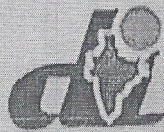Editors
Dr. Mrs. H. V. Gaikwad
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# Digitalization: Impact on Indian Society

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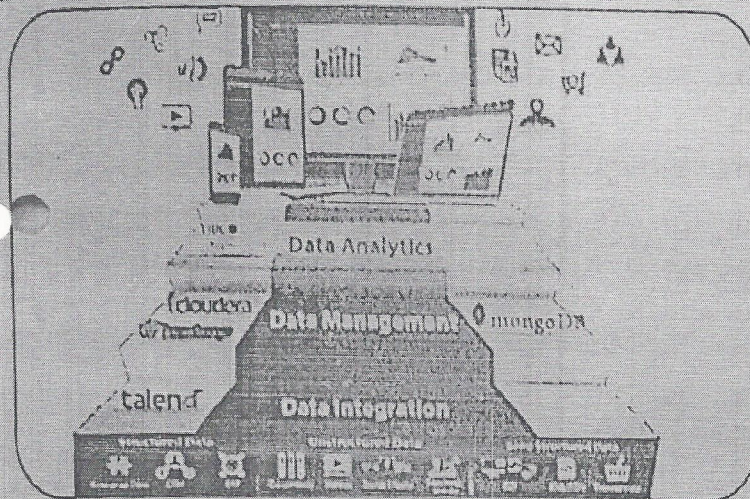Department of Management Studies, Rajarambapu Institute of Technology,
Rajaramnagar in collaboration with
Islampur Chapter of Indian Society for Training and Development, New Delhi

# OVERVIEW OF HADOOP : AN OPEN-SOURCE BIG DATA ANALYTIC FRAMEWORK

Ms. Leena More (Deshmukh)
Research Scholar, JJT University, Rajasthan.



## ABSTRACT

Now a days as size of data is going to be increasing there is a necessity of Big data technology which must support search, development, governance and analytics services for all data type; from transaction and application data to machine and sensor data to social, image and geospatial data, and more. Hadoop is a framework to store and process large amount of data quickly. Its distributed computing model processes data fast. It prevents data processing from hardware failure by making replicas on multiple processors. It can store unstructured data also like text, images and videos. Data lake support to store the data in its original format which helps to generate new queries without constraints. Apache Foundation included four modules in Hadoop basic framework. Namely; Hadoop Common, HDFS, YARN, MapReduce.

## INTRODUCTION :

Big data is being generated by everything around us at all times. Every digital process and social media exchange produces it. Systems, sensors and mobile devices transmit it. Big data is arriving from multiple sources at an alarming velocity, volume and variety. To extract meaningful value from big data, you need optimal processing power, analytics capabilities and skills.

Hadoop is an open-source software framework for storing data and running applications on clusters of commodity hardware. It provides massive storage for any kind of data, enormous processing power and the ability to handle virtually limitless concurrent tasks or jobs.

## HADOOP HISTORY

As the World Wide Web grew in the late 1900s and early 2000s, search engines and indexes were created to help locate relevant information amid the text-based content. In the early years, search results were returned by humans. But as the web grew from dozens to millions of pages, automation was needed. Web crawlers were created, many as university-led research projects, and search engine start-ups took off (Yahoo, AltaVista, etc.).

One such project was an open-source web search engine called Nutch – the brainchild of Doug Cutting

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# 10 | Profitability & Growth: A study of Indian Pharmaceutical Companies

**Dr. Priyanka Singh**

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**Dr. Bipin R. Bankar**

Asst. Professor, JSPM's Jayawant Institute of Management Studies, Tathawade, Pune.

## Abstract

The present study was aimed at analyzing the Profitability & Growth of selected Indian Pharmaceutical Companies during the period of 2010 to 2014. Further, the present study explains the significance of profitability measures of different selected pharmaceutical companies over the period of 2010 to 2014. To measure the significant differences between the year & between the companies selected for the study, hypotheses were framed and tested with the help of Two- way ANOVA technique. Different growth parameters such as Internal Growth Rate & Sustainable Growth rate were selected to measure the growth of the Pharmaceutical Companies. Further to measure the profitability, different parameters such as Gross Profit Ratio, Net Profit Ratio and Return on Equity were selected.

The results of this paper revealed that profitability & growth were not significantly different among different pharmaceutical companies selected for the study and also not significantly different among different years of the study. Hence the present study is the contribution to the existing literature. The pharmaceutical companies listed to the Bombay Stock Exchange were selected. The selection of the sample companies was done on the basis of turnover of the companies and purposive sampling technique was used to carry out the present research.

**Keywords:** Two-way ANOVA, Internal Growth Rate, Sustainable Growth Rate, Return on Equity, Bombay Stock Exchange etc.

## Introduction

The dictionary meaning of Profit (Oxford dictionary) is "money gained in business, especially the difference between the amount earned and the amount spent". In other words, Profit is "advantage or benefit gained from something". In the words of Lord Keynes, "Profit is the engine that drives the business enterprise". Economists generally define profit, i.e. the reward for the entrepreneur as residual of production after all other factors of production get their rewards. The primary objective of a business is to earn profits. Profit earning is considered essential for the survival of the business. A business needs profit not only for its existence, but also for its expansion and diversification. A business firm can discharge its obligations to various segments of the society only through earnings of profits. Thus, Profits are a useful measure of overall efficiency of a business. Profitability of any firm show how successful a firm is in terms of generating profits or returns on the investment made in the business. If a business is liquid and efficient, it should also be profitable.

# Applications of ERP in Various Management Decisions to achieve Business Intelligence

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## Abstract

Through this paper a attempt is made to discuss on the various applications of ERP and how ERP is used to take management decisions. In addition this paper also speaks about using ERP as a tool to achieve business intelligence. Uses of ERM & MBM is also extensively discussed in the given In this paper we have also discussed on the concept of data wear housing and how it is helpful to ERP and BI. "

Keywords: (Business Intelligence (BI), ERP, Master Data Management(MDM))

## Introduction

As we all are aware today's world is Competitive & fast developing. Every Businessman wants to truly maximize their return on investment in less time and in a simple way. For that IT plays an important role in the growth of this competitive world. Number of organization can perform maximum function with the help of latest technologies, which includes software. Software solutions that address all the needs of an enterprise with the process view of every Business to meet their goals and integrate all the functions of the enterprise.

To run the Business in more effective and efficient manner new technologies are now being introduced on a regular basis to make things much simpler and more modernized. One of the latest technology is the introduction of ERP in Business

For archiving success, from complex to simple manner the business can use business intelligence & ERP system on top to do get it. Business intelligence is a broad category of applications, including technologies for reporting, analysis, and sharing of information that helps users make better business decisions.

For BI in ERP integration success, think rapid, agile project planning. There is a key advantage, easy to understand. ERP has extended more help in the business which includes two more important applications namely ERM & MDM.

In this paper we have also discussed on the concept of data wear housing and how it is helpful to ERP and BI.

# A Study of Search Engine Optimization Techniques with reference to Four Educational Tutorial Websites / Blog and its Competitor's Analysis

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## Abstract

E-commerce, advertising and digital marketing plays an important role in the current information technology era. Billions of transactions are done through various websites and application with broad categories. These wide range of categories are searched through the query simply write a keyword, phrase in available or favorite (Google, Ask.com, msn, Bing etc.) search engine. It becomes very easy to collect huge information related to specific keyword, phrase and topic. But, it is quite difficult to achieve quality and effective information among the number of existing websites. With the help of Search Engine Optimization (SEO) techniques it becomes easy to achieve higher rank among the websites through quality contents, readability, converting high user traffic. This paper focus on SEO techniques such as keyword search, catchy title etc. and its effect on ranking. Further the paper focus on competitor's analysis of three websites namely www.javatpoint.com, www.w3school.com and www.guru99.com

**Keywords:** Search Engine, Search Engine Optimization (SEO), SEO Techniques, Keywords, Ranking

## Intoduction

Search Engine (SE) (Google, Ask.com, msn, Bing etc.) is a web based script available over the internet, which searches keywords in the documents and files and finally returns the list of results in the form of web pages containing specified keyword. SE is a technique to improve visibility of a website.

According to British Dictionary search engine defines a service provided on the internet enabling users to search for items of interest.

In a layman language Search Engine Optimization, wherever we enter a keyword in search engine and click on search button then we get list of web pages as a result which contain entered keyword. Normally user

# 16 | WCMS – Changing Face of Web Development with Special Reference to WordPress

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## Mr. Deepakkumar V. Pore
Assistant Professor, MBA department, JSPM's Jayawant Institute of Management Studies Pune.

## Abstract

This paper deals with the changing face of web development which moves from traditional web development language to WCMS (Web Content Management System). Special emphasis is given to the WordPress which is the most used (58%) WCMS in the world today. This paper also discusses the benefits of WCMS to develop websites & blogs than traditional web applications & hand coding methods using languages like HTML, CSS, PHP, .NET etc.

Keywords : WCMS (Web Content Management System), Web development, WordPress.

## Introduction

There are more than 1.15 Billion websites in the world today and the number is increasing every day.[1] The information available in the internet is estimated at more than 1.2 million terabyte.[2] The global era is revolving about IOT (Internet of things), the websites plays a vital role in IOT. Hence we can expect more players in the field of web development. We all come across number of websites each day but hardly few of us think about the backend of the website. It was difficult for a non technical person, blogger and web developers to think about the creation and maintenance of website in a traditional method using hand coding & web languages like HTML, CSS, PHP, .NET, Java script, Python, etc. WCMS has changed the face of web development and let the bloggers and content providers to concentrate on quality web content rather than spending their time on web designing.

### WCMS

WCMS (Web Content Management System) is a software system which will enable the users to deals with content management in web like Publishing of content, modifying the content whenever necessary and maintain the content.[3] WCMS allows you to do all these things of web content management through a central system.

Through the software system of WCMS, a non- technical person can also create and manage the content in a website with a little training of WCMS. WCMS is attracting more number of website developers and bloggers as it easy to use and helps in SEO also.
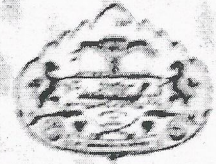
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### AJANTA PRAKASHAN

# 4 | Generation Y and Cell Phone: Identifying the Reasons of Brand LOYALITY

## Dr. Priyanka Singh

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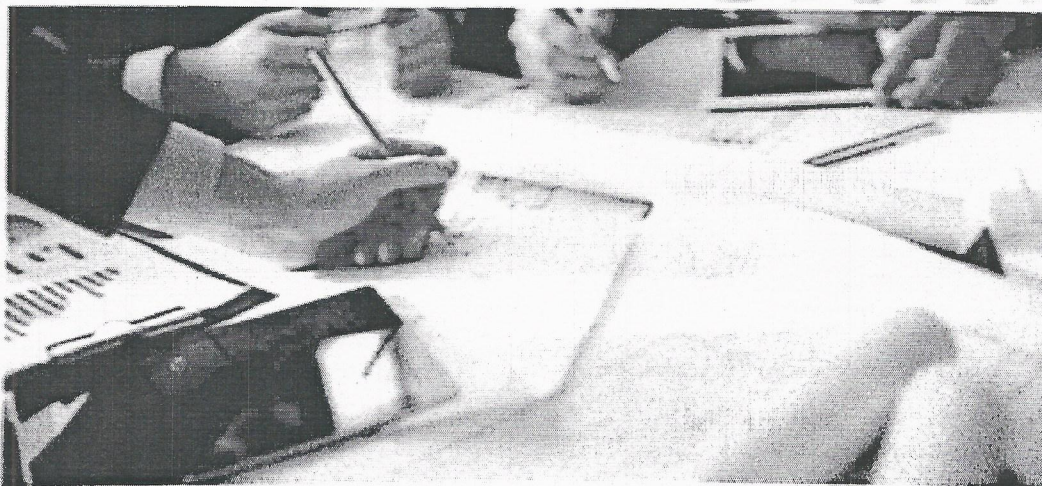
## Dr. Bipin Bankar

Asst. Prof., JSPM's Jayawant Institute of Management Studies, Tathawade. Pune.

## Abstract

The rapid adoption and usage of mobile phones around the world has changed the way peo[ple] communicate, interact and socialize with one another. Overall, consumers are choosing mobile phones o[ver] landlines. This paper makes an attempt to find out the most preferred brand of cell phone amongst t[he] Generation Y and what are the diverse reasons they opt for a specific brand while buying the cell phones.

Keywords: Gen Y, Cell Phones, Brand.

## Introduction

Cell phones have become a staple in homes and business around the world. Businessmen and wom[en] have grown dependant on this form of tele- communication. Whether you are at work or out shopping, it important that you keep in touch with your family. Having a cell phone means that you are accessible in ca[se] of an emergency even if you are out on the road. There are many different cellular phone plans that you c[an] choose from, whether you want a prepaid cell phone or one that has options. The Cell phone has becom[e] multi-billion dollar industry and it is expanding every day. More and more people are becoming technolo[gy] minded and choose to purchase a cell phone. The Use of Cell Phones in Emergencies, perhaps the great[est] benefit to owning a cell phone is the security of knowing that they can call for assistance anytime or anywh[ere] they need too. In past decades, millions of people were stranded on the side of the road in the middle [of] nowhere because their car broke down. Not being able to get help and having to rely on the kindness [of] strangers who passed by. It was not only frustrating it was also very dangerous. There are still people o[ut] there who do not want to own a mobile phone. They do not want to pay for a wireless phone plan. For tho[se] people, a prepaid cell phone is the perfect gift. They can use the phone in emergencies only. With a prep[aid] cell phone, you do not receive a monthly bill and you do not have to sign any contracts.

Cellular phones have come a long way since their inception. Constant improvements have brou[ght] them into the twenty first century. With today cell phones, GPS systems are a standard accessory. There [are] even phones that allow you access the Internet to have directions sent right to your phone.

# A Study of Effective Techniques for Developing Mobile Application user Interface

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## Abstract

Mobile phones with variety of mobile apps are the main instrument for sending, receiving and searching the information. These mobile applications are developed to fulfill the business objectives like revenue generation, brand building, advertisement and reputation. In order to achieve commercial goals and user expectations the user interface needs to be designed with at most care. Every mobile app is examined from user's point of view. The factors like uniformity of view, clarity and ease of operations are the basic factors always focused while designing the UI by the developers. There are various factors that equally impact the experience of user, need to be focused and considered while designing UI. This study explores the different techniques of developing effective user interface and how to avoid the pitfalls.

**Key Words:** Mobile apps, user interface, effective techniques for developing UI, avoiding pitfalls

## Introduction

Now a day Mobile phones with web enable features, are the main instrument for sending, receiving and searching the information. The mobile apps have major contribution in this. According to Margarate Rouse "A mobile app is a software application developed specifically for use on small, wireless computing devices, such as smart phones and tablets, rather than desktop or laptop computers". In order to make the mobile app efficient and effective, the user interface needs to be designed with at most care. User interface is the medium for user and mobile device interaction. This interaction should allow effective operation of the mobile and side by side feeds back information the affects or assist the user's decision making process. This study explores the different techniques of developing effective user interface and how to avoid the pitfalls.

As User Interface (UI) provide access to the computing capabilities of devices, the leading Mobile and application software development companies have engaged the resources into designing and develop-

# 12 | Human Resource - An Unbeatable Competitive Advantage

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### Mr. Deepakkumar V. Pore

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## Abstract

Every organization, immaterial of its size, is in a position to fight against the competition in this globalized world. They are in an urge to strengthen their resources to prove themselves in the business race. In this it is very crucial for each of the business entity to identify one such resource which will be their competitive advantage. Retaining such competitive advantage is a one more challenge to the organization. This paper tries to elaborate certain ways by which the organization can develop its human resources as a competitive advantage and sustain the same for a longer period.

**Key Words:** Competitive Advantage, Human Resource, Retaining of Talent

## Introduction

Today's business economy is very competitive. Every organization is in an urge to prove them to sustain in the market. The customers are becoming more and more demanding from the manufacturers and service providers. They expect that the product or service that they use must be unique or superior in some aspect from that of its competitors. Keeping in mind the expectations of customers the business experts. now a days, insist the business world to concentrate on a key word called "Competitive Advantage".

## Competitive Advantage

Competitive advantage is been defined as Term competitive advantage is the ability gained through attributes and resources to perform at a higher level than others in the same industry or market (Christensen and Fahey 1984, Kay 1994, Porter 1980 cited by Chacarbaghi and Lynch 1999, p. 45)[1].

In simple words competitive advantage can be said as an edge over the competitors. A resource, business model, service method, product itself are some of the examples which can be developed as a Competitive advantage. In case the organization uses any of the above said things as a competitive advantage there are chances that it can be imitated or used by the competitors hence it will always be a threat to the organization. There is one resource which can be developed as a competitive advantage and which cannot be imitated, copied or used by other organization as a competitive advantage Human Resource.

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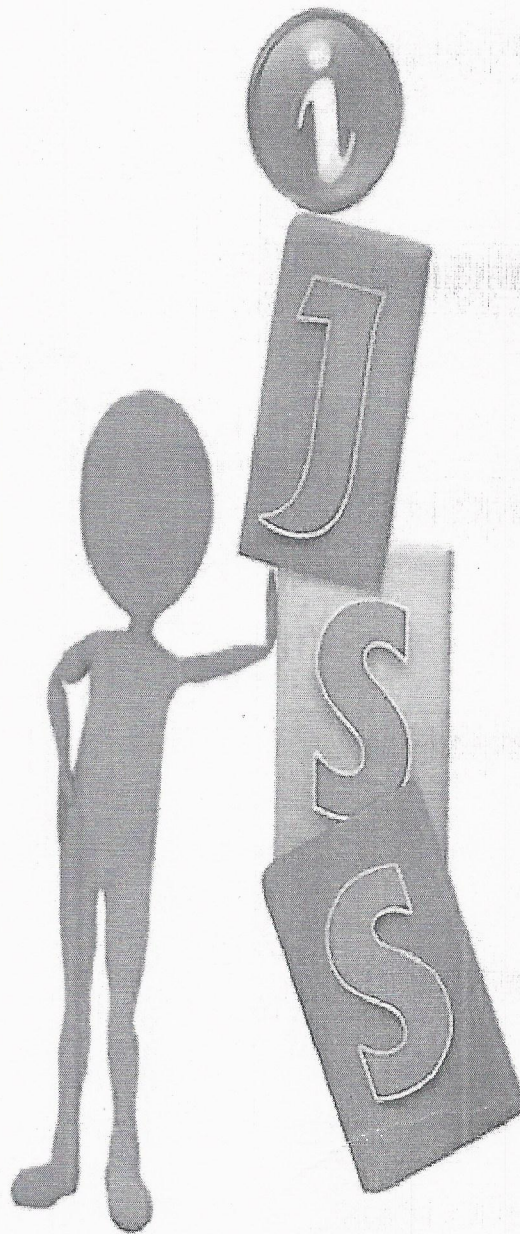
# Predictive Modeling of Service Level Agreement Parameters for Cloud Services

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and

AJAY KUMAR

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Cloud computing has emerged as an important paradigm in Information and Communication Technology space by enabling cost effective, on demand provisioning of elastic computing resources. With limited or almost negligible upfront investment, lots of organizations are attracted towards cloud, for outsourcing their computational needs. Service Level Agreements (SLA) between Cloud providers and the Cloud users are used to assure Quality of Service (QoS) which is one of the big issues that resists organization from availing cloud resources. SLA management is thus an important activity for Cloud providers as SLA violations may lead to contractual penalties and in turn loss of revenue and customer base. Managing SLA involves constant monitoring and controlling various SLA parameters. Therefore, it is desirable for providers to control possible violations before they happen by predicting the values of SLA parameters using the values continuously measured over a time period. We present an agent based SLA-management with design of a coordinator agent that uses a predictive modeling approach for predicting and mitigating SLA violations. The design is based on a case study on available datasets containing measurements on web services of SLA parameters such as response time and throughput.

Keywords: Service Level Agreement(SLA) , Regression, Supervised learning, Agent based Computing.

## 1. INTRODUCTION

Cloud is a pool of heterogeneous resources as a mesh of huge infrastructure. Infrastructure refers to both the applications delivered to end users as services over the Internet and the hardware and system software in data centers that is responsible for providing these services. In order to make efficacious use of these resources and ensure their availability to the end users, resource provisioning is done based on certain criteria specified in SLA. Service Level Agreements indicate the service level parameters that are important to ensure Quality of service and specifies agreed levels to these services usually in quantified form. SLA parameter list can vary depending on the customer requirements but usually include higher level attributes such as availability, reliability and low level attributes such as response time, throughput, latency time, downtime per week, Mean time to Repair(MTTR), Mean time between failure(MTBF) etc. [Tang and Tang 2014]. SLA management is extremely important to avoid SLA violations, to ensure Quality of Service and to enforce optimal utilization of cloud resources. As a long term management goal it may help in coming up with improved SLA negotiation plans and Cloud capacity plans. For cloud service providers, short term goal is to prevent SLA violations as much as possible to enhance customer satisfaction and avoid penalty payments. Therefore, it is desirable for providers to continuously measure and monitor SLA parameters and predict possible violations just in time that they can be controlled. However, accurate prediction of quality of cloud services or SLA violation is extremely challenging because QoS of a cloud service fluctuates drastically at small timescales, due to network traffic conditions, cloud platform loads, and other factors. Multi-agent systems (MAS) are a well known approach to model and implement complex distributed systems and applications. Several researchers have proposed Agent based approaches to managing cloud services including SLA management [Sim 2012] [He et al. 2007]. An agent is autonomous soft-

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# AN ANALYTICAL STUDY OF RANKING CONDUCTED BY NATIONAL INSTITUTIONAL RANKING FRAMEWORK (NIRF) OF MINISTRY OF HUMAN RESOURCE DEVELOPMENT FOR DIFFERENT CATEGORY-A INSTITUTES OF HIGHER & TECHNICAL EDUCATION IN INDIA IN THE YEAR 2016

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*Abstract*— The purpose of the present study was to analyze the ranking conducted for 300 different institutes. These institutes comprise Engineering, Management, Pharmacy and Universities. The ranking was conducted by the NIRF of ministry of HRD in the year 2016. The ranking data was collected from NIRF portal. To satisfy the objectives of the study hypothesis were framed and tested with the help of two way Anova test. From the present study, it was concluded that there has been significant difference in the ranking score obtained from different parameter set by ranking framework among different Universities, Engineering, Management and Pharmacy Institutes in India. The ranking initiative taken by HRD ministry is good move. Through this ranking the competition among different institutes may increase for improving their overall ranking and improve their quality and standards in education. The increased in quality and standards will help Indian institutes to compete with international education standards. The outcome of this ranking paper indicates the performance of the top universities, technical institutes and their area of improvement.

*Keywords*: HRD, NIRF, Two - way Anova, Ranking parameter, quality.

## I. INTRODUCTION

The National Institutional Ranking Framework (NIRF) has been approved by the Ministry of Human Resource development (MHRD) of India. The main purpose of this framework is to outline a methodology to Rank Higher and Technical Institutes and Universities across the country. The ranking methodology and broad parameters have been identified by the core committee set up by the MHRD for ranking. The ranking parameters or indicator are broadly covers 'Teaching, Learning and Resources (TLR)', 'Research Professional Practices & Collaborative Performances (RPC), 'Graduation Outcomes' (GO), 'Outreach and Inclusivity' (OI) and 'Perception'. Therefore, the ranking methodologies are domain specific. The NIRF has been classified institutes under six domains namely Engineering, Management, Pharmacy, Architecture, Universities and Colleges. Further, the Institutes have been classified as Category - A Institutes and Category - B Institutes. The Institutes has been registered under Category A is Research & Teaching Institutes and Category B is Teaching Institutes only.

The five parameters have 100 marks each. Therefore, the total ranking of parameters is for 500 marks. These parameters are India centric and include regional & international diversity, outreach, gender equality and inclusion of disadvantaged sections of society i.e. SC, ST, and OBC etc.

Teaching, Learning & Resources (TLR) is related to the core activities of learning. Assessment marks for this parameter was 100 & ranking weightage was 0.30. This parameter was further assessed into different metrics. They were Faculty Student Ratio with emphasis on permanent faculty (FSR), Combined Metric for faculty with Ph.D. & Experience (FQE), Metrics for Library facilities

# AN EMPIRICAL ANALYSIS OF INTERNET SEARCH ENGINE AWARENESS, PREFERENCES AND SATISFACTION FOR INFORMATION RETRIEVAL: EVIDENCE FROM PUNE REGION.

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## Abstract

*The present study is aimed at analyzing the awareness and preferences of internet search engine for information retrieval. The present study was carried out in Pune region with a sample size of 681 respondents from different parts of Pune region. The Respondents were selected as Research scholar, Academician and Students. A structured questionnaire was prepared to know the awareness, preferences and satisfaction of internet search engine. To satisfy the objectives of the study hypothesis were framed and tested with the help of Chai square test and one way Anova test. From the present study, it was concluded that the sample respondents selected for the study are aware of Internet and in particular Internet search engine irrespective of their gender and age. The result of this paper indicates that there is significant difference in the satisfaction among users with the preferred search engine and information. Further it also reveals that the rating pattern of different search engine is not similar among different users of the search engine selected for the study. The results obtained from different search engine are not same. Almost all the respondents were significantly used Google search engine for information retrieval purpose.*

**Keywords:** *Internet Search Engine, Chai Square Test, Anova Test, Google*

## Introduction

After the huge success of internet, people are friendly to use search engine for different purposes. Before the search engines were developed, the Internet was a collection of File Transfer Protocol (FTP) sites in which users would navigate to find specific shared files listings

# COMPARATIVE STUDY OF EMAIL APPLICATIONS PERFORMANCE FOR MULTI-PROTOCOLS ON WIRELESS NETWORK

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## ABSTRACT

In today's world, the email is most frequently used application for communication through internet for heavy data usages. There is a need to use the appropriate applications with cost effective solution. In this paper, the end-to-end data usages are measured for email application on wireless network. The comparative study is done between the web (browser based) and desktop application using a Gmail account. The success story of result shows that high Bandwidth data usagesis consumed in Browser (web based) email as compared to Desktop based email application. The bandwidth requirement forDesktop email Application is 40% lesser compare to Web based Application.

Key words: Email, application, bandwidth, cost-effective, Internet usage.

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