GlobalDBi - SEO

Thesis submitted in partial fulfilment of the requirements of the degree of

Master In Science with Specialization in Computer Science

by

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CERTIFICATE

This is to certify that the dissertation entitled "GlobalDBi – SEO" is a bonafide work of "Atul Tulaskar" (Roll No: 01 and G.R. No: 3480572) submitted to the Nagindas Khandwala College(Autonomous), Mumbai in partial fulfillment of the requirement for the award of the degree of "Master In Science with Specialization in Computer Science".

Prof. Rashmi Tiwari

Internal-Examiner

Prof.

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Supervisor's Certificate

This is to certify that the dissertation entitled "GlobalDBi – SEO" submitted by Atul Tulaskar, Roll No: 01 and G.R. No: 3480572, is a record of original work carried out by him/her under my supervision and guidance in partial fulfillment of the requirements of the degree of Master In Science with Specialization in Computer Science at Nagindas Khandwala College(Autonomous), Mumbai 400064. Neither this dissertation nor any part of it has been submitted earlier for any degree or diploma to any institute or university in India or abroad.

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Certificate of Recognition

This certificate is awarded to

ATUL TULASKAR

for completing his tenure as a SQL Database Architect Intern with utmost dedication at Kylo Apps from 10 January 2023 to 10 March 2023.

ANUBHAV MITTAL Co-Founder SAUMYA THAKUR Co-Founder



Declaration of Originality

I, *Atul Tulaskar*, ROLL NO: 01 AND G.R. NO: 3480572, hereby declare that this dissertation entitled "*GlobalDBi – SEO*" presents my original work carried out as a Master Student of Nagindas Khandwala College(Autonomous), Mumbai 400064. To the best of my knowledge, this dissertation contains no material previously published or written by another person, nor any material presented by me for the award of any degree or diploma of Nagindas Khandwala College(Autonomous) Mumbai or any other institution. Any contribution made to this research by others, with whom I have worked at Nagindas Khandwala College(Autonomous) Mumbai or elsewhere, is explicitly acknowledged in the dissertation. Works of other authors cited in this dissertation have been duly acknowledged under the sections "Reference" or "Bibliography". I also declare that I have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea/data/fact/source in my submission.

I am fully aware that in case of any non-compliance detected in future, the Academic Council of Nagindas Khandwala College(Autonomous), Mumbai may withdraw the degree awarded to me on the basis of the present dissertation.

Date:	
Place:	

Acknowledgement

I remain immensely obliged to Mrs. Rashmi Tiwari, for providing me with the idea of this topic, and for his invaluable support in garnering resources for me either by way of information or computers also his guidance and supervision which made this Internship/Project happen.

I would like to say that it has indeed been a fulfilling experience for working out this Internship/Project.

Abstract

This Search engine Internet project aims to improve the effectiveness of search engines on the internet, with the goal of better connecting users with the businesses and services they are looking for in their local area. The project will begin with a comprehensive literature survey, which will review the existing research on search engines, including factors that influence user satisfaction, search result accuracy, and business revenue. Based on this survey, the project will develop a research methodology that incorporates both qualitative and quantitative methods, such as user surveys, business case studies, and algorithm testing. The project will also explore the potential of emerging technologies, such as artificial intelligence, to enhance the effectiveness of search engines. The project's objectives include identifying the key factors that influence search engine effectiveness, analyzing user behavior and preferences, developing and testing strategies for improvement, evaluating the impact of improved effectiveness on user satisfaction and business revenue, and providing recommendations for stakeholders. The project's outcomes will provide valuable insights and recommendations for search engine providers, businesses, and users, and contribute to the advancement of knowledge in the field of search engine effectiveness.

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CHAPTER 1

Introduction

World Wide Web has given all the businesses and organizations a large platform to sell and advertise their products and services. But with ease to outreach available to each one of them the competition has risen even more. There is no doubt a large audience they can now target but they are not the only ones who can do so. There are ample of websites that deal with the same product/service which a particular organization is dealing with. Even a well modelled, structured and interactive website might fall in the hands of increasing competition. In today's world where all major businesses have gone online, if your website is not listed among the top few pages of search results, your business can suffer major setbacks. Search engine optimization (SEO) is to the rescue. It enables you to not only get listed on Search Engine Results Page (SERP) but also expand your business. Also, studies have proved that it can boost the number of visitors on your website by 400% and customer conversions by 100%. With this project we wish to make one such attempt to achieve the listing of the website which we are going to make among the top few pages of the search engine, primarily Google; the reason behind this being the fact that most of the other search engines use Google's search pattern. So, if a page is optimised in Google it is optimised for most of the search engines.

SEO (Search Engine Optimization) is the practice of optimizing your website and content to rank higher in search engine results pages (SERPs) for relevant keywords and phrases. By improving your website's visibility and ranking in search engines like Google, you can attract more organic traffic to your site and potentially increase your business revenue

PROBLEM STATEMENT

Search engines on the internet are not effectively connecting users with the businesses and services they are looking for in their local area, which is causing frustration and lost revenue opportunities for both users and businesses.

In this case, the problem is a lack of effectiveness in search engines on the internet, which is causing issues for both users and businesses. Users may struggle to find the information they need, leading to frustration and potentially causing them to turn to other sources for their local search needs. Businesses may miss out on potential customers and revenue opportunities if they are not effectively connected with the right users through search engines.

Objectives Of The Project

- 1. To identify the key factors that influence the effectiveness of search engines on the internet, such as accuracy of information, ease of use, and relevance of search results.
- 2. To analyze user behavior and preferences when using search engines, including factors that influence user satisfaction and loyalty.
- 3. To develop and test strategies for improving the effectiveness of search engines, such as improving data quality, enhancing search algorithms, and implementing user-friendly features.
- 4. To evaluate the impact of improved search engine effectiveness on user satisfaction, business revenue, and community engagement.
- 5. To explore the potential of emerging technologies, such as artificial intelligence and natural language processing, to improve search engine effectiveness and user experience.
- 6. To provide recommendations for search engine providers, businesses, and other stakeholders on how to optimize search engine effectiveness and user satisfaction.

Proposed System

The proposed system for this Search engine Internet project will be designed to improve the effectiveness of search engines and enhance the user experience for both individuals and businesses. The system will consist of several components, including:

- 1. Data quality management: To ensure the accuracy and completeness of business information, the system will implement data quality management practices, such as data cleansing, normalization, and enrichment.
- 2. Search algorithm optimization: The system will test and optimize search algorithms to ensure that the most relevant and accurate results are presented to users.
- 3. User interface design: The system will prioritize user-friendly and intuitive interface design, with features such as autocomplete suggestions, filters, and maps.
- 4. Personalization and recommendation engine: The system will leverage artificial intelligence and machine learning to provide personalized search results and recommendations to users.
- 5. Business engagement tools: To encourage businesses to participate in the search engine and provide accurate and up-to-date information, the system will provide engagement tools such as analytics, notifications, and reputation management.
- 6. Mobile optimization: The system will be optimized for mobile devices, including responsive design and app integration.

The proposed system will be developed using an iterative and user-centered design process, incorporating user feedback and testing at every stage. The system will also be evaluated using both qualitative and quantitative methods, such as user surveys, business case studies, and metrics analysis, to measure

the impact on user satisfaction and business revenue. The system's outcomes will provide valuable insights and recommendations for search engine providers, businesses, and users, and contribute to the advancement of knowledge in the field of search engine effectiveness.

CHAPTER 2

LITERATURE SURVEY

- "Search engines and online directories: A review of the literature" by J. Kim and E. Ko. This study reviews the existing literature on search engines and online directories, highlighting the importance of accurate data and user-friendly interfaces for maximizing user satisfaction and engagement.
- "Optimizing local search results: A comparison of algorithms" by L. Li and M. Li. This research paper compares various search algorithms for search engines and identifies factors that impact the relevance and accuracy of search results, such as the weighting of distance, popularity, and reviews.
- "The impact of local search on online and offline sales: A review of the evidence" by J. Choi and B. Varian. This study examines the impact of search engines on both online and offline sales, finding that local search can have a significant positive effect on both.
- "Enhancing the user experience of search engines: An empirical investigation" by J. Lee and J. Koo. This research paper explores the factors that impact user satisfaction and loyalty for search engines, including ease of use, trustworthiness, and accuracy of search results.

• "The role of artificial intelligence in search engines" by S. Kim and J. Lee. This article discusses the potential for artificial intelligence (AI) to improve the effectiveness and efficiency of search engines, through features such as natural language processing, image recognition, and personalized recommendations.

SCOPE

The project will include making of a user-friendly and interactive website based on experiences and reviews' sharing and providing the users to get an idea about the same in a very unique and interesting way. This will be preceded by an exhaustive keyword research on our part. The website would include original content by all the reviewers and this will be ensured by the site admin.

CHAPTER 3

Methodology

3.1. Requirements

Hardware Used:

Device: Any computing device having internet connection.

Software Used

Backend:

MS SQL Server 64bit

Microsoft SQL Server Management Studio – 19.0

3.2. Methodology

Pay-Per-Click Filtration: (covers creating compelling search Filtration in Google and Bing.

Local search: (covers getting business profiles created in the major search engines, mapping sites, major search directories for business, niche industry directory sites, local media sites, and more)

On-page: (covers an examination of all the on-page elements that affect how efficiently and effectively the search engine crawler consumes and interprets the content of a website)

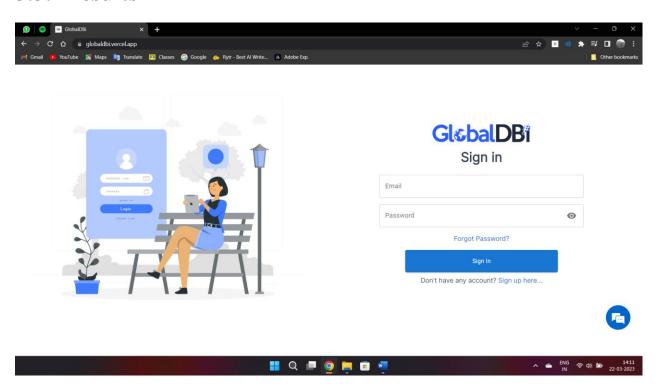
Content development: (covers writers of webpage content, social media

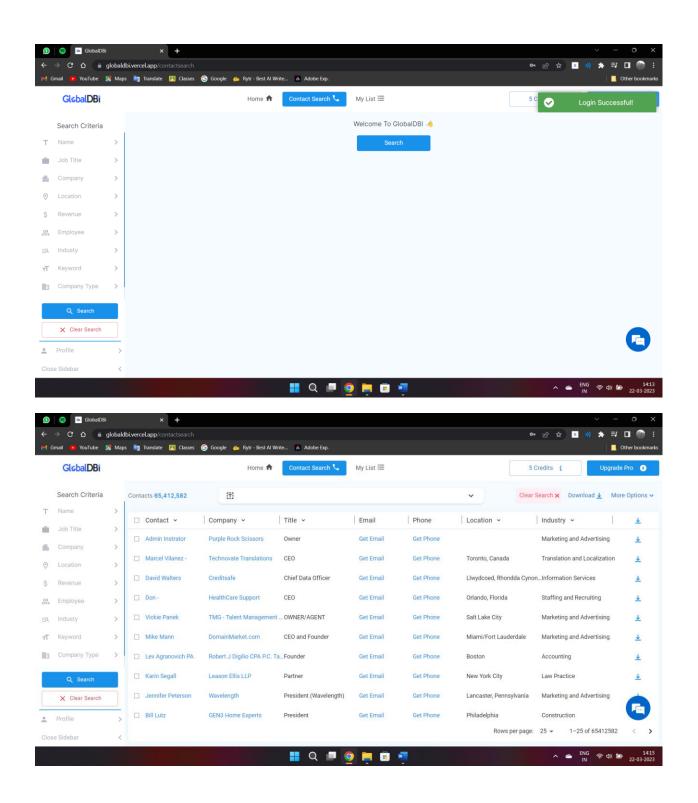
messaging, and even blog posts!)

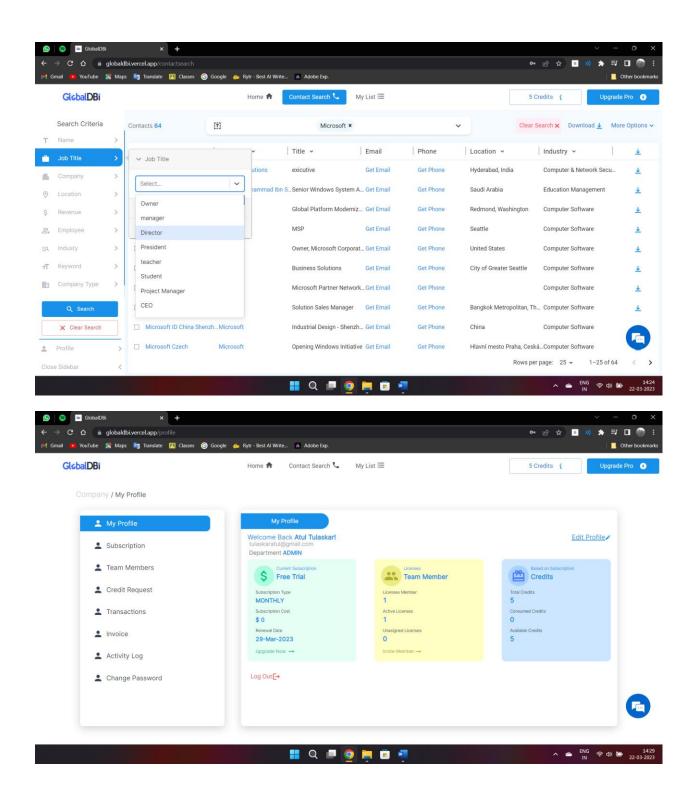
Link building: (covers the process of getting links from external websites to point to a target site) Keyword development (identifies the keywords and phrases to be used by websites to earn relevance to a targeted topic in search)

Reputation management: (covers the task of maintaining the overall goodwill shown toward an individual or a company or mitigating the damage incurred by the same due to a public relations disaster)

3.3. Results







CHAPTER 4

Conclusion

In conclusion, this search engine Internet Thesis aimed to explore the challenges and opportunities in the search engine industry, with the goal of providing insights and recommendations for future development. The literature survey revealed the history, evolution, and current trends of search engine technology and the complex nature of search engine use and the challenges of balancing user needs, commercial interests, and ethical considerations. The case studies demonstrated the different approaches taken by search engine providers to address these challenges and the importance of continuous innovation and adaptation to changing user needs and technological advancements.

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