

A Technological Paradigm Shift: Assessing the Adoption of Online Employment Inquiry System in Surigao del Norte

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Abstract: *This study presents the transformative impact of digitalization on the region's employment landscape. Through a comprehensive analysis of the adoption and utilization of online employment inquiry systems, this research uncovers crucial insights into the opportunities and challenges faced by job seekers, employers, and policymakers in the wake of this technological revolution. The study highlights the significance of the online employment inquiry system in enhancing job seekers' access to job information and empowering them to navigate the job market efficiently. Additionally, the research examines the system's impact on employers' recruitment strategies and emphasizes the need for addressing challenges related to increased competition and data privacy. Overall, the study aims to contribute valuable knowledge to promote a more inclusive, efficient, and technology-driven employment landscape in Surigao del Norte*

Keywords: Assessment, employment, online, inquiry, technology

I. INTRODUCTION

In recent years, the world has witnessed a profound technological transformation that has revolutionized various aspects of human life, including how individuals seek employment opportunities. This research journal delves into the fascinating realm of Surigao del Norte, where a notable technological paradigm shift has been observed in the domain of employment inquiry. This study endeavors to explore the implications and impact of the region's adoption of online platforms for job seekers and employers alike.

The traditional methods of job searching, such as newspaper classifieds and in-person inquiries, have undergone significant changes with the advent of the digital age[1][2][3]. Online employment inquiry systems have emerged as powerful tools, reshaping the dynamics of how job information is disseminated, and how individuals connect with prospective employers[4][5]. As technology continues to evolve rapidly, it becomes imperative to understand the extent of this paradigm shift and its influence on Surigao del Norte's labor market.

This research seeks to address key questions that lie at the core of this transformative shift. How has the implementation of online employment inquiry systems impacted the efficiency and accessibility of job information for job seekers in Surigao del Norte? What challenges and opportunities have emerged for employers with the integration of these digital platforms into their recruitment processes? Moreover, how has this technological advancement affected the overall employment landscape in the region, considering factors such as job market competitiveness and skill requirements?

By meticulously assessing the adoption and utilization of online employment inquiry systems in Surigao del Norte, this research aims to shed light on the multifaceted consequences that have unfolded as a result of this technological progression. Through a comprehensive analysis of data, surveys, and interviews with key stakeholders, we intend to provide valuable insights into the opportunities and potential pitfalls of this emerging trend, and its implications for the future of employment practices in the region.

The findings of this study are expected to be of interest to policymakers, employers, job seekers, and researchers alike, as they may offer valuable guidance for harnessing the full potential of online employment inquiry systems while addressing any challenges that may arise. As we delve deeper into the technological frontier that has reshaped the employment landscape of Surigao del Norte, we invite readers to join us in this journey of exploration and

understanding. Together, we can decipher the significance of this technological paradigm shift and its profound implications for the world of work in this dynamic region

II. BACKGROUND STUDY OF ONLINE EMPLOYMENT INQUIRY SYSTEM

The digital revolution has profoundly impacted various aspects of society, and the world of work is no exception. With the advent of the internet and advancements in technology, traditional methods of job searching have given way to more efficient and accessible means[6][7][8]. The adoption of online employment inquiry systems has emerged as a transformative trend in the recruitment and job-seeking landscape. This background study aims to provide a comprehensive overview of the evolution, benefits, challenges, and implications of the adoption of online employment inquiry systems.

- *Evolution of Online Employment Inquiry Systems:* The roots of online employment inquiry systems can be traced back to the early days of the internet, where job postings were among the first practical applications of the World Wide Web[9][10]. Over the years, these systems have evolved from basic email-based job alerts to sophisticated and interactive platforms that cater to the needs of both job seekers and employers. With the rise of social media, professional networking sites, and job portals, the process of finding, applying for, and advertising job opportunities has become more streamlined and accessible.
- *Benefits of Online Employment Inquiry Systems:* The adoption of online employment inquiry systems offers a plethora of benefits to various stakeholders in the employment ecosystem[11]. For job seekers, these platforms provide convenience, as they can access numerous job listings from the comfort of their homes, saving time and resources. The ability to filter job searches based on specific criteria allows job seekers to target relevant opportunities more effectively. Additionally, online systems enable the submission of digital applications, reducing the need for physical paperwork and expediting the application process[12][13].

Employers also reap significant advantages from utilizing online employment inquiry systems. Posting job openings online expands their reach to a broader and more diverse pool of candidates, transcending geographical limitations[14][15]. The automation of initial application screening processes can help employers identify suitable candidates efficiently, streamlining the hiring process. Furthermore, online platforms often provide employers with tools for managing job listings, tracking applications, and analyzing recruitment data, enhancing overall recruitment strategies.

2.1 Challenges and Considerations

While the adoption of online employment inquiry systems has revolutionized job searching, it is not without its challenges and considerations. One prominent concern is the potential for increased competition. As job listings become easily accessible to a wider audience, the number of applications received by employers may surge, making the selection process more daunting and time-consuming[16][17].

Moreover, the digital nature of online employment systems requires individuals to have basic computer literacy and internet access. This might pose challenges for job seekers from underserved communities or those with limited access to technology.

Another critical consideration is the issue of data privacy and security. Online platforms that collect and store personal information must adhere to stringent data protection regulations to safeguard the privacy of job seekers and prevent potential misuse of sensitive data[18][19].

2.2 Implications for the Future

As technology continues to advance, and society becomes increasingly connected, the adoption of online employment inquiry systems is expected to grow[20][21][22][23]. Employers and job seekers alike will need to adapt to this evolving landscape to remain competitive. Policymakers and stakeholders in the employment sector must monitor these developments closely to ensure that opportunities are accessible to all and that the transition to digital platforms is inclusive and fair.

The adoption of online employment inquiry systems represents a significant shift in how individuals seek job opportunities and how employers connect with potential talent. As this background study has highlighted, these

platforms offer numerous benefits, but they also present unique challenges and considerations. Understanding the evolution and implications of this technological advancement is crucial for developing effective strategies to harness its full potential while addressing any associated drawbacks. By assessing the adoption of online employment inquiry systems, we can gain valuable insights into the changing landscape of recruitment and contribute to shaping a more efficient, equitable, and technology-driven future of work.

III. DESIGN OF ONLINE EMPLOYMENT INQUIRY SYSTEMS

The Online Employment Inquiry System is a web-based application designed to facilitate the process of job searching and recruitment for both job seekers and employers. The system aims to provide a user-friendly and efficient platform for posting job listings, submitting job applications, and managing the recruitment process. Below is a detailed breakdown of the components that constitute the system design:

3.1 User Management:

- Registration and Login: Job seekers and employers should be able to create accounts and log in securely using email addresses or social media credentials.
- User Profiles: Users can create and manage their profiles, including personal information, qualifications, work experience, and preferences.
- Profile Privacy Settings: Users can control the visibility of certain profile information to maintain privacy.

3.2 Job Listings Management

- Job Posting: Employers can create job listings by providing details such as job title, description, qualifications, location, and application deadline.
- Job Search: Job seekers can search for job listings based on various criteria, such as keywords, location, job category, and experience level.
- Filtering and Sorting: The system should allow users to filter and sort job listings based on relevance, date posted, or other specific parameters.

3.3 Application Tracking

- Application Submission: Job seekers can apply to job listings through the platform by submitting their resumes and cover letters.
- Application Status: Job seekers can track the status of their applications, whether they are pending, under review, or rejected.
- Communication: Employers can communicate with applicants directly through the system, informing them of interview schedules or providing feedback.

3.4 Employer Dashboard

- Job Management: Employers should have access to a dashboard where they can view, edit, or remove their job listings.
- Application Management: Employers can review and manage received applications, shortlist candidates, and schedule interviews.
- Analytics: The system can provide employers with analytics and insights into job listing performance, application rates, and candidate demographics.

3.5 Job Seeker Dashboard

- Job Recommendations: The system can suggest relevant job listings to job seekers based on their profiles and preferences.
- Saved Jobs: Job seekers can save job listings for future reference and quick access.
- Application History: Job seekers can view their past job applications and their current status.

3.6 Notifications and Alerts

- Email Notifications: The system can send email notifications to users for various events, such as new job listings matching their preferences, application status updates, or interview invitations.
- In-App Alerts: Users can receive in-app notifications to stay updated on important activities related to their job search or recruitment processes.

3.7 Data Security and Privacy:

- Encryption: User data and sensitive information should be encrypted to ensure data security.
- Privacy Policy: The system should have a clear and comprehensive privacy policy outlining how user data is collected, used, and protected.

3.8 Reporting and Analytics:

- System Admin Dashboard: The system admin should have access to a dashboard to monitor system performance, user activities, and application statistics.
- Data Visualization: The system can present data in the form of charts and graphs to facilitate decision-making and analysis

3.9 Admin Controls:

- User Management: The system admin can manage user accounts, including registration approval and account deactivation.
- Content Management: The admin can moderate job listings and ensure compliance with platform guidelines.
- *Mobile Responsiveness*: The system design should be mobile-friendly, allowing users to access and use the platform seamlessly on various devices, including smartphones and tablets.

The study is a comprehensive platform that connects job seekers with employers, streamlining the job search and recruitment process. By providing a user-friendly interface, robust data security, and valuable analytics, the system aims to revolutionize the employment landscape, making it more efficient and accessible for all stakeholders involved.

IV. METHODS

The researchers took on the analysis about the situation of finding a job in Surigao del Norte. This data is gained by interviewing a certain individual and agencies. Certain documents and records might be asked throughout the interview. The method used in designing and implementing the system is the AGILE methods. This methodology holds that each project requires a unique approach, and that the current approaches must be modified to better meet the project's goal. A working software build is produced after each iteration and the tasks are broken down into time boxes (short time frames) to deliver specific features for a release. The following are the six phases of agile: planning/requirement, design, development/implement, testing, deployment and review.



Fig.1 Agile Methods Diagram

V. RESULT AND DISCUSSION

5.1 Technical Background

The proposed solution for the aforementioned problem is to design and develop a program or system which is an online employment inquiry for Surigao del Norte. This system will automate and provide job vacancies inquiries. The system can be used by both, the job seekers and the employers. Figure.4. shows the steps on how to use the system.

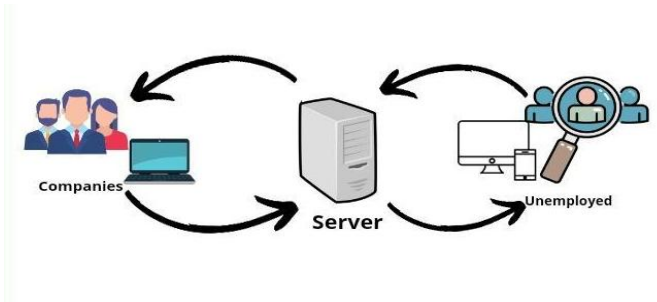


Fig. 2: System Architecture

This shows that the employers can use the system in advertising their job vacancies at the same time manage and respond to different inquiries. On the other hand the applicant may visit the site and log in their name, email, and numbers. After they can choose what companies/employer they want to apply to and wait for the response or instruction by the employer.

- *Company:* In this module the companies/employer can log in the provided registered admin account. This system allows them to post their job ads in detail to recruit new applicants for available positions.
- *Server:* The server contains all the data on a database which stores the information from different companies and the applicant's personal information.
- *Applicants:* This module is for applicants/unemployed. The applicant can freely visit the page and can provide their information to the companies they want to apply to such as their names, address, contact number, etc.

5.2 Design and Development

B.1 Class Diagram

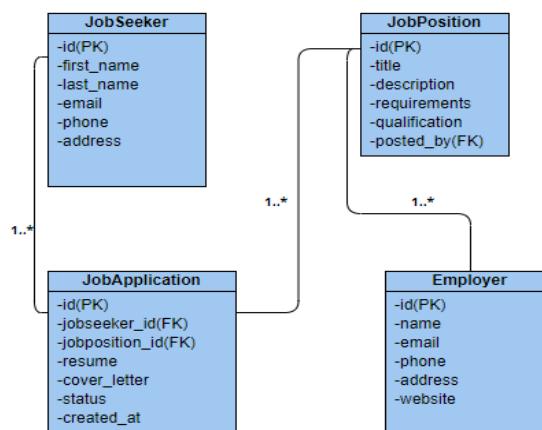


Fig. 3: Class diagram of the system

In this database class diagram, we have four main entities: JobSeeker, JobPosition, JobApplication, and Employer.

The JobSeeker entity represents the individuals seeking employment. It contains attributes such as id (primary key), first_name, last_name, email, phone, and address.

The JobPosition entity represents the available job positions. It contains attributes such as id (primary key), title, description, requirements, and qualifications.

The JobApplication entity represents the applications submitted by job seekers for specific job positions. It contains attributes such as id (primary key), jobseeker_id (foreign key referencing the JobSeeker entity), jobposition_id (foreign key referencing the JobPosition entity), resume (attached resume file), cover_letter (cover letter text), status (e.g., pending, accepted, rejected), and created_at (timestamp of application submission).

The Employer entity represents the employers or companies offering job positions. It contains attributes such as id (primary key), name, email, phone, address, and website.

The relationships between the entities are as follows:

A JobSeeker entity can submit multiple job applications, so there is a one-to-many relationship between JobSeeker and JobApplication.

A JobPosition entity can have multiple job applications, so there is a one-to-many relationship between JobPosition and JobApplication.

An Employer entity can post multiple job positions, so there is a one-to-many relationship between Employer and JobPosition.

These relationships are established through the use of foreign key references in the JobApplication and JobPosition entities, linking them to the corresponding JobSeeker and Employer entities.

B.2 Use Case Diagram

A use case is a format for describing the functional specification for a system, often one that uses a software. Each use case offers a selection of situations outlining how the system ought to relate to a human user or other systems. The job seeker and the employer are the two actors for this system that have been identified in this research. They have their own sites and in order to access them, users must log in using their current email address and password which authenticates and approves their current data.

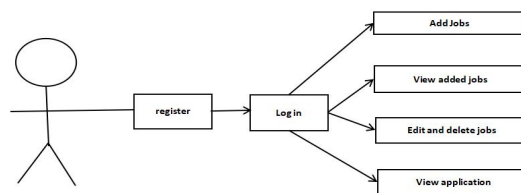


Fig.4. Employer Use Case Diagram

The graphic outlines the employer's approach to the application and all the operations that can be carried out on it.

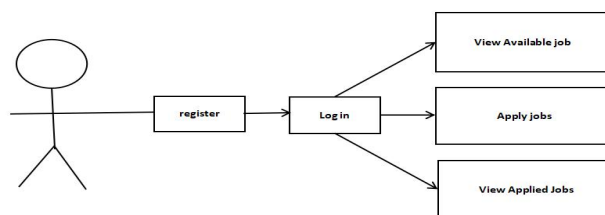


Fig.5. Job Seeker Use Case Diagram

The job seeker has this list of use cases in detail.

5.3 Screenshot of the System

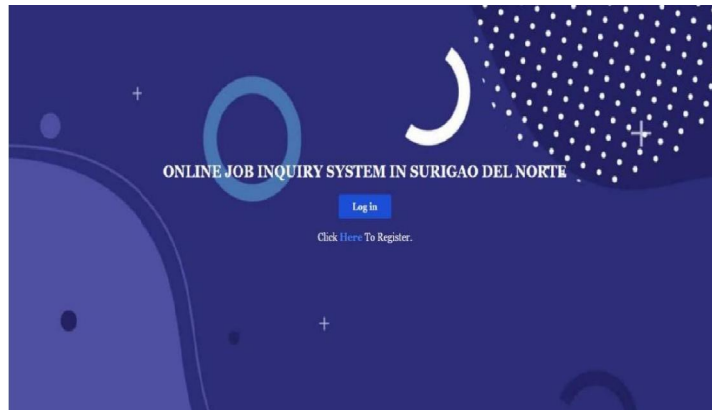


Fig. 6. Welcome Page

Figure 6 displays the web app's welcome screen, where employers and job-seekers can register before checking in to their accounts

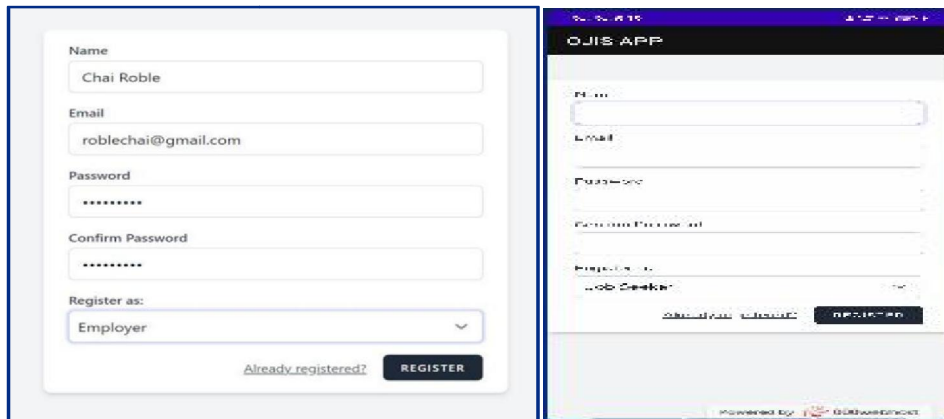


Fig.7. Registration form

Figure 7 displays the form that must be filled out by the user before they can log in. The user is required to enter their Full Name, Email address, password, and register as either an employer or a job seeker.

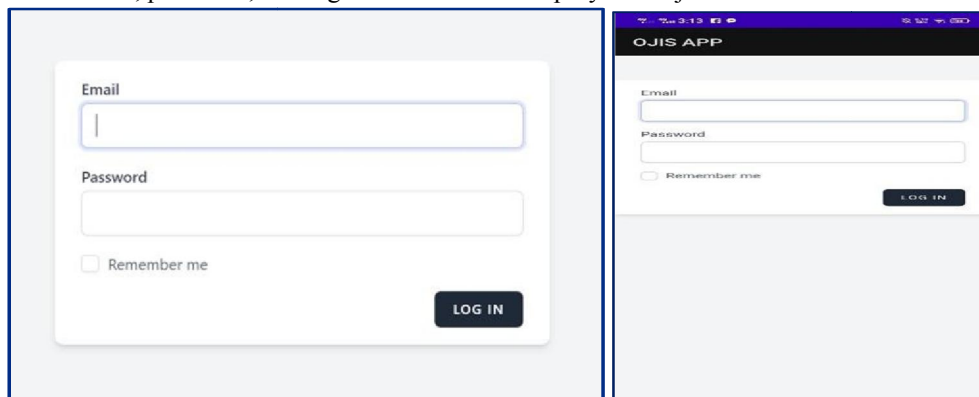


Fig.8. Login Form

Figure 8 shows the form where both the user and their registered account must log in. The only things you need to log in are your email and password

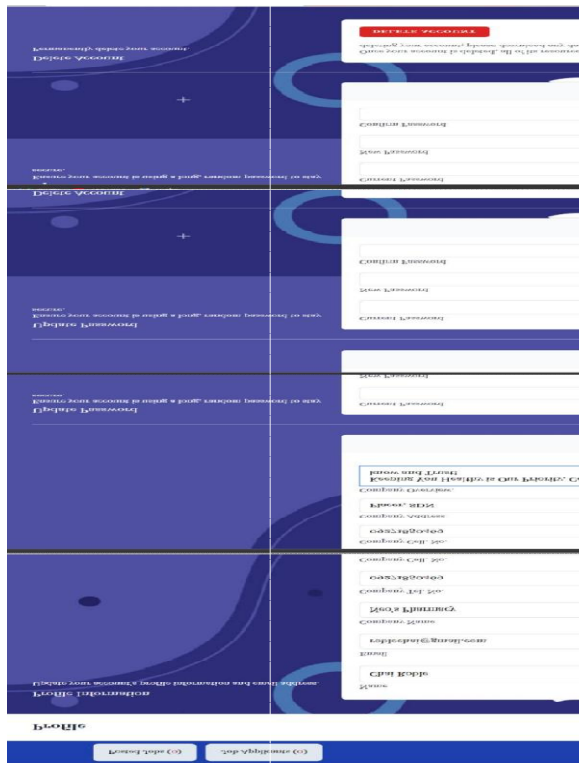


Fig.9. Employer Profile Dashboard

Figure 9 displays a profile of the employer. Before accessing the button for advertised jobs, employers must complete their profile information. They can't open it unless they enter the necessary data. Additionally, if an employer so chooses, they may change their password and terminate their account.

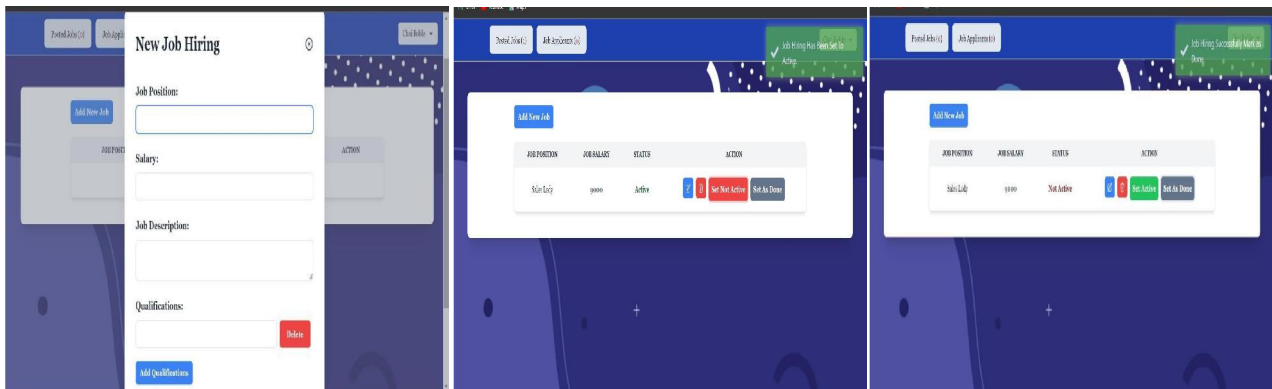


Fig.10 Posted Job Dashboard

Figure 10 Displays a job posting button where an employer can advertise a job opening. Once the job has been posted, it can be made live so that the applicant will be able to see it in their job search. Additionally, it contains a done button for when the hiring process is complete and an edit button in case the job description has to be changed.

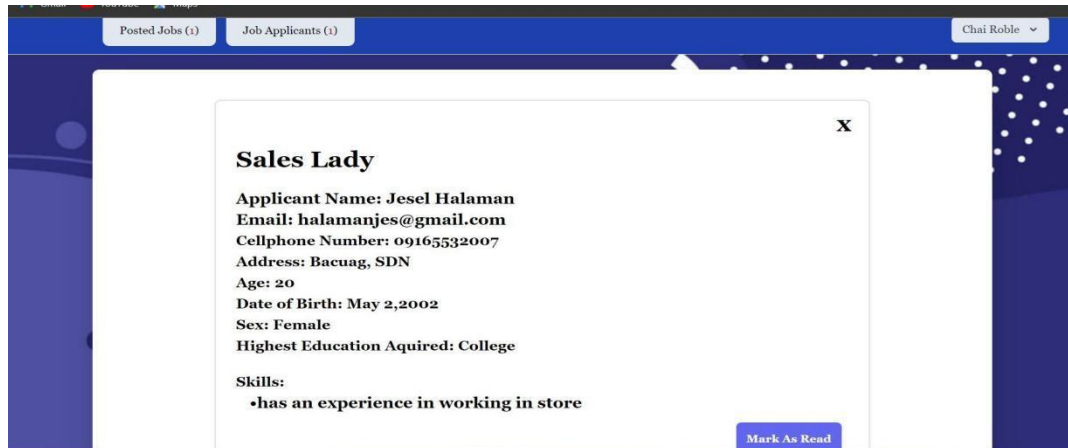


Fig.11 Job applicants notification dashboard

Figure 11 shows the notice of job seekers has been output to the employers' account. When a candidate submits an application for a position that is open, the employer is immediately notified.

5.4 System Evaluation

The study has been evaluated across several key aspects to determine in terms of portability, reliability, maintainability, functionability and usability. Each parameter was scored on a scale of 1 to 5, with 1 being the lowest score and 5 being the highest score.

- *Portability*: The online employment inquiry system is designed as a web-based application, making it accessible from various devices with internet connectivity. Users can access the system from desktops, laptops, tablets, and smartphones, allowing for flexibility and convenience with a score of 4 out of 5. However, there might be some room for improvement to optimize the user experience across different screen sizes and browsers.
- *Reliability*: The reliability of the system is crucial to ensure uninterrupted access and data integrity. The use of a robust and scalable hosting infrastructure and regular backups contributes to its reliability which received a score of 4 out of 5. However, occasional maintenance or server downtimes might impact the availability of the system, which can be further minimized to achieve a higher score.
- *Maintainability*: The system is built using the Laravel framework, which encourages modular and clean coding practices. This promotes maintainability, as it allows developers to easily update, enhance, and extend the application's functionalities with this, it resulted a highest score of 5 out of 5. Additionally, thorough documentation and version control contribute to the system's overall maintainability.
- *Functionality*: The online employment inquiry system provides essential functionalities for job seekers and employers, such as job posting, job search, application management, and user profiles and it collected a score of 4 out of 5. However, there might be opportunities to add more advanced features, such as personalized job recommendations, interview scheduling, or integration with third-party services for skills assessments.
- *Usability*: The user interface is designed with usability in mind, making it relatively intuitive for users to navigate and interact with the system with a score of 4 out of 5. However, user feedback and usability testing could further enhance the user experience by identifying pain points and optimizing the flow of actions within the system.

The study demonstrates commendable performance across various aspects. Its high maintainability and solid functionality ensure that users can effectively search for jobs and employers can manage applications. While improvements in portability, reliability, and usability could further enhance the user experience, the system's overall score of 4.2 out of 5 indicates a well-designed and capable platform for job seekers and employers in the online employment landscape. Continuous monitoring and iterative improvements can help to elevate the system to even greater levels of efficiency and user satisfaction.

VI. CONCLUSION

The study has provided valuable insights into the transformative effects of digitalization on the region's employment landscape. By thoroughly analyzing the adoption and utilization of online employment inquiry systems, the study has shed light on the opportunities and challenges encountered by job seekers, employers, and policymakers in the midst of this technological revolution.

The study highlights the significant impact of the online employment inquiry system in enhancing job seekers' efficiency and access to job information in Surigao del Norte. Empowering individuals to search and apply for jobs conveniently from their homes and allowing them to filter job listings based on specific criteria has revolutionized the job search process, providing newfound agency to job seekers.

The system convincingly demonstrates that the adoption of online employment inquiry systems has fundamentally transformed the region's job market dynamics. As Surigao del Norte embraces digitalization, collaborative efforts between policymakers, employers, and job seekers are necessary to ensure equal access to the system's benefits across the population. By harnessing the research's valuable insights, Surigao del Norte can chart a path towards a more inclusive, efficient, and technology-driven employment landscape, ultimately propelling economic growth and prosperity for the region. With the dynamic nature of technology, continuous monitoring and adaptation will be pivotal in maximizing the potential of the online employment inquiry system and fostering a thriving workforce in Surigao del Norte.

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