

Major Project Dissertation Report on
CLOUD TECHNOLOGY FOR SMALL BUSINESS – A GAME
CHANGER

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CERTIFICATE

This is to certify that Mr. Shivam Sharma have completed the project titled “**Cloud Technology for Small Business – A game changer**” under the guidance of Mr Yashdeep Singh as a part of Master of Business Administration (MBA) curriculum of Delhi School of Management, New Delhi. This is an original piece of work and has not been submitted elsewhere.

Mr Yashdeep Singh

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DECLARATION BY THE CANDIDATE

I the undersigned solemnly declare that the project report is based on my own work carried out during our study under the supervision of. I assert the statements made and conclusions drawn are an outcome of my research work. I further certify that

- I. The work contained in the report is original and has been done by me under the general supervision of my supervisor.
- II. The work has not been submitted to any other Institution for any other degree/diploma/certificate in this university or any other University of India or abroad.
- III. We have followed the guidelines provided by the university in writing the report.
- IV. Whenever we have used materials (data, theoretical analysis, and text) from other sources, we have given due credit to them in the text of the report and giving their details in the references.

Shivam Sharma

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I would also like to express my gratitude towards our principal Mr. Saurabh Agrawal (Program Coordinator) for giving me this great opportunity to do a project on “**Cloud Technology for Small Business – A game changer** “. Without their support and suggestions, this project would not have been completed.

Shivam Sharma

ABSTRACT

Cloud services characterize all variety of IT capability that is offered by the cloud service hosting to cloud service consumers. Cloud Computing networks access to a shared pool of configurable networks, servers, storage, applications, services, and other computing resources that can be rapidly provisioned and released with least management effort or service provider interaction. In modern era of Information Technology, the accesses to all information related to a business activity in large scale manufacturing units can be made available at threshold, by certain checks and balances. The maximum population of Indian manufacturing not only comes from small and medium scale industry but also such companies contribute maximum share to Indian GDP. Large scale industries and O.E. Ms are in a position to spend as well are spending the required budget on IT (Information Technology) and control various costs and inventories on day-to-day basis by incorporating latest system software (For example ERP's ,SAP, Sales Force)etc. The small and medium scale industries lack in using such software because it is of high fixed, operating costs and its privacy. Cloud computing is an emerging technology where server is maintained by parent software company and domains are to be shared. In case parent host company charges reasonably affordable cost and encrypts the confidential data and stores it such that only authenticated users can access the data and ensures the security, safety, and confidentiality of data, it can revolutionize the medium and small-scale industry users in enhancing the overall business performance. This research paper has been aimed at exploring the possibilities for implementing the cloud computing technology for improving the overall business performance for medium and small-scale industries in India

Keywords: cloud computing, Features of cloud computing, cloud models, development model Business Model, Resource Management, Virtualization, Security model, Pricing, Leading cloud provider.

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INTRODUCTION

In this ERA of growing technology and dependence on technology every company being it is startup, med level and big capital company wanted to have the latest technology and to be technically advance company.

Cloud computing is one of those technologies on which big company is preferring. Cloud is basically combination of internet, virtual-isation and providing infrastructure to the organisation. Due to its flexible nature companies are integration cloud in their current setup or new, small companies are having their infrastructure deployed over the cloud since the starting.

Considering the scope of SME cloud technology would be great prospect for them as they do not need to maintain big racks of server storage and setup datacentre to support their infrastructure rather, they can deploy everything over the cloud and manage that through interface provided by cloud service provider. It offers decrease in amount of difficulty, reduce cost, and increase organisation liveliness. Cloud offers various features which enable organisation to self-manage their infrastructure and be less dependent on external factors like vendors, hardware, data centre maintenance.

OBJECTIVES:

The objective of this research is to understand and observe the situation and employee awareness towards cloud also to compare, analyse about the current infrastructure and their view towards upcoming or new technology and why there is a need and why users are moving towards cloud. The objectives of the study are:

- What is cloud computing.
- Need to move towards Cloud overall performance
- Awareness towards cloud technology
- Difference between On -premise and Cloud
- Features of cloud computing
- Comparison between different cloud providers
- Pros and cons of major cloud providers

SCOPE/ LIMITATION

Reserrach is limited to small region where we have considered and scope is limited to small startup and small and mid-scale company.scope can be enhanced if we take into consideration wider group or more number od companies enhacing performance of the analysis

We have taken sample for observation from below mentioned companies

- ISHAN-M
- Healthivorous
- Finishing Touch
- GaugeGeotechniques

LITERATURE REVIEW

This report will give a brief description about cloud computing, different model of cloud computing. In this we will be analysing the current structure of Small and mid scale companies and technology enablement they have done in their setup and how cloud technology can improve their organisation working culture and could be cost saving.

RESEARCH METHODOLOGY

This research will aim to understand how technology has evolved and users are migrating to Cloud from earlier on-premise datacentres sales.

The proposed research is a qualitative and descriptive. The main aim for taking this is to analyse the situation that exist in various organisation regarding cloud computing and along with this we will be briefly understanding the cloud and it assovciated benefits

The Sample size:

A sample for 4 companies taken and overall employee count is around 30 and sample is collected via questionnaire

Sources of data collection:

We have used 2 methods of data collection: primary and secondary

- **Primary Data:** It is basically data collected via face to face asking details or through questionnaire
- **Secondary data:** this refers to data collected by various other sources like magazines , journals etc

Data Analysis method

Data is gathered from primary and secondary method which are later analysed and interpreted using tabulation and percentage methods, various statistical techniques which be used to analyse the result and outcome of this study

Techniques Used:

- I. Percentage, Mean: It refers to calculation done based on ratios , this is basically done for comparison analysis and distribution of services
- II. Charts and graphs: different charts like Bar charts and pie charts are used to clearly identify the result from data gathered and easy analysis

DEFINITION OF CLOUD COMPUTING

Cloud computing is one of the boom in the technology market , as it is one of the top emerging technology and people are moving toward adapting it to grow in their business.

Now the question comes what is cloud computing??

Before the existense of cloud technology , big enterprises use to have their datacentres and there they procure , place and maintain their various devices like storage , network devices, servers and its connectivity.

Procuring a datacentre is very cost intensive and time comsuming as well as it takes months to proocure one server and get it deliver to location and then do the configuration. So After the launch of cloud by AWS we do not need to maintain bigdatacentre and maintain varous hardware devises , what we have to do is just pay the money based on our usage. Cloud is basicall rented option for datacentre , where service provider or cloud service provider provides its devise for your use and it will charge based on how much you use it or how much resources you consume.

Cloud provides almost every service that a datacentre will be able to host or even more than that and that too without the hassel of daily maintenance and paying the huge cost for procurememt , rent for location and electricity and other charges. It has not only given growth apportunity to big firms but also to small firm which are not able to maintain database or which do not have much of a budget for it enabled services.

CATEGORIES OF CLOUD COMPUTING MODELS

Cloud services can be categorized wither by the deployment maodel or by service model. It deployment model comprises of

1. Public cloud

As the name represents Public cloud is open to all and is available to the users , whereby it can be access used via internet or web.It has services available to all the users and they can avail these services by subscribing.

In this model services provided by the cloud provider is shared among all the users , so user have access to shared services

Example : one server may host applications of various users or teams

2. Private cloud

Private cloud is something which specific to any user or organisatuions

Example : Government may have there separated cloud enviroment, where they do not want any sort of intervention from any extenal agent which could be a threat to them

3. Community cloud

Community clouds are develop for specific community or oragnisation or group of organisation working together whichh separate them from public accessed enviroment

4. Hybrid cloud

Hybrid cloud is mixture of both public and private cloud , where feew services are present in private environement while few services are hosted in public envireoment

Example:Organisation what to host they application on public cloud where its application can interatct with outer world where also wants to secure it data by placing the data in private cloud whgich have only secure access or access to few.

5. Combined cloud

Combined cloud is basically ana enviroment where two or more cloud service provider combine to provide a collective service to user

Here user can have services from different cloud providers like they can use few service of AWS and few of Azure

SWOT ANALYSIS OF ADOPTING CLOUD COMPUTING

Analysise is proficiency tool use to get an estimate or undersand the capabilities or abilities of a particular product or services.

In swot analysise we understand the service offering and whether it is worth to about it or not.This is done by taking into account its various factors which may result in it failure or success and after adopting this technology whether an organisation will be able to perform or the perforamnace degrade. It is basically a quality matrix from an service atthat an organisation is going to adapyt.SWOT analysis calcluate various factors like strength , weekness, oppportunity associated with the product and its corresponding threats.

In order to analysise various factors assocaited with cloud computing SWOT analysis has been conducted and below are its results

Internal			
Positive	Strengths <ol style="list-style-type: none"> 1. Cost effective 2. Flexible and innovative 3. Simplified cost and consumption model 4. Faster provisioning of systems and application 5. Secured infrastructure 6. Compliant facilities 7. Resilient in disaster recovery 8. Maintenance Cost Reduction 9. Convenient level of accessibility 10. Butter control of the resources 11. Independence of time and location 12. Energy saving 13. Environmental protection 14. Friendly utilization 15. expandability 	Weakness <ol style="list-style-type: none"> 1. Post training required 2. Development of applications 3. Increased dependency 4. High- speed Internet connection requirement 5. Difficulty of integration with local software 6. Data transfer bottlenecks 7. Lack of physical control of data 8. Lack of commitment to the highquality of service and availability and availability guarantees 9. Inability of providers to guarantee The location of the company's information 	Negative
	Opportunities <ol style="list-style-type: none"> 1. Pay for use licenses 2. Good chance for SMEs because of making progress without upfront investments 3. Invent scalable store 4. Marketplace enhancement in terms of functionality, innovation & price 5. Adaptive to future needs 6. Standardized process 7. Quick solution of the problem 8. High-tech work environment 9. Offering modern information solutions according the last technology 	Threats <ol style="list-style-type: none"> 1. Security concerns (data security) 2. lack of specific standard regulation (local, national & international) 3. Difficulty from migration from one to another platform 4. Hidden cost (backup, problem solving and recovery) 5. compatibility reduction 6. Possibility of backlash from entrenched incumbents 	
		External	

SWOT Analysis for Cloud Computing.

OUTCOMES:

The outcome was calculated considering small or mid level company and its corresponding c=scope and reachability,when a small /mid level company.

In this we well be considering the pros and cons of cloud computing and varrious issues that an organisation may encounter if shifting to cloud technology.To understand these factors SWOT analysis is conducted and evaluated.It is obvious from the analysis that cloud is emerging technology has greate potential to increase organisational efficiency ,profitability and productivity.The outcome of this analysis suggest the enterprice would increase in their growth pattern also decrease their expenditure on infrastructure and hardware along with that it would be comforatable for them to easily scale up and scale down the infrastructure.monthly subscription fees structure would major factor for enterprice to reduce their cost.

COMPANY TAKEN FOR ANALYSIS

In this research was conducted on below few startups and mid-level organisation to analysis the scope of cloud in their current setup, we have taken observation through various organisation about cloud technology

1. ISHAN-M

INTEGRATED

SOCIAL-MEDIA

HARNESSING AND

ADVERTISING

NETWORK

MANAGEMENT COMPANY

With more than 1000+ client base Ishan-M is a startup focussing on marketing and digital marketing aspects. This organisation handle marketing of various company on various digital platforms.

Employee Strength: 15-20

2. Healthivorous:

Healthivorous is NEW-startup focussing on providing healthy and nutritious product to its clients or end users, this company basically works direct from farm concept where user or customer can get their organic product directly from the farm without any intervention of middle man also this organisation assures that a quality product is delivered to its customer base.

Employee Strength:5-10

3. Finishing Touch

Finishing touch is Mid-scale company in the field of construction, maintenance, and architecture. This company mainly works on Government, Army, and Big Corporate projects

Employee strength:15-20 (Permanent)

Contractual: Depending upon project

4. Gauge Geotechniques

Gauge Geotechniques is Mid-scale company engaged in designing, development and manufacturing of various civil engineering, meteorological and geological products.

This company have their products and developments in various countries including USA, Europe, Gulf, Africa, Mongolia etc

Employee Strength:15-20 (Permanent)

Contractual: Depending upon project

DATA ANALYSIS AND INTERPRETATION

ANALYSIS BASED ON PERCENTAGE:

Opinion	No. of Respondents	Percentage
Excellent	19	63%
Good	8	27%
Fair	3	10%
Poor	0	0%
Total No. of Respondents	30	100%

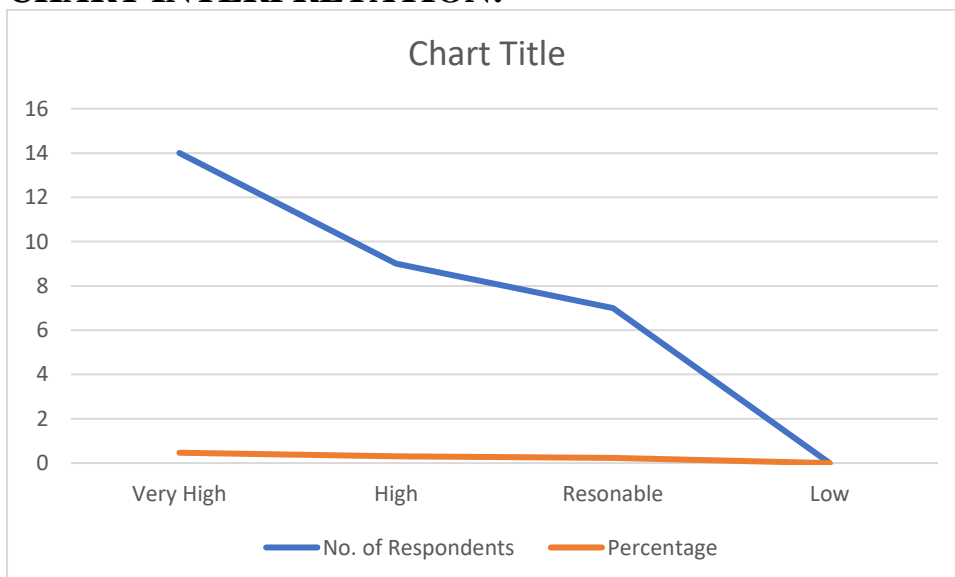
Interpretation:

63% respondents are felt it is....Excellent,
27% respondents feel it is ..Good,
10% respondents feel it is fair,
None consider it as to be not good

Assumptions:

Therefore it represents that mostly respondents feel that cloud technology have.Excellent characteristics.

CHART INTERPRETATION:



Responder's opinion

In the figure above, the X-axis represents Opinion and the Y-axis represents Respondent

Hypothesis:

The above analysis shows that most customers think cloud technology is very ..Good.

Result:

Because most of the company's customers think cloud technology is ..Good, company must ensure that the same standards are maintained and cloud technology is used effectively.

1. RESPONDENTS OPINION ON FEATURES OF CLOUD.

ANALYSIS BASED ON PERCENTAGE:

Opinion	No. of Respondents	Percentage
Excellent	19	63%
Good	7	23%
Fair	4	13%
Poor	0	0%
Total No. of Respondents	30	100%

Respondent's Opinion

- ..Excellent 63%
- ..Good 23%
- ..Fair 13%
- ..Poor - -

Total 30 100%

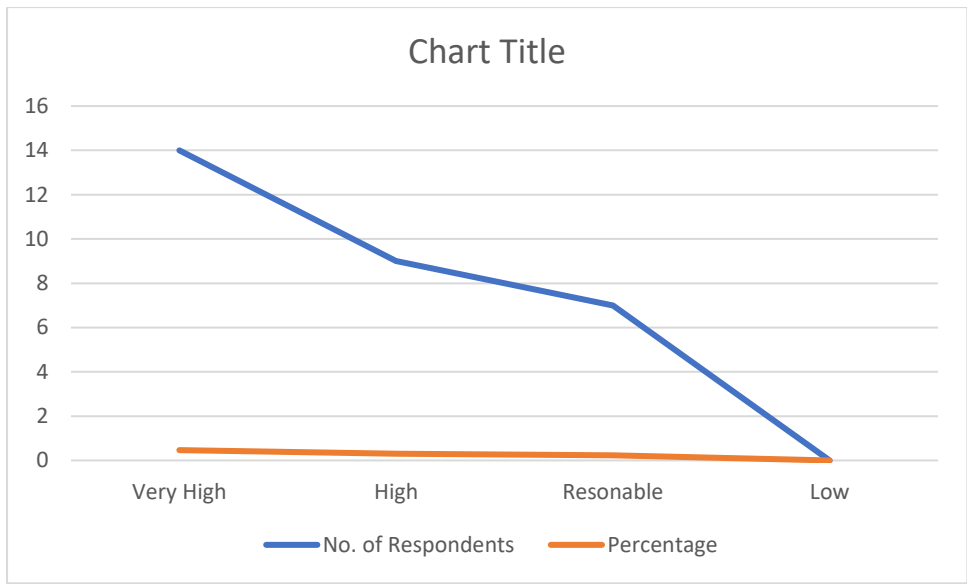
Interpretation:

63% people felt that features offered by cloud are...Excellent, 23% people felt that features offered by cloud are very ..Good, and 13% people felt that features offered by cloud are ..Good. No-one mentioned it as poor.

Hypothesis:

Therefore represents mostly respondents feel that that the features offered and overall efficiency of cloud satisfactory.

□ **CHART INTERPRETATION:**



Responder's opinion

In the figure above, the X-axis represents Opinion and the Y-axis represents Respondent

Hypothesis:

The above analysis shows that most customers think cloud technology overall efficiency and features offered by cloud are satisfactory.

Result:

Because most of the company's customers think cloud technology is ..Good, company must ensure that the same standards are maintained and cloud technology is used effectively.

2. OPINION OF CUSTOMERS ON SERVICE DELIVERY

ANALYSIS BASED ON PERCENTAGE:

Opinion	No. of Respondents	Percentage
Excellent	11	37%
Good	13	43%
Fair	4	13%
Poor	2	7%
Total No. of Respondents	30	100%

Respondent's Opinion

....Excellent 37%

....Good 43%

....Satisfaction 13%

..Dis..Satisfaction 7%

Total 30 100%

Interpretation:

37% felt Service delivery is....Excellent,

43% felt Service delivery is ..Good,

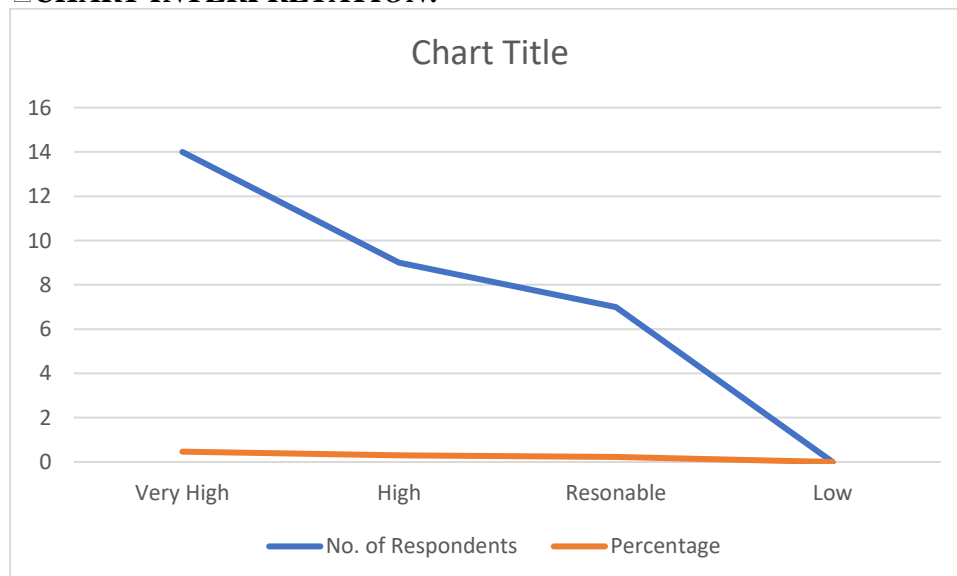
13% felt Service delivery Satisfactory and

7% of the customers are dissatisfied with Service delivery.

Hypothesis:

The above analysis represents that mostly respondents feel that that the Service delivery is ..Good.

□ CHART INTERPRETATION:



Responder's opinion

In the figure above, the X-axis represents Opinion and the Y-axis represents Respondent.

Hypothesis:

The above analysis shows that most customers think cloud Service delivery is ..Good.

Result:

Because most of the company's customers think cloud technology is ..Good, company must ensure that they must take necessary steps to improve service delivery and completely remove dissatisfied customers.

3. CLOUD OFFERINGS AWARENESS.

Analysis based on Percentage:

Opinion	No. of Respondents	Percentage
Well aware	13	43%
More aware	10	33%
Few Known	7	23%
Don't Know	0	0%
Total No. of Respondents	30	100%

Respondent's Opinion

Well-aware 43%
More-aware 33%
Few-known 23%
Dontknow - -
Total30 100%

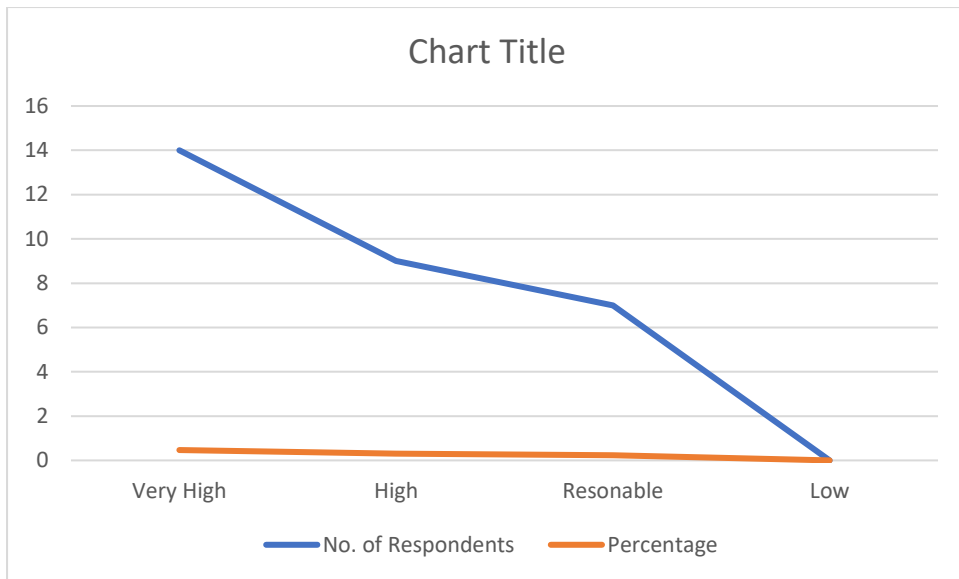
Interpretation:

43% well-aware regarding cloud offering,
33% more-aware regarding cloud offering,
23% knows few details regarding cloud offering, and
None are there who do not know about cloud

Hypothesis:

Therefore it shows that the majority of people are aware about the cloud Products.

□ **CHART INTERPRETATION:**



Responder’s opinion

In the figure above, the X-axis represents Opinion and the Y-axis represents Respondent.

Hypothesis:

The above analysis shows that most customers are aware about cloud offerings.

Result:

Service provide should make people more aware about their new launches and existing service so that more and more people starts using this and resulting in increase in sales.

5. AWS RANKING AMONG OTHER CLOUD SERVICE PROVIDERS

Analysis based on Percentage:

Opinion	No. of Respondents	Percentage
Excellent	13	43%
Good	9	30%
Satisfaction	6	20%
Dissatisfaction	2	7%
Total No. of Respondents	30	100%

Respondent's Opinion

..Excellent 43%
..Good 30%
..Satisfaction 20%
Dis..Satisfaction 7%
Total30 100%

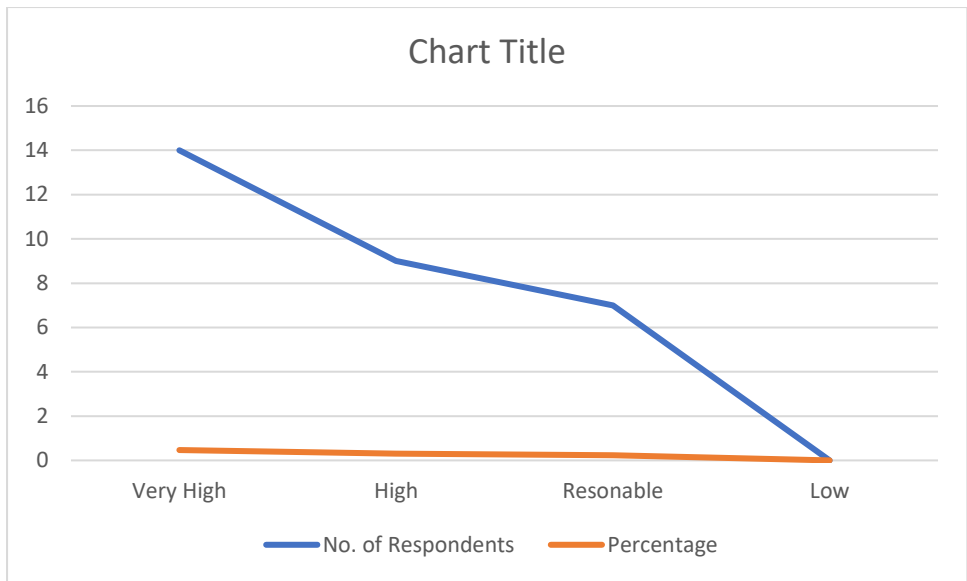
Interpretation:

43% mentions AWS Rank is....Excellent,
30% mentions AWS Rank is ..Good,
20% mentions AWS Rank is Satisfactory
7% of the customers are dissatisfied with the Ranking in market.

Hypothesis:

Analysis represents majority of the people consider and mention AWS cloud provider ranging is excellent.

□ **CHART INTERPRETATION:**



Responder’s opinion

In the figure above, the X-axis represents Opinion and the Y-axis represents Respondent.

Hypothesis:

The above analysis shows that most mention that ranking of AWS among cloud service provider is....Excellent

Result:

The Service provider show atke necessary steps to improve their ranking than the existing one and providing more satisfactory services

6. Cloud Technology Reliability.

Analysis based on Percentage:

Opinion	No. of Respondents	Percentage
Excellent	12	40%
Good	12	40%
Satisfaction	4	13%
Dissatisfaction	2	7%
Total No. of Respondents	30	100%

Respondent’s Opinion

- ..Excellent 40%
- ..Good 40%
- ..Satisfaction 13%

Dis..Satisfaction 7%

Total30 100%

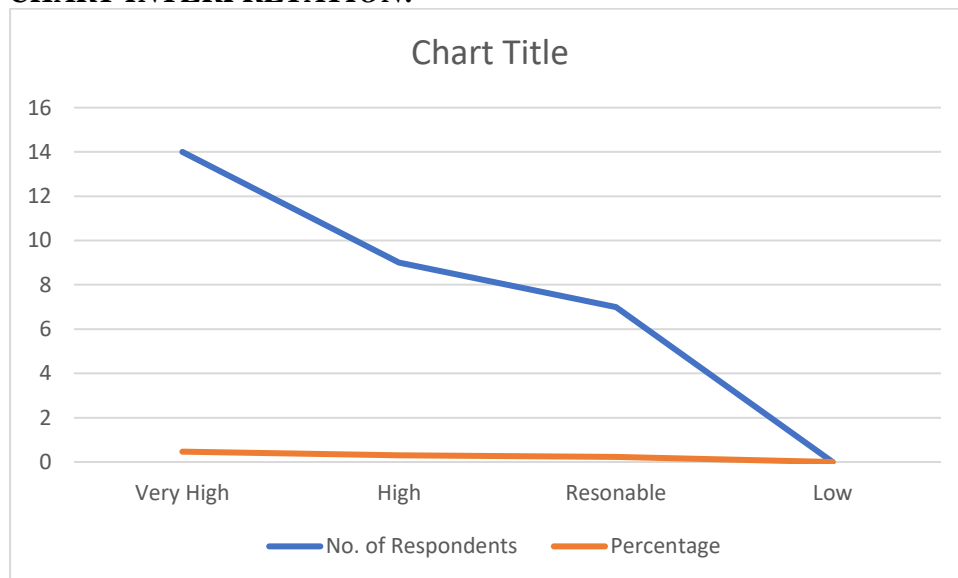
Interpretation:

36% felt Reliability of Cloud technology are....Excellent,
42% felt Reliability of Cloud technology are ..Good,
18% felt Reliability of Cloud technology are fair, and
Only 4% respondednts are dis-satisfied with cloud technology reliability aspect.

Hypothesis:

From the analysis conduct it can be ingerterped that most customer consider cloud as reliable and its reliability is good

CHART INTERPRETATION:



Responder’s opinion

In the figure above, the X-axis represents Opinion and the Y-axis represents Respondent.

Hypothesis:

The above analysis shows that most customers mentions that reliability of cloud products....Excellent and ..Good

Result:

Service provide should make neccessary steps to increase reliability of their product , they should work and anlyse aspect which is decreasing the reliability and improve them to increase customer ..Satisfactions.

7. Compatibility Of Cloud Technology

Analysis based on Percentage:

Opinion	No. of Respondents	Percentage
Excellent	14	47%
Good	13	43%
Satisfaction	3	10%
Dissatisfaction	0	0%
Total No. of Respondents	30	100%

Respondent's Opinion

..Excellent 47%
..Good 43%
..Satisfaction 10%
Dis..Satisfaction 0 0%
Total30 100%

Interpretation:

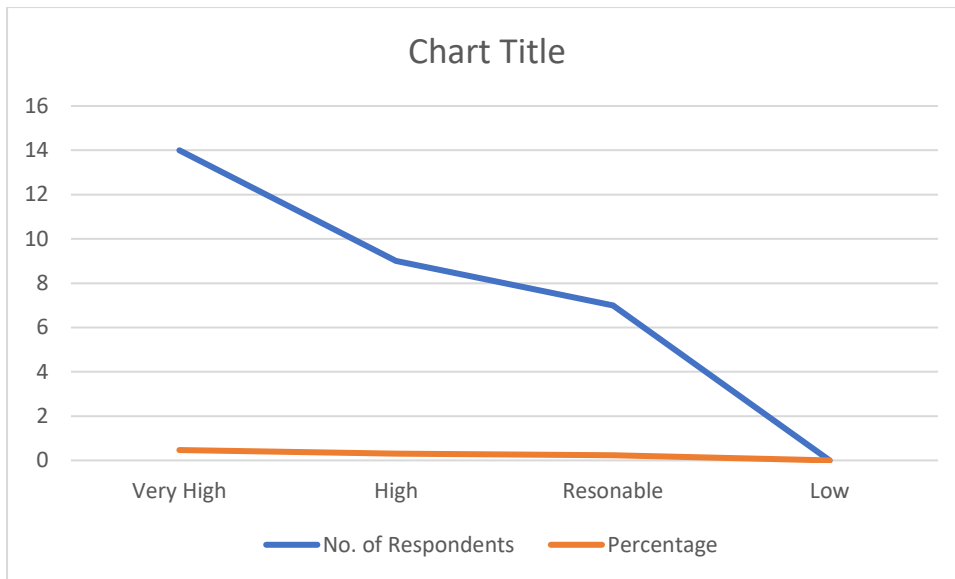
36% felt Compatibility of Cloud technology is ..Excellent,
42% felt Compatibility of Cloud technology is ..Good,
18% felt Compatibility of Cloud technology is -Satisfactory and

Only 4% of the total respondents do not consider or are dissatisfied.

Hypothesis

From the analysis conducted it can be interpreted that most customers consider cloud as compatible and its compatibility as excellent

CHART INTERPRETATION:



Responder's opinion

In the figure above, the X-axis represents Opinion and the Y-axis represents Respondent.

Hypothesis:

The above analysis shows that most customers feels that compatibility of cloud technology is ..Good

Result:

Service provide should make neccessaary steps to increase compatibility of their product , the cloud technology should be compatitibile with its existing as well as the latest technologies.

8. PRICING MODEL OF EXISTING ERP ENVIRONMENT

Analysis based on Percentage:

Opinion	No. of Respondents	Percentage
Very High	14	47%
High	9	30%
Resonable	7	23%
Low	0	0%
Total No. of Respondents	30	100%

Respondent's Opinion

Very High 47%

High 30%
Reasonable 23%
Low/less - -

Total 30 100%

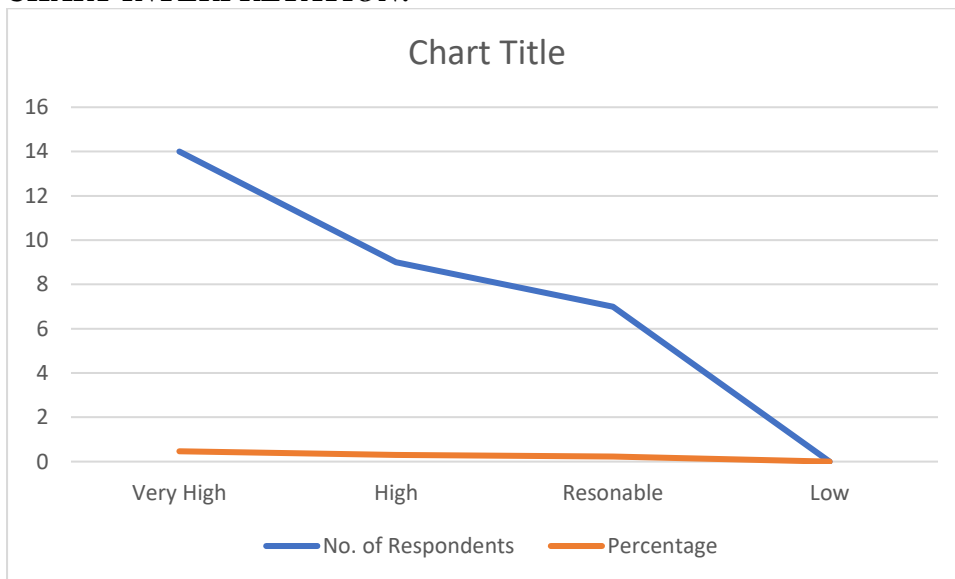
Findings:

46% users/repondent mentions pricing of ERP very-high,
30% users/repondent mentions pricing of ERP as-high,
24% users/repondent mentions pricing of ERP -reasoable
None consider it pricing to be low

Hypothesis:

From the analysis conduct it can be ingerterped that most customer consider ERP prices are very-high

CHART INTERPRETATION:



Responder's opinion

In the figure above, the X-axis represents Opinion and the Y-axis represents Respondent.

Hypothesis:

The above analysis shows that most customers mention that price of ERP products are comparateively very high.

UNDERSTANDING OF CLOUD COMPUTING BY RESPONDANTS

S.No.	UNDERSTANDING OF CLOUD COMPUTING	MSI		SSI		TOTAL	
		Y (%)	N (%)	Y(%) (%)	N (%)	Y (%)	N(%)
1	Familiarity with cloud computing	20	80	0	100	10	90
2	Company uses cloud computing	0	100	0	100	0	100
3	Familiarity with ERP software	80	20	50	50	65	35
4	Usage of ERP only	40	60	15	85	22	88
5	Cost of in-house ERP is more than Cloud computing	70	30	100	0	90	10
6	IT Companies visit you for product selling	80	20	40	60	60	40
7	Does your customer press you for IT-Usage	90	10	40	60	65	35
8	Are you connected with customer online	15	85	0	100	8	92
9	Your customer is a large scale industry	60	40	30	70	45	55
10	IT can improve your company's performance	80	20	30	70	55	45
11	Fixed cost of IT solutions is more	70	30	90	10	80	20
	OVERALL(PERCENTAGE)	55	45	36	64	45	55

Above shows that cloud computing usage and knowledge is very low in both type of industry or segment of industry type . Eighty percent of midscale respondents are aware of and 40 percent have used ERP, compared to 50 percent of those who are aware of cloud technology and 15 percent of those who use it. Since 60% of customers are mid- enterprises, 90% of mid scle customers request IT solutions from outsourcings,Smale scale query rate is 40% and user products 30% are large enterprises. 80% of mid scale companies believe the use of IT solutions can improve performance, but the idea is 30% better when it comes to small scale companies. Both company groups agree on fixed investment, but 20% of Small scale believe it is more costly.

Overall, the overall number of respondents can be said to be 55%, slightly above the average of and above the simple average of 14% for Mid-scale companies attempts to examine users' understanding of the privacy of their data stored outside of the manufacturing company's physical environment. Table 2 summarizes the responses to this.

TABLE-2: RESPONSES REGARDING COFIDENTIALITY AND SECURITY

S.No.	UNDERSTANDING OF CLOUD COMPUTING	MSI		SSI		TOTAL	
		Y (%)	N (%)	Y (%)	N (%)	Y (%)	N (%)
1	Familiarity with cloud computing	20	80	0	100	10	90
2	Company uses cloud computing	0	100	0	100	0	100
3	Familiarity with ERP software	80	20	50	50	65	35
4	Usage of ERP only	40	60	15	85	22	88
5	Cost of in-house ERP is more than Cloud computing	70	30	100	0	90	10
6	IT Companies visit you for product selling	80	20	40	60	60	40
7	Does your customer press you for IT-Usage	90	10	40	60	65	35
8	Are you connected with customer online	15	85	0	100	8	92
9	Your customer is a large scale industry	60	40	30	70	45	55
10	IT can improve your company's performance	80	20	30	70	55	45
11	Fixed cost of IT solutions is more	70	30	90	10	80	20
	OVERALL(PERCENTAGE)	55	45	36	64	45	55

Surprisingly, two types of businesses misunderstand the confidential information on the remote. In contrast, SSI fears a lot of information stored in different places in the cloud and they do not have any controll over it. Overall, 59 percent of Mid scale company do not believe in the privacy of data stored in the cloud, and when it comes to Small scale this negative belief is as high as 64 percent. Both sectors reported an average of 59 percent negative votes The types of IT solutions used, along with the preferred names and uses, are being further explored.Perspectives on the legitimacy of cloud computing are also explored.

FINDINGS AND CONCLUSIONS

Based on the above analysis below conclusions can be drawn

- It has been observed that companies are not well aware about the cloud offering and still rely on ERP solutions and the concept of cloud technology is somewhat new to them
- Customers rely on ERP models which is comparatively higher in cost and if they shift their technology base to cloud they would be able to save more cost.
- Servers and devices in cloud technology is stored in different regions and different availability zones resulting in enterprise feels that their data is not secured and is beyond their reach
- Enterprises are very conscious what actions they can take in case of any data loss, like putting legal foundation on companies or service providers
- Mid scale companies mention that despite ERP being expensive and it is considered superior whereas the small scale companies find the scope in emerging cloud technology
- Majority of the mid scale company has voted that if the service providers works on security aspects of technology they would be able to adapt to this technology.

QUESTIONNAIRE

Questionnaire for Medium and Small-Scale Industries

Name: -

Company Name

1. Occupation: -

- Private Employee
- Businessman
- Retired

2. Age Group

- 20 - 40
- 40 – 60
- Above 60

3. Education

- Illiterate (uneducated)
- Metric/Senior Secondary
- Graduation
- Post-graduation
- Doctorate

No of respondents

Part 1 – General Knowledge/Perception in Cloud Computing

Please answer the questions that follow by ticking **only one** answer in each question.

Q1. Do you know what “Cloud Computing” is?

Yes

No

Q2. Do you know how it works?

Yes

No

Q3. Is cloud computing beneficial for doing a business nowadays?

Yes

No

Q4. Do you have idea about working of cloud computing?

Yes

No

Q5. Do you know how cloud deployment models establish?

Yes

No

Part 2 – E-Marketing services

**For Users (Entrepreneurs, Marketers, and Consumers)*

Please review the statements below and indicate the degree of e-Marketing services from B2B e-

Marketplace in your organization.

Scale:

1 Very Important 4 Somewhat Unimportant

2 Somewhat Important 5 Very Unimportant

3 Neither Important nor Unimportant

Q6. What About the Compatibility of Cloud Technology (Please tick one box)

1 2 3 4 5

Q7. How About the Reliability To Cloud Technology (e.g. Online Customer Service). (Please tick one box)

1 2 3 4 5

Q8. Awareness On All Products of Products services. (Please tick one box)

1 2 3 4 5

Q9. Opinion Of Customers on Service Delivery . (Please tick one box)

1 2 3 4 5

Part 3 – SME Viewpoints on Cloud Computing

This part aims to identify the reason behind a possible engagement of an SME in the Cloud Computing, the most suitable cloud model, the type of cloud service an SME will likely use, and so on.

Q10. What is the size of the enterprise you represent?

1 – 9 Employees

10 – 50 Employees

50 – 250 Employees

Over 250 Employees

Q11. What are the reasons behind your possible engagement in the Cloud Computing?

Remove economic/expertise barriers impeding to modernize business processes by the introduction of Information Technology.

Avoiding capital expenditure in hardware, software, IT support, Information Security by outsourcing infrastructure/platforms/services

Increasing computing capacity and business performance

Diversification of IT systems

Business Continuity and Disaster recovery capabilities

Local and global optimization of IT infrastructure through automated management of virtual machines

Adding redundancy to increase availability and resilience

Controlling marginal profit and marginal costs

Other (please specify) _____

Q12. Which solution do you see as the most suitable for an SME, according to this possible Cloud

Computing taxonomy?

- Public Cloud (owned and managed by unrelated business)
- Private Cloud (owned and managed internally)
- Partner Cloud (owned and managed by a trusted partner)
- A federation of clouds provided by various sources (partner, private, etc)
- Others (Please specify)_____

Q13. Which “layer” of the Cloud would you be most likely to approach?

- Individual software packages (SaaS)
- Complete operating system and software package available via cloud services (PaaS)
- Just infrastructure services such as storage, network, etc (IaaS)
- Security services in the cloud
- Others (Please specify)_____

REFERENCES:

- Janakiram MSV Cloud Computing Strategist; (2010), “Demystifying the Cloud An introduction to Cloud Computing”, Version 1.0 – March.
- Adamov, A ; Erguvan, M.; (2009),“The Truth about Cloud Computing as new Paradigm in IT”,IEEE International Conference on Application of Information and communication Technologies, AICT 2009.
- Dikaiakos, M.D; Katsaros, D.; Mehra, P.; Pallis, G.; Vakali, A.; (2010), “Cloud Computing Distributed Internet Computing for IT and Scientific Research”.Vol.13 ,pp 10, Sept.-Oct. 2009.
- Shuai Z; Shufen Z; Xuebin C; Xiuzhen H; (2010), “Cloud Computing Research and Development Trend”, 2nd International conference on Future Networks, 2010. ICFN ' 10. pp 23, 22-24 Jan 2010.
- Chang, L, Ti ; Chin L; Chang, A.Y.; Chun J, C;(2010), “ Information security issue of enterprises adopting the application of cloud computing”, IEEE 2010 Sixth International Conference on Networked Computing and Advanced Information Management (NCM),pp 645, 16-18 Aug. 2010.
- “GOOGLE Apps,” <http://www.google.com/apps/business/index.html>.
- 5. <http://www.ht2.org/conference/pdf/84.pdf>)
- 6. <http://www.esri.com/news/arcnews/spring09articles/reduce-costs.html>)
- 7. Jensen, M. and Meckling, W. Knowledge (1992), Control and Organizational Structure Parts I and II. In Lars, Werin and Hijkander (Eds.), *Contract Economics* (pp.251-274). Cambridge, MA: Basil Blackwell ll.)