chong et al., 2010; Eriksson et al., 2005). However, some studies found no significant relationship between a website and trust but security did have a significant relationship with trust in terms of the use of online banking.

Vij et.al (2014) found that Electronic banking was considered a substantial impact on banks' performance. The major reason behind this success was that it can provide various benefits, both to the customers and banks of financial services. It can provide a large number of choices in terms of the channels they can use to perform their business and convenience in terms of where and when they can

use E-banking. Many people are adapting to this technique and the banking industry is bound to develop. Mathivanan & Kavitha (2015) found that e-banking has become a necessary weapon for the survival of users. It was found that the click of the mouse offers various types of banking services to the consumers at a lower cost and empowers them with unique freedom in choosing for their financial service needs. They found that banks have to upgrade and thinking of new innovative customized packages and services to remain competitive.

Rajput (2015) conducted this study with an objective of investigating customer's perception regarding e-banking. This study found that education level, gender and income plays significant role in the usage of online banking. It was also found that the research was corroborated the conceptual framework stating that if skills can be upgraded there will be greater determination to use online banking by consumers. Abid (2016) made an attempt to study the e- payment system that has typically changed the traditional payment system in India.

Roy S and Sinha I (2017) in their research paper "Factors affecting Customers' adoption of Electronic Payment : an Empirical Analysis" found that perceived usefulness, perceived ease of use, perceived risk and perceived security are important indicators of customers' intension to use Electronic Payment and Clearing System. Knowledge of these factors that influence adoption enable customers to develop E-Payment services that meet their satisfaction.

Sumathy & KP (2017) in their study found that it is necessary to move away from the cash-based system to cashless (electronic) payment system. The study focused on the advantages like it reduces the cost of currency management, traceability of each and every transaction, catch holding the tax evaders or fraudsters etc., improves financial inclusion and gradually integrate the parallel economy with the main stream. Furthermore, the usage of mobile wallets crosses the frontiers of big cities and gains popularity in remote villages also.

Manikandan & Jayakodi (2017) in their work "An empirical study on consumer adoption of Mobile Wallet with special reference to Chennai City" have found due the usage of mobile wallets has been increased due to demonetization in India. Apart from these factors the convenience and ease of use gained popularity to the usage of mobile wallet and it also concluded that there will be a tremendous growth in adoption of mobile wallets due to increase in the users of smart phone and expansion of internet in the near future. Singh & Rana made an attempt to understand customer perception regarding digital payments. In their study it was found that education has much effect on the adoption of digital payment. The study also concluded that there was no significant difference is perceived by the respondents on the basis of gender, age, profession and annual income. It was only education level of the respondents where there is significant difference is perceived by the respondents. It indicates that adoption of digital payment is influenced by the education level of the users.

Khan et.al (2017) observed that a better integration of online payment systems with the present financial and telecommunication infrastructure was needed for a prosperity and expansion in the future. They have also found that future work may be directed towards the legalization of various factors responsible for contributing in the effective adoption of electronic payment systems all over the globe. Pattan P and Agrawal M (2018) in their research work entitled "A Study of Consumer's Perception Towards Frequently Use of Types of E-Payment System In Indore Division" have made an attempt to find score of different types of electronic payment system using Weighted Score Method and in which it was found that Debit cards are the instruments with highest score with first place. Net banking is the second, E cash/E Wallets are in the third place and finally credit cards in the fourth place.

Anuradha Reddy (2019) in her research project sponsored by Indian Council of Social Science Research – Southern Regional Centre, has studied the status of cashless payments in Mahabubnagar District of Telangana State. In the study, it was found that there is no significant difference between the rural and urban people with regard to awareness

about cashless/digital payments. As part of the study, 200 respondents 100 from urban and 100 from rural were selected to gauge the status. Majority of the respondents expressed that they are aware of Debit cards are (85% of the respondents), whereas only few respondents are aware of T-Wallet (9% of the respondents). In the study another surprising finding is that though people are aware of cashless payment mechanism; do not prefer to pay in cashless mode. (It means awareness is there but not implemented/ adopted). As per the study it is observed that payments by using smart phones are expected to increase in the near future. The author has made an attempt to study the factors which influence the adoption of cashless mode, it was found that Income level and Educational qualifications are influencing the mode of payments.

Though good number of researches conducted on payments systems, no attempt was found to be made on the digital mode of transactions (i.e. NEFT, RTGS, Mobile banking and ECS). In this paper a modest attempt has been made to analyze the digital payments in India during the years 2014 to 2019. (Three years prior to demonetization and Three years post demonetization).

Objectives

The present research work is aimed at studying the developments in electronic payments such as National Electronic Funds Transfer (NEFT), Real Time Gross Settlement (RTGS), Mobile Banking Transactions and Electronic Clearing Services (ECS) in India.

Research Methodology

Present study is made based on the secondary data which is collected from the reports of Reserve Bank of India (RBI), National Payments Corporation of India (NPCI). Payment related transactions between the years 2014 and 2019.

Hypotheses:

H_1: H_0: $\mu_1 = \mu_2$, Hα: $\mu_1 \neq \mu_2$ paired t-test for NEFT transactions

H_2: H_0: $\mu_1 = \mu_2$, H_α: $\mu_1 \neq \mu_2$ paired t-test for RTGS transactions

H_3: H_0: $\mu_1 = \mu_2$, H_α: $\mu_1 \neq \mu_2$ paired t-test for Mobile Banking transactions

H_4: H_0: $\mu_1 = \mu_2$, H_α: $\mu_1 \neq \mu_2$ paired t-test for ECS transactions

National Electronic Funds Transfer (NEFT)

National Electronic Funds Transfer (NEFT) is an electronic funds transfer system maintained by the apex bank (i.e. Reserve Bank of India). NEFT transactions were started in India in November 2005; the required setup was established and maintained by Institute for Development and Research in Banking Technology (IDRBT). NEFT enables bank customers in India to transfer funds between any two NEFT-enabled bank accounts on a one-to-one basis. It is done via electronic messages. In the following sections, the discussion about NEFT transactions pre and post demonetization is presented.

Table – 1: NEFT Transactions

Year (12 months)	NEFT Transactions	
	Volume in Millions	Value in Rs. Billions
Year 2014	873.02	55339.51
Year 2015	1161.91	75985.8
Year 2016	1480.77	106103.8
Year 2017	1897.65	157997.3
Year 2018	2218.06	216347.9
Year 2019	2621.68	412966.3

Source: Compiled from Reserve Bank of India database

Above table (table -2) indicates the volume and value of NEFT transactions for the years from 2014 to 2019 (total of 12 months).

During the year 2014 (January to December) the total volume of NEFT transactions were 873.02 million which accounts for Rs. 55,339.51 billion value. There was an increase of 288.89 million

transactions in the year 2015; the growth rate was about 33.09%, whereas the growth in terms of value was Rs. 20646.29 billion which counts for 37.30%. Increase in NEFT transactions both in terms of volume and value are continuously seen from January, 2014 till December, 2019. In fact, the increase in NEFT transactions is an indicator of improvement in the transparency, increase in the Government Exchequer, faster clearance of payments.

Hypothesis -1:

With an objective of studying the test of significant difference before demonetization and after demonetization, paired t-test is applied and the findings are follows:

Data has been taken from Reserve Bank of India reports from January, 2014 to September, 2019 (i.e. 34 months before demonetization and 34 months after demonetization excluding the month of November 2016).

To test the significance of difference before and after demonetization, paired t-test is applied. The basic inputs are as follows: Sample size: 34, Level of Significance: 0.05

Null Hypothesis: There is no significant difference in the mean transactions of NEFT before and after demonetization in terms of volume and value. H_0: $\mu_1 = \mu_2$

Alternative Hypothesis: There is significant difference in the mean transactions of NEFT before and after demonetization in terms of volume and value. H_α: $\mu_1 \neq \mu_2$

Table – 1 (a): Paired Samples Statistics (NEFT transactions)

		Mean	N	Std. Deviation	Std. Error Mean
Volume	Before	94.89	34	21.11	3.62
	After	182.59	34	25.86	4.43
Value	Before	6384.81	34	1813.65	311.03
	After	21866.83	34	31607.25	5420.59

Source: Compiled using SPSS

Table – 1 (b): Paired Samples Test (NEFT transactions volume)

	Paired Differences					t	D. F	Sig. (2-tailed)
	Mean	S. D	S. E Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Before – After (Volume)	-87.70	16.75	2.87	-93.54	-81.85	-30.51	33	.000
Before – After (Value)	-15482.02	31362.08	5378.55	-26424.77	-4539.27	-2.87	33	.007

Source: Compiled using SPSS

From the above table (table – 1(b) it is clear that the null hypothesis is rejected, which means there is significant difference between before and after demonetization with respect to NEFT transactions (both in terms of volume and value).

Real Time Gross Settlement (RTGS)

Reserve Bank of India introduced the RTGS System in March 2004 with four bank branches on a pilot basis, only for inter-bank transactions. Subsequently, customer-based transactions were also taken up. The acronym 'RTGS' stands for Real Time Gross Settlement, which can be explained as a system where there is continuous and real-time settlement of fund-transfers, individually on a transaction by transaction basis (without netting). 'Real Time' means the processing of instructions at the time they are received; 'Gross Settlement' means that the settlement of funds transfer instructions occurs individually.

Table-2 reveals the trends in RTGS transactions in terms of volume and value. The transactions volume was 89.83 million in the year 2014 which counts for Rs. 7,43,993.63 billion. During the year 2019 the volume was 148.19 million and the value was Rs. 12,84,956.90 billion.

Table – 2: RTGS Transactions Year wise

Year (12 months)	RTGS	
	Volume in Millions	Value in Billion
Year 2014	89.83	743993.63
Year 2015	97.18	794160.6
Year 2016	103.11	871025.4
Year 2017	120.88	1116611.16
Year 2018	134.23	1296189.97
Year 2019	148.19	1284956.9

Source: Compiled from Reserve Bank of India database

RTGS transactions are executed on real time basis. Whereas, NEFT transactions are executed on batch basis. RTGS is suitable for the customers who wish to transfer bulk amounts. In India RTGS services are available from 8. 00 a.m. to 8.00 p.m on Monday – Saturday (Except 2nd and 4th Saturday).

Hypothesis -2:

To test the significance of difference before and after demonetization, paired t-test is applied. The basic inputs are as follows: Sample size: 34, Level of Significance: 0.05

Null Hypothesis: There is no significant difference in the mean transactions of RTGS before and after demonetization in terms of volume and value. H_0: $\mu_1 = \mu_2$

Table – 2 (b): Paired Samples Test (RTGS transactions)

	Paired Differences					t	D. F	Sig. (2-tailed)
	Mean	S. D	S. E Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Before – After (Volume)	-2.90	1.09	.18824	-3.29	-2.52	-15.44	33	.000
Before – After (Value)	-32227.88	29552.73	5068.25	-42539.32	-21916.45	-6.35	33	.000

Alternative Hypothesis: There is significant difference in the mean transactions of RTGS before and after

demonetization in terms of volume and value. H_α: $\mu_1 \neq \mu_2$

Source: Compiled using SPSS

From the above table (table – 2(b) it is clear that the null hypothesis is rejected, which means there is significant difference between before and after demonetization with respect to RTGS transactions (both in terms of volume and value).

Mobile Banking

In simple terms, mobile Banking refers to provision and availment of banking- and financial services by using mobile telecommunication devices. Mobile-banking services include the following: Account information, Mini statements and account history, Alerts on account activities, Monitoring term deposits, Access to loan and/or card statements, Insurance policy management, Funds transfer , Fund transfers between customer-linked accounts, Fund transfers to other accounts, Bill payments, Credit card payments Investment, Portfolio management, Real-time stock quotes, Personalized alerts and notifications on security prices Support services, Cheque book and card requests , Complaint filing and tracking, ATM location.

Table – 3: Mobile Banking Transactions Year wise

Period	Mobile banking	
	Volume in Million	Value in Billion
Year 2014	144.48	666.21
Year 2015	308.46	2862.57
Year 2016	798.58	10288.9
Year 2017	1509.3	15466.67
Year 2018	4555.07	22840.44
Year 2019	11997.7	52549.51

Source: Compiled from Reserve Bank of India database

From the table – 3, it is clear that there is a tremendous growth in mobile banking transactions both in terms of volume and value. During the year 2014, transactions volume was 144.48 million and the value was Rs. 666.21 billion. The growth rate was very significant year by year. During the year 2019, the volume of transactions through mobile banking was 11,997.7 million and the value was Rs. 52,549.51 billion. The reasons for extraordinary growth in mobile banking transactions might be due to increase in smart phone density and usage. Ease of operations, convenience and cost effectiveness are also the contributing factors for the growth.

Hypothesis -3:

To test the significance of difference before and after demonetization, paired t-test is applied. The basic inputs are as follows: Sample size: 34, Level of Significance: 0.05

Null Hypothesis: There is no significant difference in the mean transactions of Mobile banking before and after demonetization in terms of volume and value. H_0: $\mu_1 = \mu_2$

Alternative Hypothesis: There is significant difference in the mean transactions of Mobile banking before and after demonetization in terms of volume and value. H_α: $\mu_1 \neq \mu_2$

Table – 3 (a): Paired Samples Statistics (Mobile Banking transactions)

		Mean	N	S. D	S. E Mean
Volume	Before	30.98	34	21.53	3.69
	After	415.46	34	325.23	55.77
Value	Before	322.17	34	320.00	54.87
	After	2275.96	34	1329.32	227.97

Source: Compiled using SPSS

Table – 3 (b): Paired Samples Test (Mobile Banking transactions volume and Value)

	Paired Differences					t	D. F	Sig. (2-tailed)
	Mean	S. D	S. E Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Before – After (Volume)	-384.47	304.01	52.13	-490.55	-278.40	-7.37	33	.000
Before – After (Value)	-1953.79	1056.00	181.10	-2322.25	-1585.33	-10.78	33	.000

Source: Compiled using SPSS

From the above table (table – 3(b) it is clear that the null hypothesis is rejected, which means there is significant difference between before and after demonetization with respect to Mobile banking transactions (both in terms of volume and value).

Electronic Clearing Services

In simple terms, it is a mode of electronic funds transfer from one bank account to another bank account using the services of a clearing house. This is ideal for bulk transfers from one account to many accounts or vice-versa. Also this can be used both for making payments like distribution of dividend, interest, salary, pension, etc. by institutions or for collection of amounts for purposes such as payments to utility companies like electricity, telephone or charges such as government taxes such as house tax, water tax, etc. or for loan installments of non-banking financial institutions/banks or regular investments of persons.

Table – 4: ECS Transactions Year wise

Period	ECS	
	Volume in Million	Value in Billion
Year 2014	339.4	3750.29
Year 2015	306.14	3152.99
Year 2016	57.28	629.04
Year 2017	9.09	131.12
Year 2018	6.75	140.43
Year 2019	3.025	85.68

Source: Compiled from Reserve Bank of India database

Table – 4 presents the details pertaining to electronic clearing services in terms of volume and value. It is observed that there is a decline trend in ECS transactions in volume and value. During the year 2014, 339.4 million transactions worth of Rs. 3750.29 were held. Whereas, only 3.025 million transactions worth of Rs. 85.68 were held in the year 2019.

Hypothesis -4:

To test the significance of difference before and after demonetization, paired t-test is applied. The basic inputs are as follows: Sample size: 34, Level of Significance: 0.05

Null Hypothesis: There is no significant difference in the mean transactions of ECS before and after demonetization in terms of volume and value. H_0: $\mu_1 = \mu_2$

Alternative Hypothesis: There is significant difference in the mean transactions of ECS before and after demonetization in terms of volume and value. H_α: $\mu_1 \neq \mu_2$

Table – 4 (a): Paired Samples Statistics (ECS transactions)

		Mean	N	S. D	S. E Mean
Volume	Before	20.61	34	10.60	1.81
	After	.58	34	.22	.03
Value	Before	220.88	34	115.93	19.88
	After	10.82	34	2.44	.41

Table – 4 (b): Paired Samples Test (ECS transactions)

	Paired Differences					t	D. F	Sig. (2-tailed)
	Mean	S. D	S. E Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Before – After (Volume)	20.03	10.44	1.79	16.38	23.67	11.17	33	.000
Before – After (Value)	210.06	115.08	19.73	169.90	250.21	10.64	33	.000

Source: Compiled using SPSS

From the above table (table – 4(b) it is clear that the null hypothesis is rejected, which means there is significant difference between before and after demonetization with respect to Mobile banking transactions (both in terms of volume and value).

CONCLUSION:

Globally, countries like Canada, Sweden, UK, France and United States of America are transforming their economies into cashless economies. By encouraging digital transactions, the costs of currency management such as printing, storage, distribution, damages in transportation etc. can be avoided. In addition, currency notes will have limited life time, which requires replacement with new currency notes. To avoid the cost of currency management, Government of India is taking variety of measures in this regard to discourage cash transactions. The outcome is impressive, but the journey is too long. In the long run, the roll-out of the new programs could move India beyond not just cash, but also older payment technologies like debit and credit cards. With the introduction of simple and interoperable tools like BHIM and Barat QR Code, India may have its best opportunity to develop a broad national network for digital payments that are cheap, convenient, and accessible to everyone, rich and poor, urban and rural. The light footprint of QR codes combined with the nudge of a government-sponsored interoperable app could even provide a model for other countries looking to stimulate digital payments.

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A STUDY ON IMPACT OF COVID-19 ON CUSTOMER SATISFACTION TOWARDS E-BANKING SERVICES

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ABSTRACT

Banking sector has come up with a lot of new initiatives which are oriented to provide a better customer service and facilities with the help of information technology. ATMs, Mobile banking, Internet banking, Credit/debit cards, Payment apps have emerged as delivery channels for traditional banking products.

Covid-19 pandemic has devastated the world economy and financial markets. Covid-19 the pandemic affected many sectors including Unorganized sector, Education, Finance E-commerce, Aviation, Tourism and Banking. The present study aims to study the impact of covid-19 on customer satisfaction towards e -banking services like ATM, internet banking, mobile banking and problems faced by the customers in accessing these services during Covid-19

Key words: Internet banking, Mobile banking, ATMs, Covid-19, Customer satisfaction.

Introduction

The e-banking is changing the banking industry. Several innovative IT based service such as Automated Teller Machine (ATM), Internet banking, Smart cards, Credit Cards, Mobile banking, Phone banking, Payment apps provided number of convenient services. As electronic banking is becoming more prevalent, so level of customer satisfaction is also changing the scenario of technological environment.

To carry out basic essential transactions, the Indian Banks' Association (IBA) has asked banks to open only selective branches in areas that have been placed under lockdown across the country in view of the covid-19. In light of the spreading disease - COVID-19 - and government orders, banks across the country are working at reduced capacities, providing only essential services. Essential banking services are available to the public - deposits, withdrawals, clearing of cheques, remittance facilities and government transactions. Unless it is an emergency; banks are recommending customers to use mobile and internet banking services and only go out if cash is needed. .The central bank advisories to bankers and customers emphasize the usage of digital-based payments to avoid physical contact through the medium of currency/ coins.

E-banking is now a necessity due to Covid-19 pandemic background. Covid-19 is expected to enhance usage of e-banking services. Nowadays due to the fear of the Covid-19, instead of exchange of cash currency i.e. rupees and coins, people prefer cashless transaction or online e-transactions. As these online e-transactions can be done from a distance, contact is not needed and risk of contacting covid-19 may be minimized. People are using e-banking services for two reasons one for maintaining social distancing and, second to make transactions during lock down and quarantine period.

Review of literature

Management of COVID-19 pandemic primarily involves the adoption of social distancing norms and healthy behaviors in the prevailing situation of absence of preventive vaccines or medicine. Consumers may switch to contactless payments in view of the need for self- protection while continuing to transact for necessaries of life. In view of the protection of consumers, replacement of paper currency, debit and credit cards and touch screen terminals with contactless technology is recommended by WHO (2020) in the event of the pandemic.

Daniel 1999 defines electronic banking as the delivery of banks information and services by banks to customers via different delivery platforms that can be used with different terminal devices such as a personal computer and a mobile phone with browser or desktop software, telephone or digital television.

Robinson 2000 believes that the supply of internet banking services enables banks to establish and extend their relationship with the customers.

Karjaluto etal.2002 argued that banking is no longer bound to time and geography. Customers over the world have relatively easy access to their accounts, 24 hours per day and seven days a week.

Yibin (2003) analyzed the status, trends, challenges and implications of e-banking and concluded that e-banking could not only improve the access to finance but also with better and more competitive rates.

Recent studies found that consumer behavior is changing partly because of more spare time. The way of use of financial services is characterized by individuality, mobility, independence of place and time, and flexibility. (seitz and stickel,2004)

Khan .et.al 2009 evaluated the service quality of internet banking services in India from customers perspectives and concluded that customers are satisfied with service quality of four dimensions such as reliability, accessibility, privacy/ security, responsiveness and fulfillment, but are least satisfied with the user friendliness dimension.

Objectives of the study

1. To study the use of e-banking services during Covid-19.
2. To identify challenges faced by customers due to Covid-19.
3. To examine the problems faced by customers in accessing e- banking services.
4. To analyze the reasons for adopting e-banking services and benefits derived from using these services.
5. To understand customer satisfaction towards e-banking services during Covid-19.

Research methodology

The study is based on primary data which was collected with the help of questionnaires.. During Covid-19, primary data is collected with the help of Google Forms. A questionnaire was prepared using Google Form. It was sent to number of people from twin cities of Hyderabad and Secunderabad, through Facebook, WhatsApp, and E- mail. Received 621 filled questionnaires and verified the completeness of questionnaire only found 400 questionnaires were completely filled. Thus, 400 completely filled questionnaires are considered for the analysis. The responses were recorded in the excel sheet from responded Google forms and then analyzed.

Limitations of the study

The study is confined to the twin cities of Hyderabad and Secunderabad.

Analysis and Findings

The impact of Covid-19 on customer satisfaction towards e-banking services, reasons for adopting e-banking services , benefits availed from using these services and the problems faced by customers in accessing e- banking services is analyzed regarding major e- banking products i.e, ATMs, Internet banking and Mobile banking.

Table 1 – Type of Account

Types of account	Frequency	Percent
Saving	305	76.2
Current	30	7.5
Recurring deposit	45	11.5
Fixed deposit a/c	20	5.8
TOTAL	400	100

Source – Primary Data

Table 1 presents type of account held by the surveyed customer in the banks. The results in table 1 indicates that large number of respondents 76.2% are having saving account in the banks, 16.3% are having current account and 7.5% are having salary account.

Table 2 – Relationship with Bank

Period	Frequency	Percent
Less than 1 year	58	14.5
1 Year -3 Years	104	26.0
3 Years-5 Years	63	15.8
5 Years – 7 Years	54	13.5
More than 7 Years	121	30.2
Total	400	100

Source- Primary Data

In order to find out the relationship between e-banking and the level of customer satisfaction, it was important to explore for how long respondents held their accounts in the banks. Table 2 presents the banking relationship of the surveyed customer. The results in table 2 indicates that large number of respondents (30.2%) have maintained a banking relationship with the banks for more than seven years and 26 per cent of them have maintained such relationship between 1 to 3 years. However it could be observed that there is relatively high degree of stability of those customers who had maintained long term relationship with the bank they deal with. In order to retain a long term relationship with its customers, the banks should offer innovative banking products, credit cards, internet banking, ATMs, Mobile banking, PC banking etc.

Table 3– Feeling Unsecured visiting Bank during Covid-19

Use of e-banking ssservices	Frequency	Percent
Yes	360	90.0
No	40	10.0
Total	400	100

Source – Primary Data

Table 3 presents concerns of respondents to visit the bank during pandemic. The results in table 3 indicates that large number of respondents 90 % are feeling unsecured for visiting the bank for risk of contacting covid-19. Due to risk of covid-19 customers are moving towards using e-banking services in place of traditional banking services.

Table 4 – Period of use of E-banking Services

Period of use	ATM	Internet Banking	Mobile Banking
Less than 6 months	25(6.0%)	42(12.0%)	80(38.0%)
6 months to 1 Year	05(1.0%)	32(9.0%)	14(7.0%)
1 Year to 2 Years	12(3.0%)	68(19.0%)	30(14.0%)
2 Years to 3 Years	48(12.0%)	60(17.0%)	28(13.0%)
More than 3 Years	310(78.0%)	148(43.0%)	58(28.0%)
Total	400(100.0%)	350(100.0%)	210(100.0%)

Source – Primary Data

The present scenario of ATMs, Internet Banking, Mobile Banking is measured in terms of the length of the period the respondents are using a particular service. For this purpose, time is divided into five sub-heads i.e. less than 6 months, 6 months to 1 year, 1 to 2 years, 2 to 3 years and more than 3 years. Table 4 shows that ATM is the oldest service in use. Out of total respondents, maximum 78 per cent respondents are using it for more than 3 years. Internet and Mobile banking

are at second and third position with 43 per cent and 28 per cent users respectively.

Table 5 -Use of E-banking services during Covid-19

Use of e-banking ssservices	Frequency	Percent
Yes	340	85.0
No	60	15.0
Total	400	100

Source – Primary Data

Table 5 presents use of e—banking services by the surveyed customers during Covid-19. The result in table 5 indicates that large numbers of respondents 85.0% have used e-banking services during covid-19. 16.0% have not used any e-banking services during covid-19.

Table 6 -Reasons for using E-banking Services during Covid-19

Reasons	Frequency (Yes)	Percent	Frequency (No)	Percent
Time saving	260	65.0	140	35.0
Internet access	324	81.0	296	74.0
Convenience	300	75.0	100	25.0
Easy access	248	62.0	152	38.0
Quick information	192	48.0	208	52.0
Speedy process	280	70.0	120	30.0
24/7 banking	368	92.0	232	58.0
Risk	48	12.0	352	88.0

Source – Primary Data

Reasons for using e-banking services have also been examined to find out the clear picture about use of e-banking services. Table 6 shows that 24/7 banking (92.0%) followed by Internet access(81.0%) convenience (75.0%), speedy process (70.0%), time saving (65.0%), easy access (62.0%), quick information (48.0%) are the top reasons for using e- banking services.

Table 7 -Benefits availed by using E–banking Services during Covid-19

Benefits	Frequency(Yes)	Percent	Frequency(No)	Percent
Easy money withdrawal	352	88.0	48	12.0
Balance enquiry	260	65.0	128	32.0
Funds transfer	344	86.0	56	14.0
Bill payment	360	90.0	192	48.0
Online information	152	38.0	288	72.0
E –shopping	272	68.0	208	52.0

Source – Primary Data

Table 7 presents benefits availed from using e- banking services. It is understood from the table that bill payment (90.0%) easy money (88.0%) followed by funds transfer (86.0%), E-shopping (68.0%) are the most important benefits respondents availed from using e- banking services. Other benefits include

balance enquiry (65.0%) and online information (38.0%).So more benefits customers get from the services, the quality improves and also the probability of customer satisfaction increases.

Table 8 – Problem faced while using E-banking Services during Covid-19

Problem in using services	ATMs	Internet Banking	Mobile Banking
Very often	20(5.0%)	26(7.0%)	17(13.0%)
Sometimes	77(19.0%)	42(12.0%)	27(13.0%)
Rarely	125(31.0%)	98(28.0%)	116(55.0%)
Never	178(45.0%)	184(53.0%)	50(24.0%)
Total	400(100.0%)	350(100.0%)	210(100.0%)

Source – Primary Data

To find out the frequency with which customers are having problems against their banks with regard to these services, four parameters of complaints are considered which are very often, sometimes, rarely and never. Table 8 reveals that there are maximum 53 per cent respondents who never had problems with internet banking. The table also shows the position of ATMs in this context where this percentage is 45 per cent. In case of mobile banking, this per cent is lowest, i.e. 24 per cent.

Table 9- Operational Problems in using E-banking services during Covid-19

Operational problems	Frequency	Percent
Non working of ATMs	58	14.5
Server down	73	18.25
No response for calls	47	11.75
Untrained personnel	35	8.75
Delay in service	66	16.5
Risk of loss of currency	34	8.5
Security threat	55	13.75
Ignorance	32	8.0
Total	400	100

Source- Primary Data

Table 9 presents the nature of problem being faced by the respondents with the usage of e-banking. The major problem arising in this is regarding server down problem (18.25%) followed by delay in service (16.5%), non working of ATMs (14.5%) and security threat (13.75%).

Respondents says that the ATMs of the bank does not either work properly or having the shortage of cash in it, the reason may be some time technical difficulties. 11.75 per cent of the respondents perceive that they face the problems because of non attending of the phone calls by the bank employees. Further 8.75 percent perceive that they are facing some problems due to untrained personnel in the organization, 8.5 percent due to risk of loss of currency. Around 8 percent perceive that they encounter problems due to their ignorance regarding the use of new technological methods about the usage of e-banking products.

Table 10 – Reliability of E-banking Services

Reliability of services	ATMs	Internet Banking	Mobile Banking
Very reliable	232(58.0%)	204(55.0%)	90 (42.0%)
Reliable	140(35.0%)	98 (28.0%)	54 (26.0%)
Unreliable	30(7.0%)	60(17.0%)	66 (31.0%)
Total	400(100.0%)	350(100.0%)	210(100.0%)

Source – Primary Data

Reliability of e-banking services is another dimension, which constitute the present scenario of e-banking and is analyzed on the basis of three parameters i.e. very reliable, reliable and unreliable. Table 8 depicts that out of the services ATM is the very reliable with maximum number of respondents, i.e. 58 per cent followed by internet banking 55 percent. The table also shows that reliability is also highest in ATM and internet banking. Whereas the unreliability is maximum i.e. 31 per cent in case of Mobile banking followed by internet banking having 17 percent respondents.

Table 11– Complaint settlement of E-banking Services

Complaint settlement	ATMs	Internet Banking	Mobile Banking
Satisfactory	316(79.0%)	226(64%)	114(54.0%)
Indifferent	56(14.0%)	76(22.0%)	60(29.0%)
Unsatisfactory	28(7.0%)	48(14.0%)	36(17.0%)
Total	400(100.0%)	350(100.0%)	210(100.0%)

Source – Primary Data

The information has been collected from the respondents about the complaint settlement system for these services in banks to know whether this system is satisfactory or not. The table 11 shows that out of the total respondents having problems, maximum number of respondents, i.e. 79 per cent are satisfied with the complaint settlement system of ATMs, whereas this percentage is 64 and 54 per cent in case of Internet banking and Mobile banking.

Table 12 – Overall Satisfaction after using E-banking Services

Satisfaction level	ATMs	Internet Banking	Mobile Banking
Highly satisfied	140(35.0%)	206(59.0%)	116(55.0%)
Satisfied	260(65.0%)	78(22.0%)	56(27.0%)
Indifferent	0.0	36(10.0%)	27(13.0%)
Dissatisfied	30(9.0%)	22(6.0%)	11(5.0%)
Total	400(100.0%)	350(100.0%)	210(100.0%)

Source – Primary Data

Level of satisfaction after using a particular service has also been examined to find out the clearer picture regarding their status on the basis of four parameters i.e. highly satisfied, satisfied, indifferent, and dissatisfied. Table 12 presents that satisfaction level, which is highest in case of Internet banking as all the respondents are highly satisfied /satisfied, followed by and Mobile banking. The table also reveals that dissatisfied level is highest in case of ATMs. On the other hand, indifferent level is highest, i.e. 27 per cent in case of Mobile banking.

Conclusions & Suggestions

The study reveals that Covid—19 as undoubtedly affected banking sector and customers. Convenience, speedy process, time saving, easy access, quick information and 24/7 banking are the top reasons for using e- banking services. The most important benefits respondents availed from using e- banking services are easy money withdrawal, funds transfer, balance enquiry and bill payment. Maximum numbers of respondents are satisfied with the complaint settlement system

To sum up, there is no doubt, the opportunities in e-banking are immense but the only need is to explore them. The nature of banking services may still be the same but the way they are being offered has been changed dramatically

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PROBLEMS AND PROSPECTS OF E-LEARNING -A STUDY WITH REFERENCE TO HIGHER EDUCATION IN TELANGANA STATE

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ABSTRACT

Learning is the process of acquiring new knowledge, skills, values, attitudes, behaviours and abilities to change the personality. E-learning is the process of using technology to connect instructor and student who are physically far way. The knowledge can be delivered by using some channel like; YuTube, SWAYAM and MOOC etc. E-learning is gaining lot of importance on account of COVID-19 pandemic situation in the country and all over the world. Hence, it is proposed to study problems and prospects of e-learning in higher education in the State of Telangana.

Against this backdrop, the paper makes an attempt to i) study the effectiveness of e-learning in higher education in the State of Telangana and ii) analyse problems and prospects of e-learning in higher education in the State of Telangana

The present study is based on primary and secondary data. The primary data is collected from the students through a structured questionnaire with the help of Google Forms. The secondary data is collected from the Articles, Periodicals, Magazines, Newspapers, Research Journals, and Websites. The collected data is analysed with the help of statistical tools such as Mean, Reliability test, Normality test, Homogeneity test, Percentages and Chi-square test.

Key words: E-learning; Digital Education; Online Platforms; Covid-19; Pandemic Situation.

Importance of the learning:

Learning is the process of acquiring new knowledge, skills, values, attitudes, behaviours and abilities to change the personality. Teaching is a purposeful and pre-planned activity to impart knowledge and speedup the learning. E-learning is the process of using technology to connect instructor and student who are physically far way. The knowledge can be delivered by using some channel. We have been using Black boards & Chalk pieces, Computers, Floppy disks, CDs, DVDs and LCDs etc., for teaching purpose. Now we are using internet and advance technology for teaching also.

In olden days, we followed Gurukulam education system in India. In olden days, students used to go to Gurukulam for acquiring the knowledge, but we never thought of digital education system in India, but, it is happening due to technological developments. Now, the entire world is moving towards to digitalization in the form of digital marketing, digital accounting, and digital banking due to technological developments. Similarly, education system also digitalizing and imparting knowledge using electronic devises.

The Government of India has launched schemes for e-learning like; Massive Open Online Course

(MOOC) and Study Webs of Active Learning for Young Aspiring Minds (SWAYAM). In these two platforms government is offering 2150 courses delivered by about 1300 Instructors from over 135 Indian Universities, over 10 million learners have enrolled courses under this platform. Other public and private institutions are also offering online courses on their own software applications like; Vedhanth, YouTube, Zoom, Skype, Google meet, Microsoft teems and Blue jeans etc.

Types of e-learning:

Basically there are two types of e-learning viz.,

1. Synchronous learning
2. Asynchronous learning

1. Synchronous learning: Synchronous means "occurring at the same time", it involves the instructor and learners are participating on web in real time. In this method, instructor and student can interact directly and observe the moments of both and also they can share messages, charts, audios, videos, share screen and record screen.
2. Asynchronous Learning: Asynchronous means "not occurring at the same time", under this method, the instructor prepares video lectures at his/her place through electronic device, then upload the video lectures on web site or some channels like; YouTube etc., and the student can watch the video lectures at any time.

Review of Literature:

A number of academicians and professionals have written articles, explained the basic concepts of e-learning, online education and its impact on students. They also highlighted the need and importance of e-learning to provide better education in India.

1. Safiyeh Rajaee Haramdi (2015) studied about the degree of the relationship between E-learning and motivation among students. He found that the students are more likely to engage and motivated by e-learning.
2. Torbjor Holmstrom and Jenny Ditkanen (2012) have studied about understanding teacher's beliefs about E-learning in higher education. They highlighted that E-learning is a concept that enables new and effective teaching approach.
3. Zuleika Firdosh Homavazir (2015) He studied on impact of E-learning on students learning and employability in India. He said that E-learning can increase its market presence in India with targeting rural audience for the courses and creation of employment opportunities in rural areas.
4. Deepali pande, Dr. V. M. Wadhar, and Dr. V. M. Thakare (2016) have studied on the adoption and integration of E-learning techniques in higher education and studied advantages and disadvantages of E-learning.
5. Sheikh Mohd Imran (2012) has made an attempt on the significance of E-learning in higher education and growth in Indian LIS (Library and Information Science) education. He also studied the importance of Information Technology and communication. He described the E-learning created new dimensions in education; both instructor and learner need to shift their methods of teaching and learning.
6. Deepshikha Agarwal (2009) she studied about Indian education scenario, E-learning content preparation and presentation tools. Applications of E-learning to spread education to remote areas and future of E-learning in India. The study also reveals that India needs more technological and infrastructure development.
7. Sunil Kumar Sharma, Javed Wasim and Dr. Jamshed Siddiqui (2014) discussed about Indian education scenario and E-learning challenges, future of E-learning. E-learning for informal and vocational training which is highly effective for a developing country like India.
8. Dr. Devendra Bhongade and Dr. Yogesh M. Sarode (2018) have made a study on role of E-learning in higher education in India. They highlighted on trends, issues, challenges and future of E-learning in India. They found that E-learning is playing a vital role in higher

education and also women education. With the help of E-learning the literacy percentage is increased in India.

9. Manusood and Virender Singh (2014) studied about technical courses in higher education in North India. Use of E-learning tools by the students of technical courses and they found that rapid increase in internet connectivity is an important catalyst for the growth of E-learning.

10. Arun Gaikwad and Vrishali Surndra Randhir (2016) have studied on education development through E-learning in India. Utilization of electronic devices to access educational curriculum to understand and examine the E-learning. This paper reveals that E-learning is creating lot of opportunities in future.

Research Gap:

From the above review of literature, it is observed that majority of studies are related to problems of higher education system in the country and some of the studies are focussed on role of e-learning in higher education. But, authors are not able to cover problems and prospects of e-learning in higher education with special reference to Telangana State on account of COVID-19 pandemic situation prevailed in most of the countries in the world.

Statement of the problem:

The digital learning is gaining lot of importance on account of COVID-19 pandemic situation in the country and all over the world. Hence, it is proposed to study problems and prospects of e-learning in higher education in the state of Telangana.

Objectives of the Study:

The objectives of the present study are;

To study the effectiveness of e-learning in higher education in the State of Telangana

To analyse problems and prospects of e-learning in higher education in the State of Telangana

Research Methodology:

The present study is based on primary and secondary data. The primary data is collected from the students through a structured questionnaire with the help of Google Forms. The secondary data is collected from the Articles, Periodicals, Magazines, Newspapers, Research Journals, and websites.

Selection of Sample Size:

The present study is based on a sample of 250 students who have attended online classes using different online platforms. The selection of sample students is made by using random sampling method. The online questionnaire (Google-form) was send to students through Whatsup groups and Emails covering all the state universities in Telangana. We have received responses from 250 students who are studying post-graduation courses in different universities.

Scope of the study:

The present study covers e-learning in higher education in the State of Telangana and covers post graduate students including technical and professional courses offered by various universities in the State of Telangana.

Statistical Tools:

The collected data is analysed with the help of statistical tools such as Mean, Reliability test, Normality test, Homogeneity test, Percentages and Chi-square test.

Profile of the respondents:

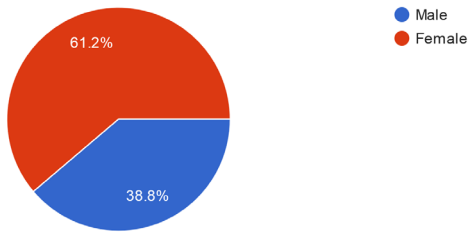
The data collected form the students who are studying post graduate courses offered by various universities in the state of Telangana. The details are presented in table-1.

Table-1

Gender	Number of Respondents	Percentage
Female	153	61.20
Male	97	38.80
Total	250	100.00

Source: Compiled from primary data

Chart 1



It is observed from the table that, 61.2% are females and 38.8% are males, out of 250 students who were attended online classes.

Age group of the respondents:

The age group of the respondents is shown in table-2.

Table-2

Age	Number of Respondents	Percentage
15 - 20 Years	26	10.4
21 - 25 Years	212	84.8
26 - 30 Years	5	2.0
31 - above	7	2.8
Total	250	100.0

Source: Compiled from primary data

Chart 2

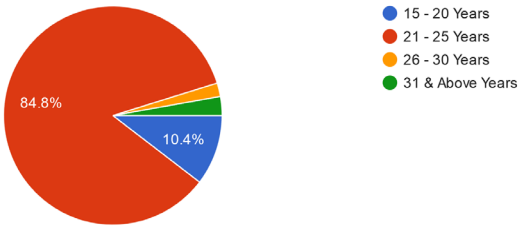


Table-2 shows that majority of the respondents ie., 84.8% of respondents are in the age group of 21-25 years, 10.4% of the respondents are in the age group of 15-20 years, 2% of the students are in the age group of 26-30 years and 2.8% of respondents are above 31 years.

Course-wise composition of respondents:

The course-wise composition of respondents is presented in table-3.

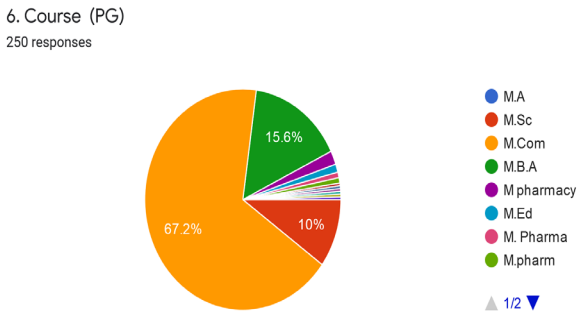
Table- 3

Course-wise composition of respondents

Course (P.G)	Number of Respondents	Percentage
M.B.A	38	15.2
M.Com	168	67.2
M.Ed.	4	1.6
M. Pharmacy	13	5.2
M.Sc.	25	10
M. Tech	2	0.8
Total	250	100

Source: Compiled from primary data

Chart-3



The present study is mainly focused on post graduate students studying in various universities in Telangana State. It is observed from the table that, majority of the respondents are studying M.Com course with 67.2% followed by M.B.A. with 15.6%, M.Sc., 10% and rest of the percentage consists of M.A., M.Ed., Pharmacy and M.Tech etc.

University-wise composition of respondents:

The present study covers students from Osmania University, Kakatiya University, Palamuru University, Mahatma Gandhi University, Satavahana University, Telangana University and JNTU. The details are presented in table-4.

Table- 4

University-wise respondents

Name of the University	Number of Respondents	Percentage
Palamuru University	67	26.8
Osmania University	27	10.8
Kakatiya University	83	33.2
Mahatma Gandhi University	54	21.6
Satavahana University	12	4.8
JNTU-Hyderabad	1	0.4
Telangana University	6	2.4
Total	250	100

Source: Compiled from primary data

The study reveals that, majority of students from Kakatiya University are attended online classes followed by Palamuru University, Mahatma Gandhi University and Osmania University as presented in table-4.

Area-wise composition of students:

The present study covered respondents from rural, semi-urban and urban areas in Telangana state. The details are shown in table-5.

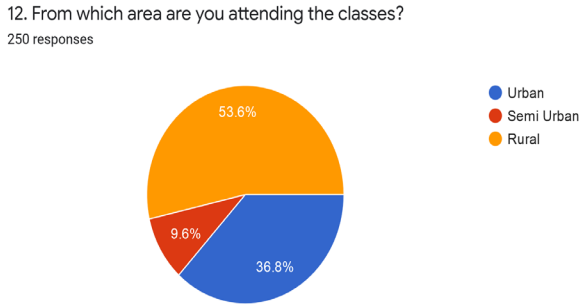
Table- 5

Area-wise composition of the respondents

Area	Number of Respondents	Percentage
Rural	134	53.6
Semi-urban	24	9.6
Urban	92	36.8
Total	250	100

Source: Compiled from primary data

Chart-4



The present study reveals that students who are studying in various universities are from rural areas. The table shows that 53.6% of students are attending from rural areas followed by 36.8% from urban areas and 9.6% from semi-urban areas.

Internet Services:

The type of internet service used by the students is shown in table-6.

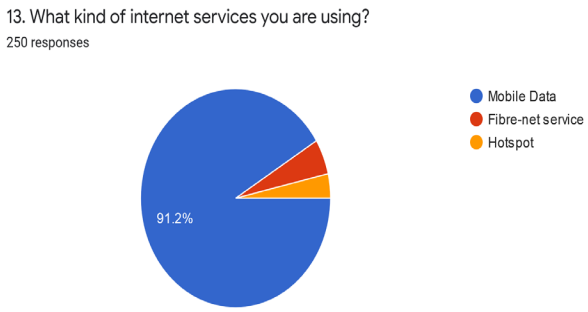
Table- 6

Internet Services

Type of service	Number of Respondents	Percentage
Fibre-net service	13	5.2
Hotspot	9	3.6
Mobile Data	228	91.2
Total	250	100

Source: Compiled from primary data

Chart-5



The study reveals that 91.2% of students are using mobile data for listening online classes and rest of the students are using fibre-net and hot-

spot services which indicates that majority of the students are using mobile phones for watching and listening online classes.

Type of device:

The type of device using for online classes is shown in table-7.

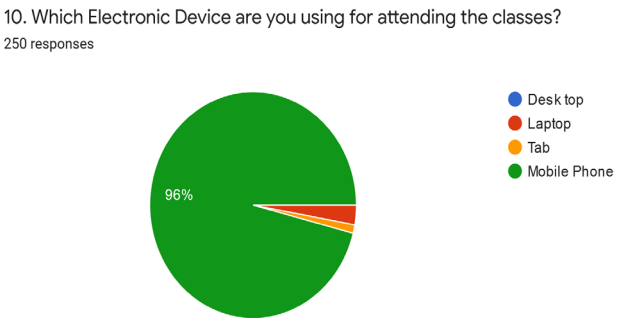
Table-7

Type of device

Name of the Device	Number of Respondents	Percentage
Laptop	7	02.8
Mobile Phone	240	96.0
Tab	3	01.2
Total	250	100

Source: Compiled from primary data

Chart-6



The present study reveals that majority of the students ie., 96% of the students are using mobile phones and remaining 4% of the students are using lab tops and tabs for accessing online classes.

Awareness about computer knowledge:

The level of computer knowledge possessed by the students is presented in table-8.

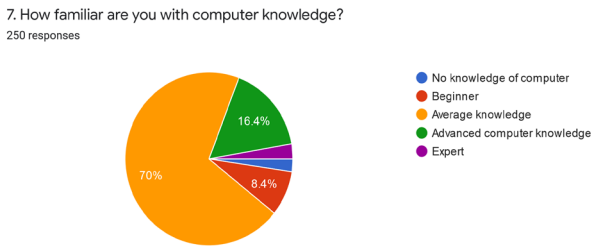
Table-8

Awareness about computer knowledge

Level of computer knowledge	Number of Respondents	Perce-ntage
Advanced computer knowledge	41	16.4
Average knowledge	175	70.0
Beginner	21	8.4
Expert	7	2.8
No knowledge of computer	6	2.4
Total	250	100.0

Source: Compiled from primary data

Chart-7



The study reveals that 70% of students are having sufficient knowledge in computers to access for online classes and 16.4% students are have advanced knowledge in computer skills and some of the students are just beginners in computer skills.

Pre-training for online classes:

The feedback about pre-training classes for students about online classes is presented in table-9.

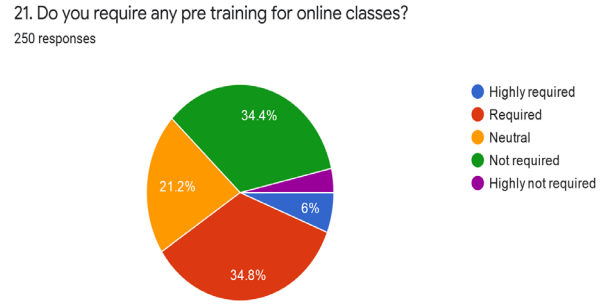
Table-9

Feedback about pre-training for students

Parameters	Feedback about pre-training for students	Percentage
Highly required	15	06.0
Required	87	34.8
Neutral	53	21.2
Not required	86	34.4
Highly not required	09	03.6
Grand Total	250	100

Source: Compiled from primary data

Chart-8



From the above table it is observed that only 6% of respondents felt that pre-training is highly required for students, whereas, 34.8% of respondents also felt that pre-training is required for students about online classes and 34.4% of respondents also opined that there is no need for pre-training about online classes.

Satisfaction towards technical skills of the instructor:

The level of satisfaction towards technical skills of instructor is presented in table-10.

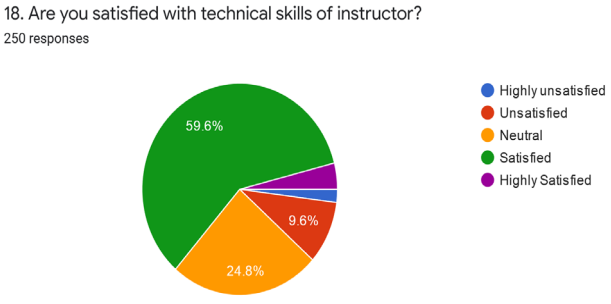
Table-10

Feedback about technical skills of instructor

Parameters	Feedback about technical skills of instructor	Percentage
Highly Unsatisfied	5	2.0
Unsatisfied	24	9.6
Neutral	62	24.8
Satisfied	149	59.6
Highly Satisfied	10	4.0
Grand Total	250	100

Source: Compiled from primary data

Chart-9



The data presented table-9 reveals that 59.6% of respondents are satisfied with technical skills possessed by the instructor, whereas, only 11.6% of respondents are not satisfied with technical skills of the instructor.

Satisfaction level of students towards e-content/material provided by the instructor:

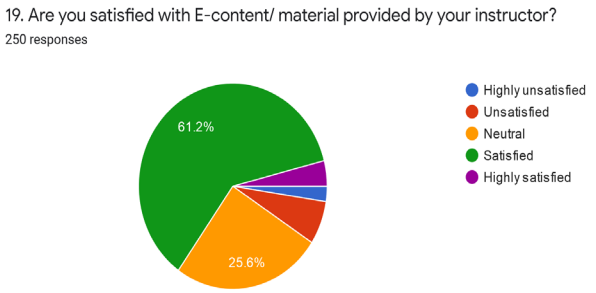
The level of satisfaction of the students towards e-content/material provided by the instructor is shown in table-11.

Table-11

Parameters	Number of Respondents	Percentage
Highly Unsatisfied	6	2.4
Unsatisfied	17	6.8
Neutral	64	25.6
Satisfied	153	61.2
Highly Satisfied	10	4.0
Grand Total	250	100

Source: Compiled from primary data

Chart-10



From the above table, it is concluded that 61.2% of respondents are satisfied with the e-content/ material provided by the instructor; on the other hand, only 6.8% of students are not satisfied with the e-content/material provided by the instructor.

Pre-training classes for instructor about online classes:

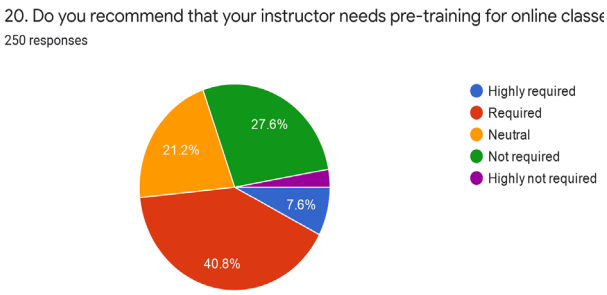
The feedback about pre-training classes for instructor about online classes is presented in table-12.

Table-12

Parameters	Number of respondents	Percentage
Highly required	19	7.6
Required	102	40.8
Neutral	53	21.2
Not required	69	27.6
Highly not required	7	2.8
Grand Total	250	100

Source: Compiled from primary data

Chart-11



The study reveals that majority of the students are felt that pre-training is required for the instructor about online classes only 27.6% of students are opined that pre-training is not required for instructor.

Student's opinion about online classes during lockdown situation:

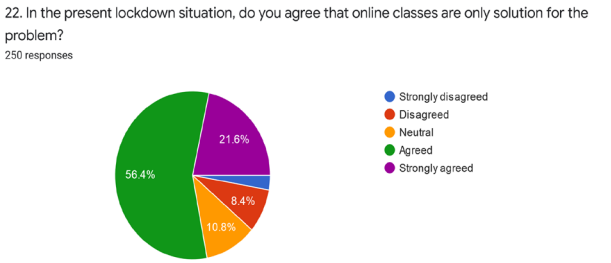
The student's feed about online classes during lockdown situation is presented in table-13.

Table-13

Parameters	Number of Respondents	Percentage
Strongly disagreed	7	2.8
Disagreed	21	8.4
Neutral	27	10.8
Agreed	141	56.4
Strongly agreed	54	21.6
Grand Total	250	100

Source: Compiled from primary data

Chart-12



From the table, it is observed that majority of the respondents are in favour of online classes during lockdown pandemic situation, only 8.4% of the students are not interested in online classes during lockdown situation.

Use of online platforms/applications:

Generally, students are using different types of online platforms and applications for accessing online classes such as Skype, Zoom, Cisco, Google meet, Facebook, YouTube and Go to meeting etc. The details are presented in table-14

Table-14

S. No	Name of the application	No. of Respondents Using	Usage of Respondents Percentage
1	Skype	30	8.17
2	Zoom	229	62.40
3	Blue Jeans	16	4.36
4	Google meet	11	3.00
5	What's app	27	7.36
6	Facebook	2	0.54
7	Microsoft Teams	5	1.36
8	Cisco WebEx Meetings	12	3.27
9	You Tube	25	6.81
10	Vedhanthu	2	0.54
11	Team link	3	0.82
12	Unacademy & Grade up	1	0.27
13	Goto meetings	1	0.27

Source: Compiled from primary data

It is observed from the table that, students are using 18 types of applications/platforms for accessing online classes in various universities. It is noted that majority ie., 62.40% of students are using Zoom App followed by Skype 8.17%, Whats-Up 7.36% and YouTube 6.81% etc.

Satisfaction level of students towards online classes:

The satisfaction level of the students towards online classes offered by the various institutions and universities are analysed with reference to Internet availability, audio clarity, video clarity, screen sharing and content reaching etc., with the help of Likert 5-Point scale. The table-15 provides the total weightage points of various services offered by the institutions and universities.

Table- 15

Satisfaction level of students towards online classes

S. No	Statement	Highly Unsatisfied	Points	Un satisfied	Points	Neutral	Points	Satisfied	Points	Highly Satisfied	Points	Total	Rank
		1	1	2	2	3	3	4	4	5	5		
1	Internet Availability	25	25	49	98	64	192	92	368	19	95	778	5
2	Audio Clarity	28	28	41	82	67	201	93	372	18	90	773	6
3	Video Clarity	28	28	53	106	69	207	85	340	18	90	771	7
4	Screen Sharing	24	24	30	60	70	210	90	360	29	145	799	3
5	Content reaching	26	26	47	94	55	165	93	372	25	125	782	4
6	Problematic subjects online teaching	30	30	79	158	60	180	61	244	14	70	682	8
7	Computer based subject online teaching	33	33	48	96	76	228	58	232	16	80	669	9
8	Satisfaction towards technical skills of instructor	5	5	24	48	68	204	155	620	10	50	927	2
9	Satisfaction towards E-content/ material provided by your instructor	6	6	18	36	69	207	159	636	10	50	935	1

Source: Compiled from primary data

It is found that majority of the students are satisfied with e-content/ material provided by the instructor, technical skills of the instructor and screen sharing ranked as 1, 2 and 3 respectively and followed by other services. Whereas, computer based subjects teaching online, problematic subjects teaching online, video clarity of online classes due to non-availability of internet in rural areas and it were ranked as last among all the services. On the whole, the students of all the institutions/universities satisfied with the services offered by the institutions and universities.

A further analysis is made to test is there any association between the satisfaction level of students from different areas and online classes offered by the institutions and universities.

ANALYSIS OF DATA:

Before applying Chi-square test, it is necessary to verify reliability and homogeneity of the data; in this regard, the following tests are applied:

1. Reliability Test: The reliability test is conducted through SPSS to verify reliability of the data. For this purpose, we have used the Cronbach's Alpha test. If the alpha value falls between 0.1 - 0.6, the data is not reliable and if it is between 0.7 - 0.9, the data is said to be reliable. The reliability statistics are

shown in table-16.

Table-16

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	No of Items
0.801	0.813	8

Source: Compiled from primary data (SPSS)

sFrom the above table, it is observed that Cronbach's Alpha value is 0.801 for all 8 items which is falling between 0.7 - 0.9. It indicates that the data is highly reliable.

2. Normality Test: The normality test is conducted in SPSS to test whether the data is normally distributed or not. For this purpose, 'p' value is used, if the 'p' value is greater than 0.05, the data said to be normally distributed. The results are presented in table-17.

Table-17

Test of Normality

The electronic device used by the students		Kolmogorov-Smirnova			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Internet Availability	Laptop	0.214	7	.200*	0.858	7	0.144
	Tab	0.175	3	.	1.000	3	1.000
	Mobile Phone	0.227	240	.000	0.895	240	0.000
Audio Clarity	Laptop	0.267	7	.141	0.915	7	0.429
	Tab	0.385	3	.	0.750	3	0.000
	Mobile Phone	0.246	240	.000	0.880	240	0.000
Video Clarity	Laptop	0.256	7	.182	0.833	7	0.086
	Tab	0.385	3	.	0.750	3	0.000
	Mobile Phone	0.213	240	.000	0.901	240	0.000
Screen Sharing	Laptop	0.173	7	.200*	0.922	7	0.482
	Tab	0.385	3	.	0.750	3	0.000
	Mobile Phone	0.215	240	.000	0.893	240	0.000
Content reaching	Laptop	0.258	7	.174	0.818	7	0.062
	Tab	0.385	3	.	0.750	3	0.000
	Mobile Phone	0.249	240	.000	0.887	240	0.000
Problematic subjects	Laptop	0.269	7	.135	0.918	7	0.456
	Tab	0.175	3	.	1.000	3	1.000
	Mobile Phone	0.191	240	.000	0.908	240	0.000
Computer based subjects	Laptop	0.160	7	.200*	0.935	7	0.591
	Tab	.385	3	.	0.750	3	0.000
	Mobile Phone	.244	240	.000	.425	240	0.000

*. This is a lower bound of the true significance.
a. Lilliefors Significance Correction
Source: Compiled from primary data (SPSS)

From the above table, it is observed that majority of the factors are greater than the P value of 0.05, thus, the data is said to be normally distributed at 5% level significance.

3. Homogeneity Test: This test is applied to know the homogeneity of the population distribution with reference to variances/dispersions within the population distribution. For this purpose, Levene statistic test is used: The details are shown in table-18.

Table-18

Test of Homogeneity of Variances

Variable	Levene Statistic	Sig.
Internet Availability	1.424	0.243
Audio Clarity	0.895	0.410
Video Clarity	1.719	0.181
Screen Sharing	0.899	0.408
Content reaching	1.802	0.167
Problematic subjects	0.511	0.600
Computer based subjects	0.160	0.853

Source: Compiled from primary data (SPSS)

Table-18 shows Levene Statistic value and its significance level for online classes and their related variables. The Levene Statistic value should be more than P value of 0.05. It is observed from the table that all the values are more than 0.05. Hence, the variance or dispersion is normal within the population distribution.

Application of Chi-square test:

The satisfaction level of the students towards e-learning facility provided by various institutions and universities in the state are analysed with reference to Internet availability, Audio clarity, Video clarity, Screen sharing, Content reaching, Problematic subjects and Computer based subjects with the help of Likert -5 Point Scale. The following hypothesis is formulated to analyse the level of satisfaction of the students towards e-learning.

Ho: There is no significance difference between electronic device used for attending online classes and satisfaction level of the students towards e-learning.

Ha: There is a significance difference between electronic device used for attending online classes and satisfaction level of the students towards e-learning

The above hypothesis is tested by applying Chi-square test through SPSS at 5% level of significance. The chi-square test results are presented in table-19.

Table-19

Chi-Square Test

S. No	Parameters	Pearson Chi-Square Value	D.F	Asymp. Sig (2 Side)
1	Internet Availability	9.062	8	0.337
2	Audio Clarity	9.141	8	0.331
3	Video Clarity	5.916	8	0.652
4	Screen Sharing	11.547	8	0.173
5	Content reaching	6.828	8	0.555
6	Problematic subjects	4.056	8	0.852
7	Computer based subjects	5.132	8	0.743

Source: Compiled from primary data (SPSS)

From the above table, it is found that majority of the respondents are satisfied with online classes conducted by various institutions and universities in the State of Telangana. The calculated 'P' values shown in table indicates that all the values are greater than the 'P' value of 0.05 which indicates that there is no significance difference between electronic device used for attending online classes and satisfaction level of students towards e-learning. Hence, the null hypothesis is accepted and alternative hypothesis is accepted.

PROBLAMS AND PROSPECTS OF E-LEARNING:

Recently, e-learning is playing a vital role in exchange of knowledge and imparting education to the students due to Covid-19 problem in the world. Now-a-days, many channels and applications are available to the users for online education due to technological advancements. In spite of advantages of online education, users are facing different problems in e-learning process. The present study also reveals the problems facing by the students. The following are the major problems in online education:

Problems of e-learning:

1. Internet: Internet speed is one of the major problems in online education. Countries like USA, Japan and China are using 5G network, whereas, in India still we are using 4G network only. Similarly, internet facility also not available in rural areas in India. So, it is very difficult to access online classes due to poor network, leads to poor audio and video clarity. The present study also reveals that 30% of the students are not satisfied with the internet service out of a sample of 250 students who have been attended online classes in various universities in the state of Telangana.

2. Internet data: It is observed from the study that 15.2% (38) students felt that data charges are very high to attend the online classes throughout the day; they also felt that they need 3GB to 4GB data per day, but most of service providers are providing 1.5GB data per day only. The present study also found that majority of the students belongs to economically poor; hence, they are not able to spend more amounts on high data plans.

3. Electronic Devices: According to United Nations Millennium Developments Goal (MDG) 88 million of Indian population are under the below poverty line. Hence, majority of the students are not able buy advanced electronic devices to access online classes due to poor purchasing power.

4. Lack of awareness about computer knowledge: It is found that 70% of the students are having average computer knowledge, 11% of the students are having no computer knowledge and 6% of the students opined that they are not aware of online classes.

5. Poor teaching aids: In India, majority of the educational institutions are using conventional aids in teaching process, but, online classes require ICT based teaching tools. So, we need to strengthen teaching infrastructure in our education system.

6. Infrastructure development: It is found that 63.2% of students are attending online classes from rural and semi-urban areas. They opined that, they are not able to attend online classes due poor network, low speed and power failures in rural areas. Hence, there is need to strengthen telecommunication infrastructure facilities in rural and semi-urban areas to access online classes.

7. Train the trainer: It is observed from the study that 48.4% of students suggested that teachers require pre-training classes to teach online classes.

8. Training for students: The study reveals that 40.8% of students felt that training is required for students to attend online classes.

9. Satisfaction level of students: It is found that majority of the students felt that offline classes are better than online classes. Further, it is also observed that 11% of the students are not satisfied with technical skills of the teachers.

Prospects of e-learning:

1. E-content/ Material: The study reveals that the majority (61.2%) of the students are highly satisfied with e-content and material provided by the instructor. Teachers are required to use power point presentation, diagrams and pictures for effective presentation so that teacher can create interest among students.

2. Best option during lockdown period: It is observed from the study that 78% of students opined that online classes are the best option during lockdown period due to COVID-19 pandemic situation in the state.
3. Motivation to students: Online learning will motivate students by conducting online programmes like; online quiz, online assignments, online certificate programmes during lockdown period, so that students are kept engaged in learning process.
4. Improvement in technical skills: It is found that 40% of students felt that computer and technical skills can be improved through online learning as the students are required to use computer-based devices to access online classes.
5. Lack of sufficient teaching staff: Most of the state universities and government degree colleges in the state are facing problem of lack of sufficient number of teaching staff. This problem can be solved by arranging online classes through outside experts to some extent.
6. Environmentally friendly: Online learning is environmental friendly, because teachers need not use papers and chalk piece, so that we can reduce paper and chalk pollution.
7. Updated knowledge: The study reveals that 40% of students felt that online classes are helpful in up-dating their subject knowledge during lockdown period.
8. Effective learning: It is possible to achieve student centred learning (SCL) objective through online learning process.
9. Cost Effective: Online learning is cost effective, we can reduce cost of learning in terms of logistics, travelling expenses and maintenance of hostels etc.

Conclusion:

From the foregoing analysis made in this paper, it is concluded that online learning is the best option during lockdown period due to COVID-19 pandemic situation in the state, so that students are kept engaged in learning process during crisis period, but one of the major limitations in online learning is that there is no personal contact with students. The present study also reveals that offline classes are better than online classes.

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Osmania Journal of International Business Studies (OJIBS)

Aims and Objectives

OJIBS is the bi-annual research publication of the Department of Commerce, Osmania University, Hyderabad. The journal is aimed to publish the research papers in the broad areas of Business Environment, Finance, International Business & Trade, Economics, Commerce and Business Management. It is a double blind refereed journal and is listed in ISSN. The OJIBS attaches importance to theoretical, empirical, applied and interdisciplinary studies in the aforesaid areas. Priority will be given to papers with an international outlook. The OJIBS provides a platform for a cross-section of people including researchers, academicians, traders, policy makers and practitioners for sharing the ideas, opinions, and discussions on various issues related to the above said areas. The OJIBS publishes original research papers, book reviews, and data pertaining to the above said areas. The views, expressions, observations and interpretations made in the journal are those of the individual authors and do not necessarily reflect the views of the OJIBS.

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