

A Framework of E-Recruitment System for Law Enforcement Agencies Government of Pakistan.

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Abstract

The recruitment process is major challenge for the organisations in these days. Existing methods of recruitment causes various difficulties, such as, job application prices, its documentation, having transparent selection of deserving candidates. Sindh police is one of those organisations having need for a computerised recruitment process to deal with the issues discussed earliest. Purpose of this study is to study and investigate the existing recruitment process and develop a model for e-recruitment in Sindh police. This study is based on 3 qualitative case studies. Data collection including 20 semi-structured interviews form persons working in SindhPolice at different level of working jobs in the organisation. It also includes investigation of internal and external documents having various reports published by SindhPolice. It also includes various reports published in print and electronic media. This study identifies that not having an advanced recruitment process is major issue for SindhPolice. This study contributes in the area of existing research by providing an extend framework for e-recruitment process for organizations proposed by[1]. It also identifies the existing weaknesses in the current process of recruitment in SindhPolice. It provides an effective solution for effective and transparent recruitment in SindhPolice, which guides the management of organisation for effective selection process of the candidates. The proposed research model provides the solution for enhances recruitment process in SindhPolice and provides the solution for creating and storing an applicantprofile account, create and announces departmental vacancies, automated system validation for short listing conditions as per given departmental rule of recruitment process, tracking automated physical (running, jumping) examination by using RFID technologies.

Keywords: Computerized Recruitment system, Online Job Portal System for Law Enforcement Departments of Pakistan, Sindh Police.

1. Introduction

The recruitment is human resources useful administration function, recruitment is one of the exercises that effect most basically on the general execution and advancement of any organization. Currently in Pakistan, advanced transparent recruitment system is a big issue for government sector institutions [2].Electronic employment is the arrangement of staff enlistment the utilization of computerized assets, which is relies upon web. E-enlistment, likewise recognized inside the writing as online Recruitment, Web based or digital recruitment refers to the activity of promoting work opportunities on the web, and the formal sourcing of realities about employments on the web. Public/Private organizations and recruitment agencies have moved a lot of their recruitment method electronic so as to enhance the pace by which job applicant can be matched with stay vacancies. Using database technologies, and online job advertising boards and search engines, public/private sectors can now fill posts in a fraction of the time beforehand possible. The cause of the study is to suggest a conceptual model the lookup on recruitment with the help of assessing source effectiveness based totally on new measures that observe pre-hire criteria, with a transparently centres of attention on e-recruitment. This will furnish an overview of the modern study in terms of the purpose at the back of the research primarily based on identified gaps inside the literature. Over the years the importance of fine human helps administration practices for public/private sector organizations has been highlighted by the increasing quantity of lookup posted inside the media, in each scholarly and practitioner-focused journals and magazines. A key aspect of human aid management is the recruitment of staff, as this characteristic generates the human capital that forms the foundation of companies. The future success of the enterprise is forces based on the success of human resource efforts, which evolves through the identification and appeal of quality new employees generated from the recruitment process that will stimulate employer to development as a result of manpower capabilities on hand in the organization.this research based project titled "Digital E-Recruitment System" is a computerized straightforward based venture which is give numerous highlights for partners of Sindh police division, administration of Sindh and furthermore competitors of policing officials, an applicant can enrol themselves by utilizing web association 24 by 7, at whatever point the Sindh police office report number of opening it will appears on authority online entrance additionally guidelines of the enlistment for

explicit positions, a wannabe can apply through appropriately by utilizing own logging account.

After fruition of online application during dead line the framework is makes shortlisted applicants and rejected number of up-and-comers according to given parameters of framework. The aspirant can check and download the departmental news updates, newsletters and pre written examination entry slips with the help of online account loggings. In Sindh province, many of public/ private sectors are working internet based facilitations to the applicants for attraction and given technological trends for advancement of human resources process, this system is based on paperless and no anyone can claim for injustice in the recruitment system.

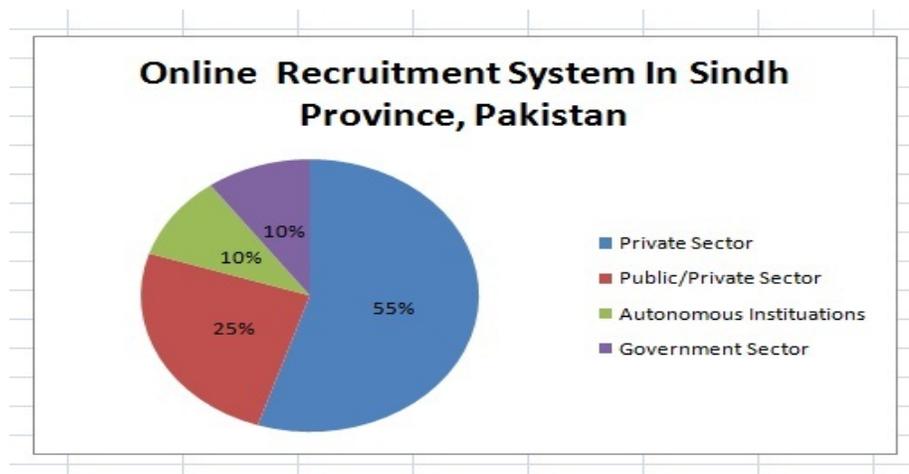


Figure 1 Source: Employment Exchange Regional Office Khairpur, Government of Sindh

1.1 Existing Recruitment Methods in Sindh Police Department

- Approval of competent authority required Number of Vacancies.
- Set Advertisement for Publishing in the national newspapers, this is highly cost.
- Receiving of Manual Applications.
- Manual Scrutiny Process.
- Taken Manual Patterns based Written, physical, and other necessary examination.
- Manual Medical Fitness Reports.

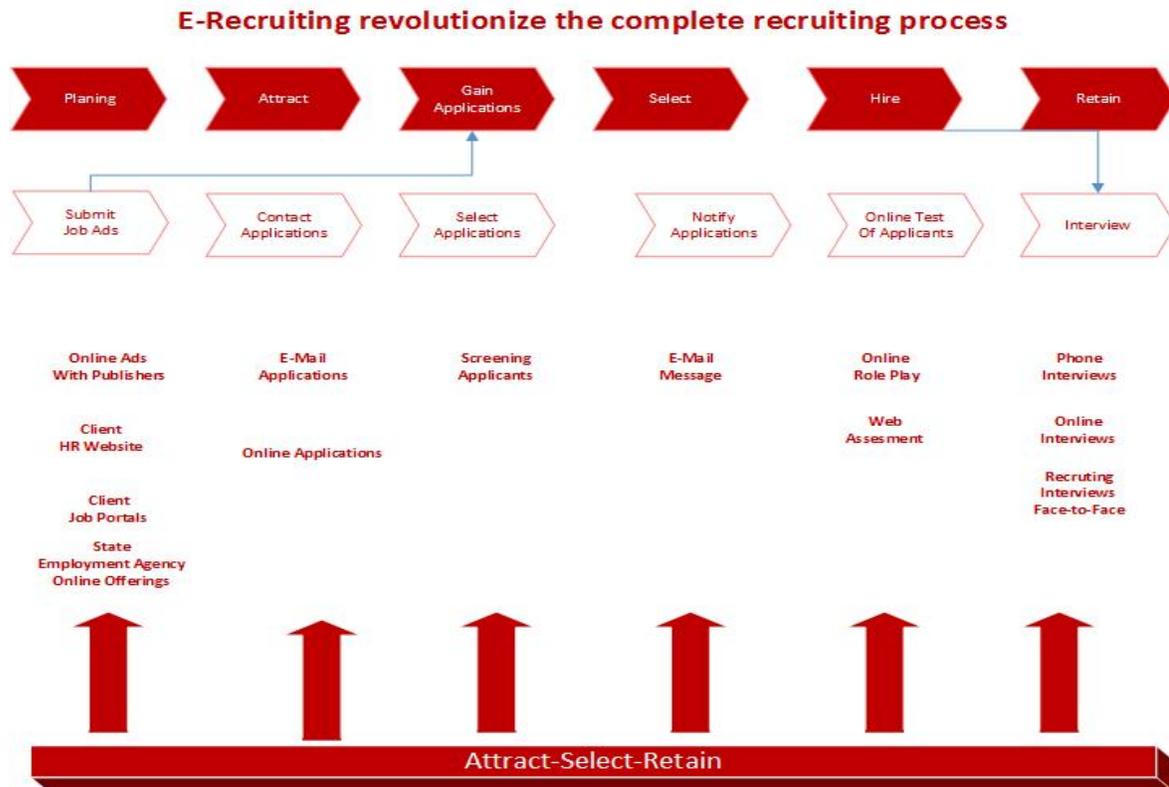


Figure2e-Recruitment Process

1.2 Benefits of Proposed Digital E-Recruitment in Sindh Police Department

- Flexible & Free from manual recruitment filling system comparison with existing system.
- Reduce the publishing of departmental an advertisement cost.
- Don't needs of third party recruitment agencies.
- Maintain transparent recruitment via technology based trends.
- Cost effective for dispatching newsletters, written examination, interviews letters.
- Time Saving of both aspirant and Department.

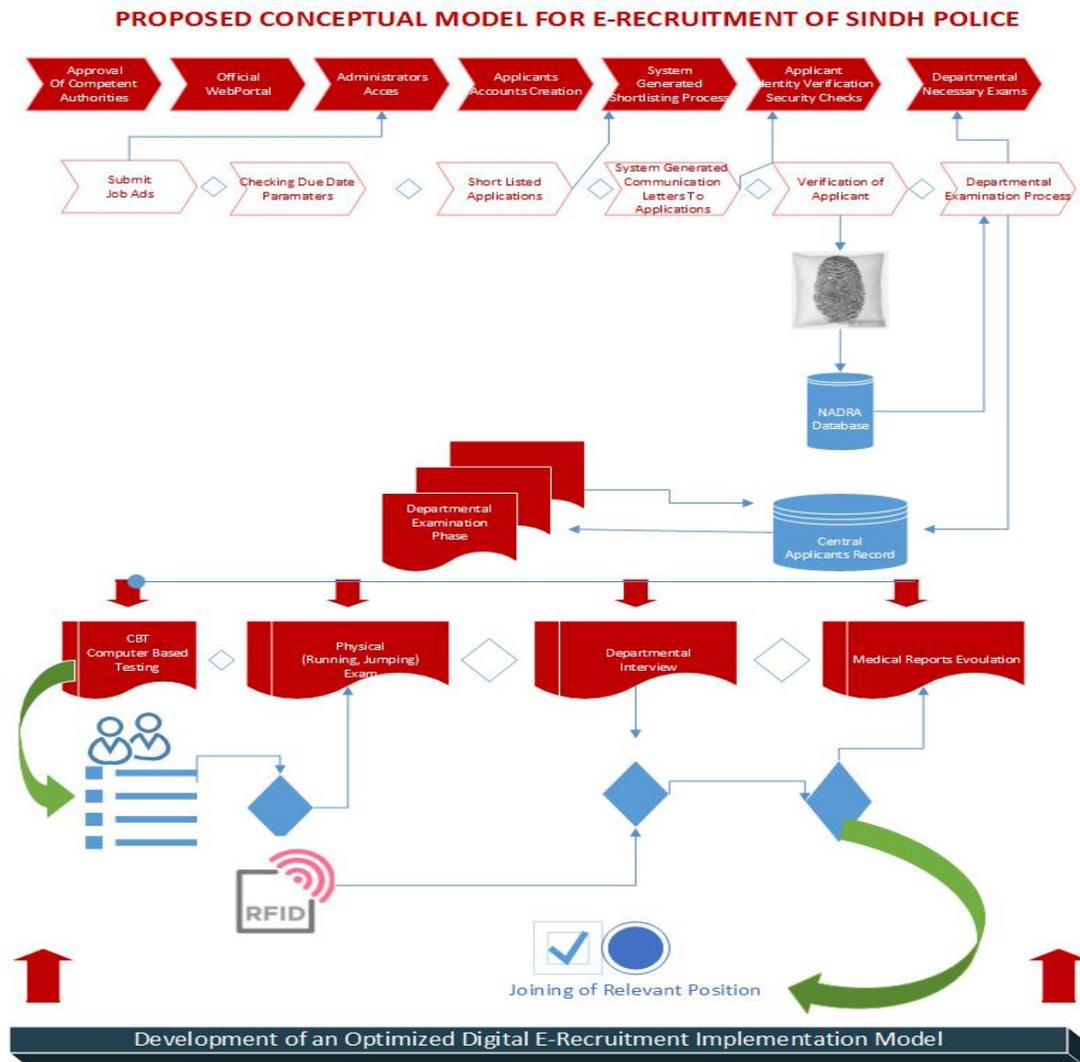


Figure 3 Proposed Conceptual Model

1.3 Limitations of Proposed smart recruitment suggested model

- Many rural areas of Sindh province cannot access internet connectivity.
- Data extraction of aspirants based on exact matching as per necessary conditions.
- Stockholders cannot enter data without the permission of an Administrative right.
- Stockholders have deeply knowledge about information & communication Technology.
- Data centres are unsecure in Sindh police department.

1.4 Objectives of the Research Study Project

- To Study and Investigates current existing Manual Police Recruitment system.
- To Comparative Study of different online Job portals of public sectors of Pakistan.
- To Suggest How E-Recruitment Process is beneficial for Sindh Police Department.
- To Analyse the Efficiency and performance of E-Recruitment for Sindh Police.

1.5 Scope of the Research Study project

The significance of the computerized E-Recruitment Model is to proposed theoretical programming advancement model dependent on existing enlistment process arrangement of Sindh police, which is relative investigation and gives a thought regarding how to created "Development of smart E-Recruitment model" for Sindh police administration of Sindh, it supplanted the right now existing manual enrolment process which is very cost and its enhanced the advanced aftereffects of enlistment framework.

2. Background

A Conceptual Framework suggested by *Prof. Rekha D.M and Naveena (2019)* for digital E-recruitment framework, authors identified several problem facing by multinational organizations during the employment exchange or new appointment, according to this survey based research article many other frameworks discussed with the help of secondary data elements and authors compared in detailed already an existing frameworks available for digital E-Recruitment system, in this article the authors deeply analysed the steps of recruitment and selection system after that gives touch with advanced information & communication technology based trends, authors adopted technological trends and emerging technologies which are beneficial for public/ private based organizations[3].

Dr. V. Vijay Anand (2018)and others briefly examined the research gap on recruitment and its challenges in top most private and government sectors, authors suggested a e-recruitment framework and also suggested some better e-recruitment types for employment reduce the organizational cost, authors explained two types of recruitment, here, first is internal recruitment and second is external recruitment, this research briefly

analysed the organizational sampling data, which organizations are facing major challenges during the recruitment of employees[4].

The authors ***Durga Parsad and Radhakrishna (2018)*** explained that how the Radio frequency identification (RFID) works for identity of any object as compare human identification, in this research article authors suggested a framework for implementation of maintenance and minimize the cost of maintenance equipments, authors suggested the framework titled as “computerized maintenance management system” CMMS. The computerized maintenance management system reduce the timing and save effective cost during the process of identity which is going to be maintain, according to Durga Parsad, Radio frequency identification is one of the best solution which works for intelligences machine and machine learning environment[5].

The process of getting job in any public/ private sector of unemployed first meet job related criteria currently, many web portals are available for sharing the job related information electronically application processing. In this research paper the authors ***Fanny Ramadhani (2018)*** and other explained that how different companies hire employment step by step procedural techniques by using manual process of recruitment, authors suggested that how a novel framework works for e-recruitment & selection process, such as how the applicant can be register in related company’s portal and which parameters can be check the e-recruitment system with the help of organizational job opening portal [6].

According to the authors ***Dr. Muhammad Shaukat Malik and others (2018)*** briefly explained the rules of recruitment and selection in various departments depends on HR (Human resource) wing, same as in Pakistan some reputed organizations are working properly on E-recruitment and planning management for employability analysis[7].

The author ***Varun Shenoy , P.S Aithal and Ramesh Pai A (2018)*** conducted a qualitative based research case study on electronic based campus recruitment management system, the authors suggested a electronic based students interviews on getting admissions or getting specific job in various departments of related institution, also related to stockholders that how a team members works to deliver any type of task or project, authors explained ABCD Model which is use for analysis techniques that how to

understand the work flow of the organization for good deliverables of stockholders in famous Berger paints company [8].

The data retrieving from currently web based e-recruitment is matching exact parameters of required elements, but due to some critical technological errors many of applicants cannot access the related information and also cannot fillup the required some necessary information, so far many companies rejected some highly experienced number of candidates due to missing of minor information. In this article the authors **Hina S Soni ,Dr. Piraya (2017)** suggested the authentic semantic based e-recruitment based on web ontology techniques which is formally naming specifications[9].

A Business Processing model is beneficial activity for recruiting the personnel via electronic based in various related job oriented tasks, in this research the authors **Deepak Lal, and Soumitra S Das(2017)** focused on pros and cons of e-recruitment and explained that how you will hire some quality based personnel, authors explained that information technology is using over all business oriented organizations in different ways, so it is straight forward technique that how reduce cost during the recruitment process of employees[10]

Sneha Singh (2017)Explained that how e recruitment system is economical beneficial for developed organizations in various business sectors, in this research article author Sneha singh investigated the different techniques were used in internet recruitment system and how they are working particularly tasks. Human resources in business strategy is the backbone of organization, so how to conduct the relevant data from different peoples by using internet access by 24/7 and how any organization saving their time for getting specific results of recruitment and selection process, author explained in detailed that when was the concept of e recruitment started in different developed countries[11].

ParkashYadao and Simta (2017) briefly explained that e-recruitment is workforce based task in the huge organizations. How peoples are working together in the different project level tasks for accuracy of recruitment system. The different usage levels of internet connection were explained by Parkash Yadao in various organizations sectors, authors explained that how internet based human resources are big advantage of internal or external organizations and how to collect the data with different nature of employees. E-recruitment converts the an existing system of recruitment and saves the highly expensive costs for recruitment and selection in public/private institutions [1].

I reviewed the research article of *Amusan D,G and Oyediran M.O (2016)* A Web based development framework suggested for entire the university staff in Nigeria, authors suggested a theoretical conceptual framework for e-recruitment system which focused how to reduce the communication gap between job applicant and university administration, also briefly explained that existing recruitment system getting more time as compare the electronic based recruitment and selection system, In this scenario authors also comparative analysis of manual and suggested e-recruitment system.

Authors suggested and advised to the university management that how to reduce the effective cost which is given to the 3rd party of assessment for recruitment and selection assignments, the system will auto get applicants data, applicant short listing process and electronic based mailing system for information to the applicants, applicants can also see online status of the application, in this article authors, briefly explained 3 tier architecture (the client tier, application tier, and database tier)[12].

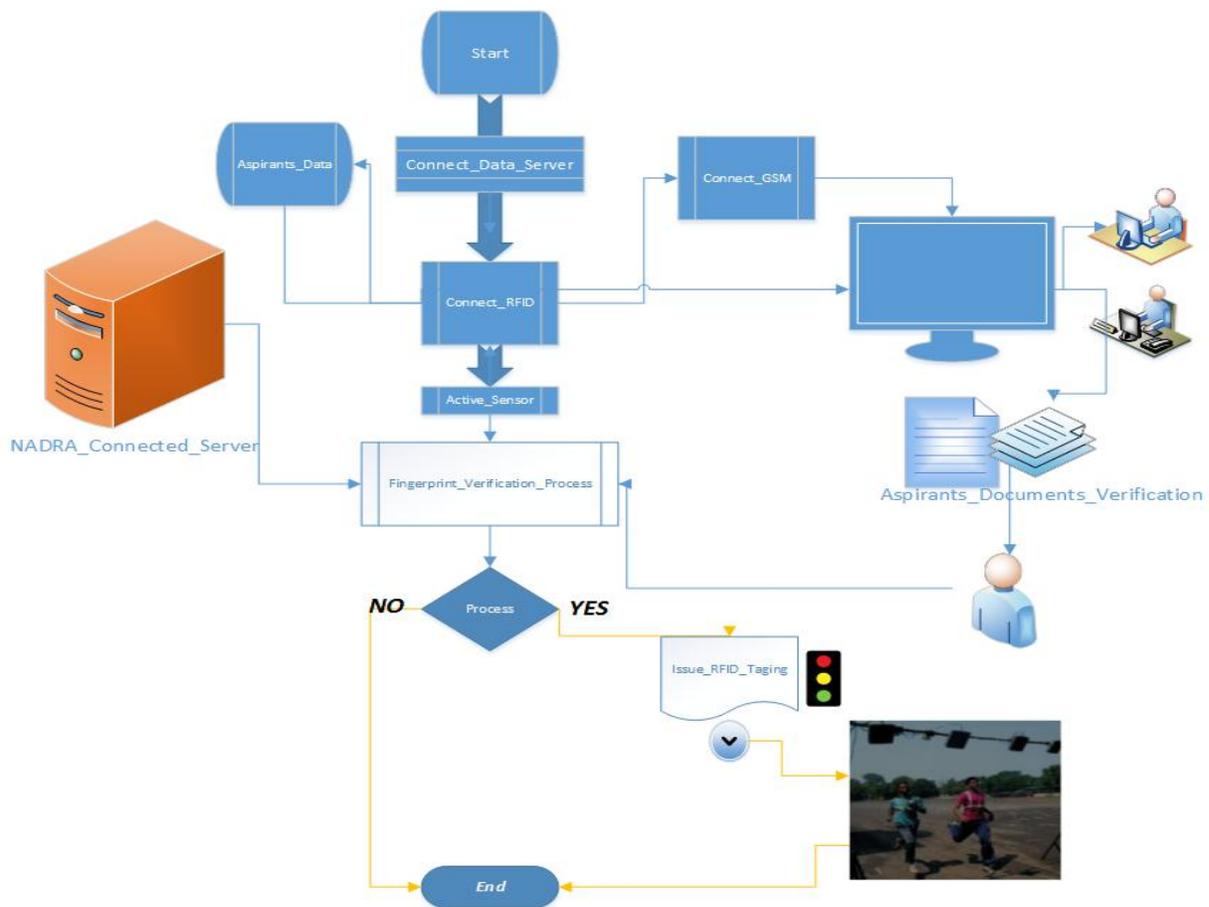
Aloisa Narlusi (2015) explained in this research paper that how rapidly developed a framework and system for e-recruitment for public private favour, day by day increasing the ratio of online jobs seekers and day b y day going to powerful this system for professional organizations, it means as we know in previous history of business modelling, there were so Many people required for recruitment analysis and so many necessary documents for short listing process in manually, the authors got different results from this research which is purely on recruitment challenges facing both (applicant and organization). Many of effective theoretical frameworks explained and limitations of related technologies, such as network design and network connectivity is top most immediate respondent activity for recruiting the number of people in specific projects, logical network design also explained by authors that how it will work for internal and external communication channels of an organization[13].

According this research article, the authors *Khalil Ghazzawi (2014)* Introduced an advancement technology in internet based projects trends. In this research article authors suggested a web based framework for extended e-recruitment system, which is based on semantic web technologies, in this research authors were briefed that semantic web Ontology is highly secure trend for getting the data from public. Semantic web included different data nature techniques which is free from physically official files. Authors explained w3c (World Wide Web Consortium) that how data features extracting from web technologies and how this data will be secure for future correspondences, authors

explained data analysis tools and techniques which is used for e-recruitment system design and development[14].

3. The Proposed Conceptual Framework Modules For E-Recruitment In The Sindh Police Department .

The public sectors based various departments major purpose is to appoint exceptional an aspirants and to decrease the cost associated with enlistment by improving the viability and improvement of the Recruitment sources. E-Recruitment System is considered as one of the Development most worth positive and effective wellspring of enlistment, there is a need to focus on it so as to increase greatest points of interest from this source. The essential focal point of this examination is to propose the theoretic calculated model for viability of E-Recruitment framework in Sindh police office, government of the Sindh. This research article is primarily based on qualitative research, a case study interview conducted from different participants of SindhPolice department and secondary data information which is accumulated through various Online-Jobs Portals in Pakistan.



Figur 4Overall Flow of Transparent E-Recruitment system

3.1. Official Commercial Web Based job portal of Sindh Police.

The Sindh Police government of Sindh already have official published web portal for departmental information around the world, all users have accessed to use this official web portal of the Sindh police, in this scenario I have suggested only updated web based official jobs portal for hiring the different nature of job employees in Sindh police, Sindh police department can enhance this official web portal with suggested framework and share the link for applicants for storing the database of different applicants. The database is purely restricted no one can be access without administrative loggings of the system.

1.2.1 Departmental Online Job Application Data Processing

The applicant creates first online account in the related job web portal step by step given parameters, after that same scenario the applicant do not creates once account with existing account identification which is based on computerized national identity card number, when user logged successfully all menus are activated for required information for online job application processing, many of web portals are working in this technology based trends.

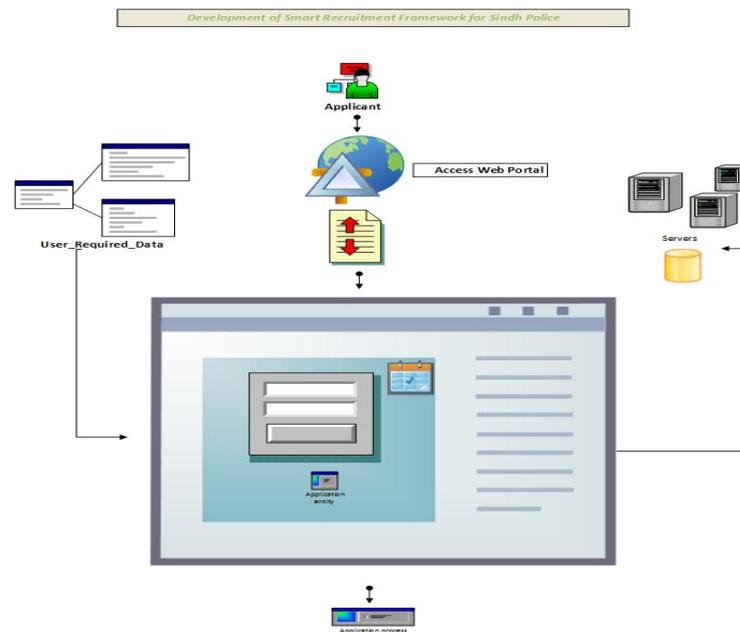


Figure 5 Online Application Data Processing Module

1.2.2 Applicant Identification reorganization via biometrics techniques

After completion of online job portal Data processing of Sindh police, the Sindh police department announces the departmental examinations in various divisions of the Sindh province and allocate the different testing centres, whenever the applicant comes for departmental examination, firstly system check security clearance and identity of applicant biometrics with the interaction of existing NADRA (National Database registration Authority) this system checks only applicant identity with NADRA integrated servers.

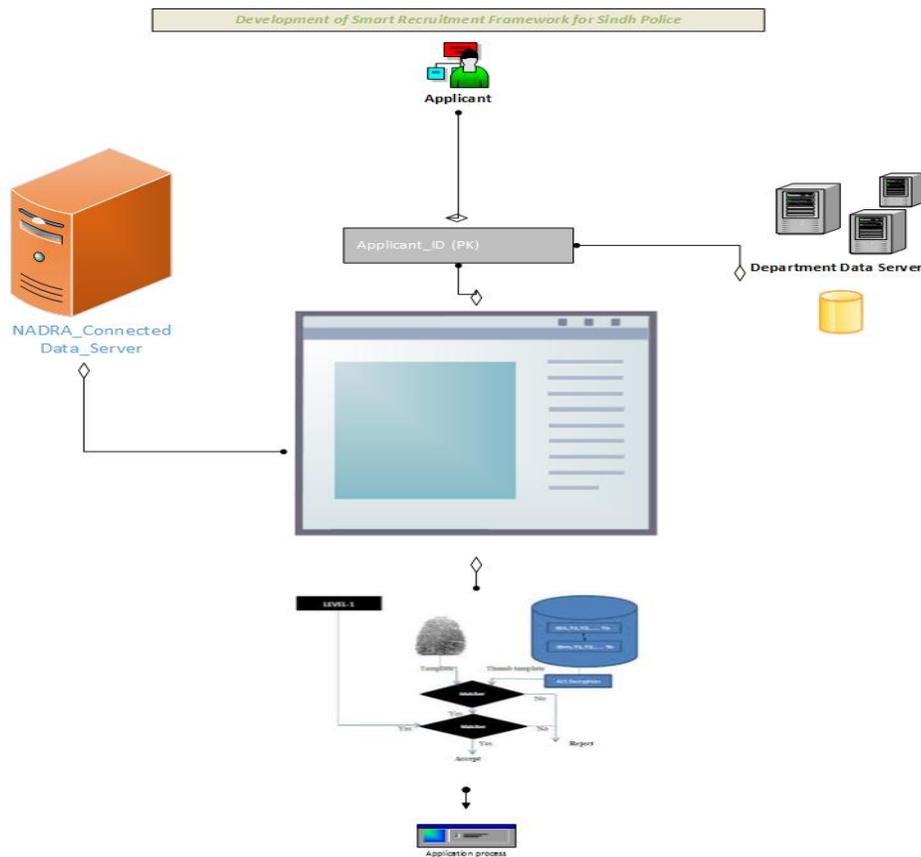


Figure 6 Applicant Fingerprints checking module

1.2.3 Applicant physical examination (running, jumping, push-ups) tracking via RFID.

In this module of “the development of digital recruitment model” system will optimize the results of applicant of running, jumping and push-ups transparently with the help of RFID (Radio frequency identification) no one can be add/edit results of system generated, and after the completion of exercises system will provides print layouts only for departmental personnel records and clone copy of applicant, no one applicant can illegal for transparency recruitment system.

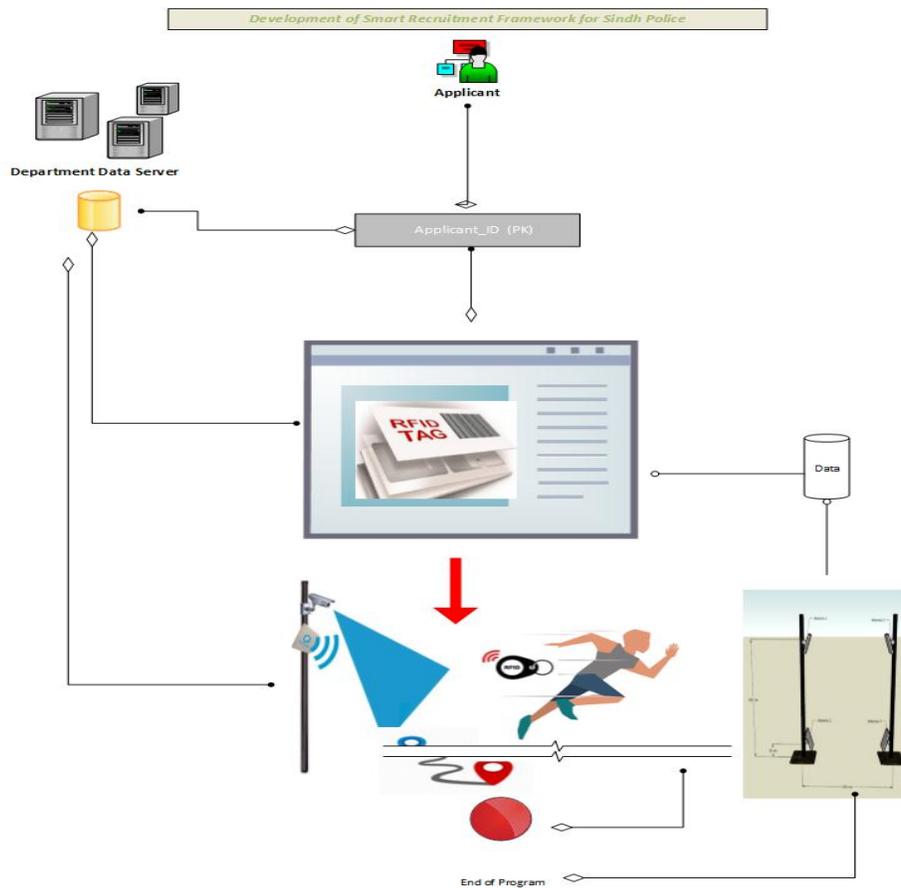


Figure 7.Physical runing, jumping tracking module

4. Needs for E-Recruitment in Sindh Police.

Now days in developed countries, various public or private sector are using “Digital E-recruitment Enterprises resource planning for managing human resources, and also in developed countries are recruiting staff by using E-Recruitment techniques, here I, am introducing the state-of-the art central point system for police recruitment which is transparent based, it will be beneficial for all law enforcement agencies of Pakistan for recruiting the competent number of candidates in short time period also will provide innovations in the departmental planning and development resources.

5. Conclusion.

The purpose of digital online recruitment system is to provide the quality cost saving, transparency, security and results optimization with the help of information & communication technology based trends in the Sindh Police department government of Sindh Pakistan. If anyone applicant cannot perform their departmental required tasks for qualifying the exams the system cannot add/update records by choice and other references. The Sindh Police department can conduct by self all applicants’ examinations without hiring third party agency for recruitment system.

6. Future Work.

This research endeavoured in briefing the previous and future developments in e-recruitment of Sindh Police. The future exploration of our research questions might require conducting a research project on RFID sensors results and measurement of record keeping stability depending on RFID sensors available. More, this research scope can be extended with the usage of biometrics scanning devices focusing its major benefits and weaknesses observed in recent studies.

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