Public Complaint Handling Process and the Usage of ICT in Public Sector: An exploratory Study of Ombudsman Sector of Pakistan

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Abstract

This paper explores the evolution of public grievance redressal sector (PGRS) in Pakistan with insight knowledge of public complaint handling process including usage of modern technology in handling process. The systemic inefficiencies and process irregularities of the legacy Ombudsman modus operandi had an adverse effect on its overall progress. To improve the existing Ombudsman system, usage of information and communication technology for complaint handling process was explored in the current research. The functional workflow process for public complaint handling was designed and implemented in PGRS using information system, which decreased the deficiency of technology usage from 92% (2011-12) to 58% (2016). This optimized complaint handling process has also increased the disposal of public complaints within 60 days from 8% (2013) to 93% (2016) at federal level and 56% (2014) to 73%(2016) at provincial level. The performance of the PGRS has been increased by increasing the usage of ICT in sector.

Key Words: Public Complaints, Public Sector, Ombudsman, Usage of ICT

1. Introduction

Process is the sequence of the interconnected steps/procedures/actions, in which each consumes the resources (human, energy, machine, money and input) and gives output (data, action) and serves as the input for the next step to get final goal. Public complaint handling the process is a planned and systematic approach to resolve the public's . Government has expanded its complaints administrative networks for more effective and efficient governance. The interaction of government with public has also increased the complaints of public against government agencies. Usually, these agencies have defined the complaint handling process to address the public complaints. Now complaint handling process has been established in almost every country, state, province, department and organization throughout the world either as more organized or informal arrangement. Worldwide the organizations (private organization, universities, etc) have also defined this process to mitigate the complaints from customers to improve the customer satisfaction. Complaint redressal procedures are important and help in organizational accountability and monitoring. UN also established the Complaint Procedure in UN Human Rights Council.

The more organized framework for process of complaints procedures is the Ombudsman, protected by the Law of that country, state and province. Ombudsman can be defined as a government office created by constitution, charter, legislation or ordinance with the responsibility to receive and investigate complaints against governmental agencies and with authority to give findings after investigation. The main objective of the PGRS is to redress the public grievance/complaint against any government agency, Government Corporations and provide Administrative Justice by removing Mal Administration.

The usage of the ICT (information and communication Technology) has eased the human life with readily available, more organized and updated information. It has become an integral and accepted part of everyday life. ICT is increasing the importance in the human life and it is expected that with the existing trends, it will become the functional requirement of the workplace. It includes the range of software and computers with peripherals. The use of ICT in public sector has added the value to the public sector processes, both in its performance and functional monitoring. The ICT has impacts on

activities of R & D projects and business economics. ICT is used in public and private sectors for more economic opportunities to run the business i.e. consumer satisfaction, process readiness etc. Furthermore, e-government is the most well defined usage of the ICT for public sector service delivery. The use of ICT and professional development has positive correlation in teaching and its content in teaching has also positive correlation on student behavior in professional development. The usage of ICT has impact on the organizations' performance and now organizations' performance has been linked with e-skills and use of ICT in organization. It has also reduced the bureaucratic hurdles in decision making in public sector.

The literature unanimously proved the importance of the usage of ICT in public sector for quick service delivery. The literature also highlighted the different concerns/obstacles/problems for any change in the public sector , which need to be understand and addressed before and during the change either this change is manual or with introduction of IT. An exploratory research is required to explore the complaint handling process and usage of ICT in Ombudsman sector of Pakistan, which is still a little explored area. To meet the objective of the study, the following two research questions were established:

RQ1: How Ombudsman institutions are handling the public's complaints in public grievance redressal sector of Pakistan?

RQ2: To what extent information technology is implemented in public grievance redressal sector of Pakistan?

RQ3: How can help ICT to improve the complaint handling procedures in PGRS of Pakistan?

This paper is organized as follows. Research methodology is explained in Section 2. Section 3 presents the exploratory analysis and results of this study followed by discussion in section 4. Conclusion is mentioned in Section 5 followed by future work and limitation sections.

2. Research Methodology

Based on the fundamental epistemology (nature of knowledge that guides the research and how it can be obtained), a research study can be conducted using

interpretive, and critical positivist research philosophical paradigms. This research study uses interpretive research philosophical paradigms depending on the nature of the study. Interpretive research investigates a research topic and emphasizes on the meanings in context without predefining independent and dependent variables interpretive research is used to search and understand the context within which decisions and actions are performed. Moreover, the interpretive research philosophical paradigm is considered due to the exploratory nature of the study. Furthermore, this philosophical paradigm is considered due to the qualitative and quantitative nature of the study. Qualitative research is used for studies in natural settings. AS-IS model process is the best way to look into the existing business process of the organization. It has significant role in Business Process Reengineering (BPR) . This model uncovers the unaligned and irregular processes in the organization.

This paper opted for an interpretive research philosophical paradigms with exploratory study using interviews, systemic approach with AS-IS and TO-BE analysis approach to find the organizational capacity, process and issues regarding complaint handling. The systemic approach and AS-IS process model has provided deep insight knowledge of the complaint handling process in Ombudsman sector. The AS-IS process model and information system have also identified the best possible process with improvements to be used in complaint handling in public sector and implemented this process with help of information system. The internal processes are explored using personal visits, interviews, meeting with concerned officers and by analysis of different official document, circulars, regulations, reports and Laws. The usage of ICT in Ombudsman Sector of Pakistan was calculated using the seven ICT core indicators for Government by . These indicators were developed for World Summit on Information Society (WSIS) on partnership to measure the ICT development in a country. These indicators were adjusted with reference to the Ombudsman sector of Pakistan.

3. Analysis and Results

This section has three parts. The first part presents the AS-IS in-depth analysis of complaint

handling procedures in Ombudsman sector of Pakistan with the calculation of ICT usage in this sector. It starts with the overview of public grievance redressal sector. In second part, the proposed TO-BE optimized workflow process for public complaint handling process in Ombudsman sector is presented on the basis of AS-IS analysis. Then its implementation using ICT was explained. The third part explained the usefulness and effectiveness of the optimized process with the analysis of 274,769 complaints and measurement of core ICT indicators after implementation.

3.1 Overview of Public Grievance Redressal Sector (PGRS) in Pakistan

In Pakistan, the first public complaint procedure was adopted in 1983 using the Ombudsman's legal framework model (Swedish Ombudsman Model, 1809) by establishing first Federal Ombudsman of Pakistan for handling and redressal of public

complaints against government agencies. Thereafter, a need of Provincial Ombudsman was felt and these were established gradually. These subsequent Ombudsmen offices have adopted the processes and procedures of complaint handling framed by the Federal Mohtasib (Ombudsman) of Pakistan . Now Federal Ombudsman is handling the complaint against any Federal agency/department/corporation and Provincial Ombudsman are handling complaints against provincial agency/department/ corporation. The Public Grievance Redressal Sector (PGRS) is now working in a Federation where twelve independent Ombudsmen are working on both Federal and Provincial level; every office has its own legislation and boundaries. These Ombudsmen are autonomous and have the operational and functional independence. In Figure 1, the autonomous and functional independent institutions in complaint handling's work processes are shown. There is weak coordination between the Ombudsman offices in PGRS regarding complaint handling.

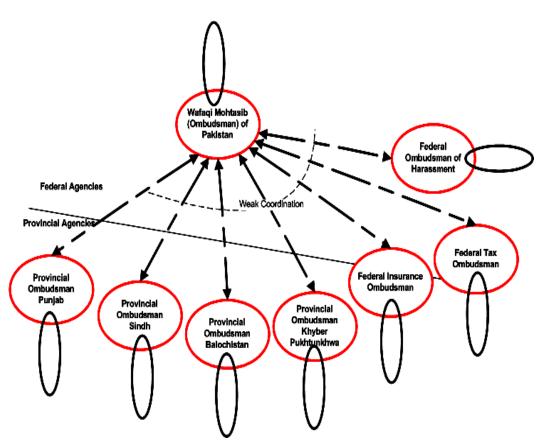


Fig. 1 Working of Public Grievance Redressal Sector (PGRS) in Pakistan

3.2 Complaint Handling Process in PGRS of Pakistan

The five Ombudsman Offices are selected due to the volume of the complaints whereas the others have less volume as compared. The Ombudsman offices are 1) Federal Ombudsman of Pakistan, 2) Provincial Ombudsman Punjab, 3) Provincial Ombudsman Sindh, 4) Provincial Ombudsman Khyber Pakhtunkhwa Provincial Ombudsman Balochistan. In Pakistan. the Federal Ombudsman is the mother institution of Ombudsman. The complaint handling process is analyzed using systemic approach with AS-IS and TO-BE process Model and interviewing the technical persons in Ombudsman offices. The AS-IS model is used to find the complaint workflow management and its underlying properties. It has uncovered the

unaligned processes and identified the TO-BE modified processes in complaint handling. The systemic issues in complaint handling were also highlighted.

3.3 Federal Ombudsman of Pakistan

The Federal Ombudsman of Pakistan is the pioneer institution in Pakistan as well as in Asia. The process of complaint handling was first developed in 1983 and then modified from time to time. The complaint is first received. After the initial scrutiny, it is sent for investigation to Investigating Office (IO). Then IO finalizes the complaint by engaging both complainant and agency. The finalized findings are submitted to Ombudsman for the disposal. The following Figure 2 presents the flow of the complaint in Federal Ombudsman.

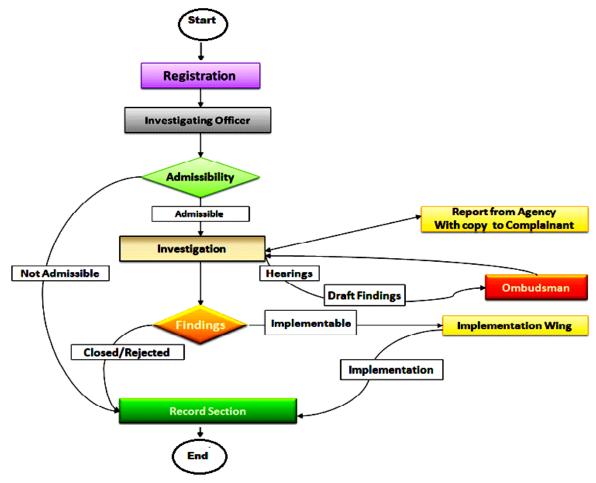


Fig. 2 Processing of complaints in Federal Ombudsman of Pakistan

The process of the initial scrutiny in Federal Ombudsman is with Investigation Officer, which caused a delay of 5-10 days whereas it could be one day if it is with registrar level. The federal Ombudsman has somehow information system for complaint handling process.

3.4 Provincial Ombudsman Offices

There are four Provincial Ombudsmen in each province of the Pakistan, working independently with jurisdiction of Provincial Governmental Agencies. All these Ombudsman Offices (Sindh 1991, Punjab 1996, Balochistan 2001 and Khyber Pakhtunkhwa 2010) were established with the approval of respective Provincial Government and benchmarked the complaint handling procedures of Federal Ombudsman of Pakistan. However, with the passage of time the loopholes were created in the process, which caused the delay in the disposal of complaints.

The complaint handling process is done manually without using any software technology. The Lack of funds was one of the major reason of manual legacy systems. The manual system created the gray areas in processes of handling of complaints with delays in disposal of complaints The registration of the complaint was taking 3-10 days or even more. At worst most of the complaints ended up in dust bins without coming into the track of complaint handling and monitoring procedures. The findings were submitted to Ombudsman from regions with physical file, which took weeks and weeks just for approval. In Provinces, the complaint handling procedures are more or less same where one extra appraisement process was added in Ombudsman Sindh before the approval of the Ombudsman. The following Figure 3 presents the flow of the complaint handling in Provincial Ombudsman Offices.

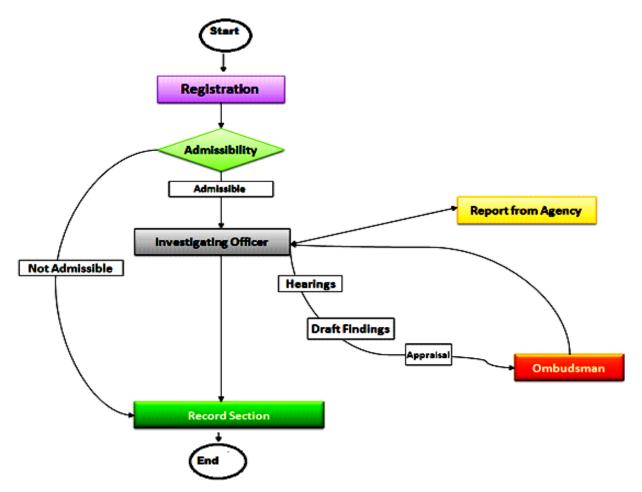


Fig. 3 Processing of complaints in Provincial Ombudsman Offices

The findings were not categorized which increased the difficulty while implementation of findings. Due to this reason, the implementation of the findings was not properly tracked and no proper mechanism was found for implementation. Therefore, there was a dire need for the improvement in the complaint handling process with inclusion of Implementation of findings with proper categorization at Provincial level.

3.5 Usage of ICT for Complaint Handling in PGRS of Pakistan (AS-IS)

The usage of ICT in PGRS of Pakistan was calculated using the seven ICT core indicators for Government by Pena Lopez . These indicators were developed for World Summit on Information Society (WSIS) in partnership w`ith UN to measure the ICT development in a country. These indicator are used to calculate the usage of ICT in specific sector i.e. Education, health etc. The indicators were relabeled with reference to the Public Grievance Redressal Sector for better understanding. The Indicators are same but we had change the sector name for the clarity with reference to this research study context. The adjusted modified seven indicators are given below:

- Proportion of persons employed in PGRS of Pakistan routinely using computers (No person using computers/Total No of Employees X 100).
- Proportion of persons employed in PGRS of Pakistan routinely using the Internet (No person using Internet/Total No of Employees X 100).
- Proportion of PGRS of Pakistan with a Local Area Network (LAN)(No of Organizations having LAN/Total No of Organizations X 100)
- Proportion of PGRS of Pakistan with an intranet (No of Organizations having Internet/Total No of Organizations X 100)
- Proportion of PGRS of Pakistan with Internet access, by type of access (Dedicated line or shared) (No of Organizations having Dedicated/shared line of Internet/Total No of Organizations X 100)

- Proportion PGRS of Pakistan with a web presence for complaint registration (No of Organizations having web presence/Total No of Organizations X 100)
- Level of development of online complaint handling by Ombudsmen (software online connectivity within the Regional Offices) (No of Organizations having Software connectivity/Total No of Organizations X 100)

The data was collected in 2012-13 from all the Ombudsman Offices in PGRS of Pakistan based on the above seven ICT indicators in public sector is shown below in Table 1.

The number of computer users and internet users were almost same in each ombudsman office as shown in Figure 4 with respect to total number of employees in that organization.

Every organization has the internet access with two of them also having the dedicated (CIR) line for the office while rest are simply shared lines. PGRS has 50.05% of employees routinely using the internet and 49.45% routinely using computers as shown in Figure 7. However, the web presence in term of getting online complaint is just 8.30%; it is same in case of software for complaint handling and connection to the Offices. Whereas, the proportion of LAN in PGRS was just 25%. It means the computers were being used just for word processing. As shown in Figure 5, the role of technology in PGRS was very low. So PGRS of Pakistan could equally benefit from technology regarding complaints handling and disposal. The intervention of new technology would also help to manage the workload of complaints. The cost was one of the other reasons of the limited use of technology in PGRS.

This initial study of the PGRS had established that new interventions of technology were required, which could increase the usage of technology in PGRS and also decrease the disposal time of complaint. This intervention could be gained either by collective efforts through collaboration in Ombudsman Office or by individual effort by each Ombudsman.

 Table 1:
 ICT usage Data in PGRS of Pakistan (AS-IS

	Total No of Employe es	No of Employe es Using Compute rs	No of Employe es Using Internet		t 1 for Yes 0	Internet (Dedicate d line) 1 for yes 0 for No	t (Share d line) 1 for yes 0	Web Presence (Online Complaint Registrati on) 1 for yes 0 for No	Online complai nt Handlin g 1 for Yes 0 for No
Federal Ombudsman, Pakistan	500	250	270	1	1	1	0	1	1
Provincial Ombudsman, Punjab	100	40	50	0	1	0	1	0	0
Provincial Ombudsman, Sindh	110	43	35	0	1	0	1	0	0
Provincial Ombudsman KPK	20	5	5	0	1	0	1	0	
Provincial Ombudsman Balochistan	55	30	30	0	1	0	1	0	0
Ombudsman Azad Jammu Kashmir	20	6	7	0	1	0	1	0	0
Federal Tax Ombudsman	60	40	37	1	1	1	0		
Banking Mohtasib Pakistan	65	50	40	1	1	0	1	0	0
Federal Insurance Ombudsman	30	10	10	0	1	0	1	0	0
Federal Woman Ombudsperson	10	4	4	0	1	0	1	0	0
Ombudsperson Punjab, Pakistan	10	6	5	0	1	0	1	0	0
Provincial Ombudsman for Harassment at Workplace Sindh	15	8	5	0	1	0	1	0	0
Total	995	492	498	3	12	2	10	1	1

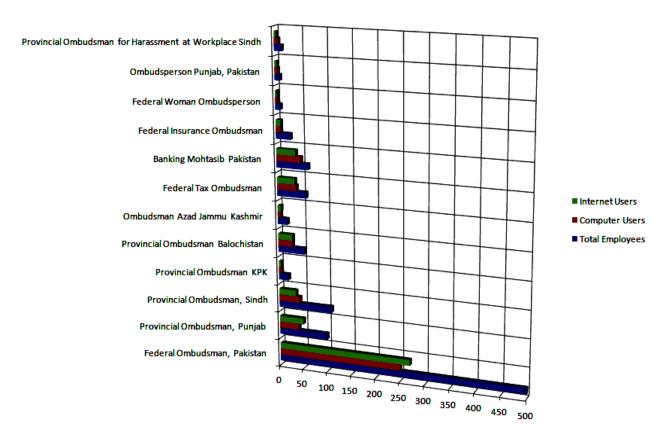


Fig. 4: No of computer users and internet users with respect to Total Employees in PGRS (AS-IS)

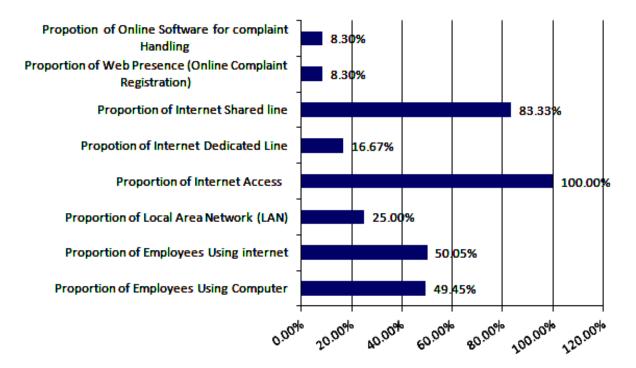


Fig. 5: Core ICT indicators for PGRS of Pakistan (AS-IS)

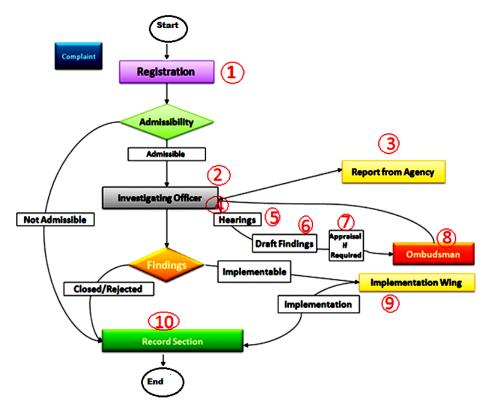


Fig. 6: Optimal Functional Complaint Handling Process for PGRS of Pakistan

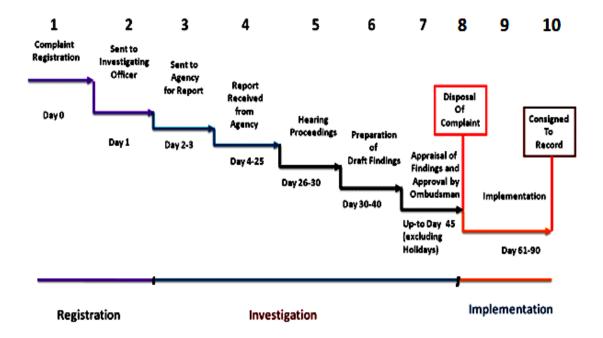


Fig. 7: Functional Timelines for Individual Process in Complaint Handling Process

3.6 Functional/Optimal Process Model for Complaint Handling in PGRS (TO-BE MODEL)

The basic Legislation of Ombudsmanship in Pakistan has authorized the Ombudsman to adopt any sort of rules and regulation for redressal of grievances in his/her respective office. So, no separate Legislation is required to modify the procedures of the complaint handling in PGRS. In the light of detailed analysis of complaint procedures and initial study of ICT usage in PGRS of Pakistan, it was decided to improve the PGRS' workflow process using ICT. For this purpose the detailed analysis of complaint handling process and the workflow process were sent back to each relevant office with the recommendations on each deficient area to decrease the avoidable delays in complaint redressal. After the deliberated discussion and feedback, the complaint handling process of different Ombudsman Offices were merged and developed following functional complaint handling process as shown in Figure 6.

The functional complaint handling process was implemented in PGRS of Pakistan with the help of customized web-based information software, which displayed the improvement in public complaint procedures in the form of speedy disposal. It also provided the timeline instrument, as shown in Figure 7, for monitoring each sub-process of the complaint handling. It helped in eliminating the unjustified delays.

3.7 Implementation of the Functional Process of Complaint Handling using ICT

ICT tools provide a platform for the integration and exchange of data with embedded intelligence. Software aligns the processes efficiently and has significant impact on outputs. Web Software helps in collaboration at process layer and enhances the efficiency of the system in collaborating sides . To make more effective and efficient complaint handling, the web-based software called Complaint Management Information System (CMIS) was developed for PGRS. This software enhanced the data storage and information flow within the physical processes. In government sector, the quality of public services has been increased by using online collaborative service delivery rather than offline

service delivery . It has N-tier architectural design with dot net at front end and SQL Server at backend for data storage.

3.8 CMIS Software Application Architecture

The application is divided into three layers namely: presentation, business, and data. This pattern presents an overview of the responsibilities of each layer and the components that compose each layer. The layered architecture is shown in Figure 8.

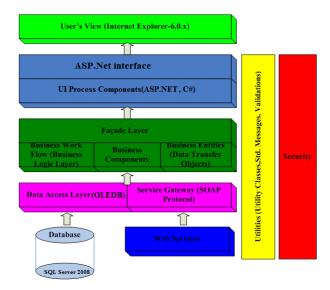


Fig. 8 CMIS Software Application Architecture

3.9 Presentation Layer

ASP.Net (ASPX): The presentation layer provides the application's user interface (UI). Typically, this involves the use of ASP.Net Forms for browser based client interaction. ASP.Net Forms will interact with ASP.Net' CS files and UI Process Components (UIP). The asp forms along with built-in UI process components are embedded to utilize the rich controls of all these frameworks.

User Process Components: It is proposed that User Interface Process Components shall be implemented using user defined component to make the symmetry in user interface.

3.10 Business Logic Layer

The business layer implements the business functionality of the application. It uses the C# objects.

Business Components: Business components encapsulate the business logic, also called business rules. These rules constrain the behavior of a business concept to match the needs of complaint handling.

Business Workflows: Business processes reflect the macro-level activities that the business performs. Examples include complaint registration, assignment of IO, and disposal of complaints. These business processes are encapsulated by business workflow components that orchestrate one or more business components to implement a business process.

Business Entities: Business entities are data containers. They encapsulate and hide the details of specific data representation formats. Business and business workflow components can interact with independent business entity components. Business entities are often used as Data Transfer Objects. The data access components will often return business entities instead of database-specific structures.

3.11 Data Access Layer

The data layer provides access to external systems such as databases. The primary ASP.Net technology involved at this layer is OLEDB and SQL Stored Procedures. Through OLEDB API, Connection with database is established, SQL statements will be sent and results will be processed.

Service Gateway: An application may expose some of its functionality as a service that other applications can use. A service interface presents this service to the outside world. Ideally, it hides the implementation details and exposes only a course-grained business interface. Web services provided to this application are handled through SOAP protocol.

3.12 Foundation Services

In addition to the three standard layers, Three-Layered Services Application defines a set of foundation services that all layers can use. These services fall into two basic categories:

Security: These services maintain application security.

Utilities: It contains validations at different tiers, utility classes, and standard messages classes to maintain cohesion of overall application.

3.13 Proposed Environment

The proposed environment to host the application is as follows.

Client Side

 Browser- Internet Explorer, Version-6.0.x

Server Side

- Application Server- IIS, Version- 7.x
- Dot Net 4.0
- Crystal Reports Version- 10

Database Environment

Database- SQL Server 2008

3.14 Functional Process for complaint handling Mapped in CMIS

The functional complaint handling process is mapped in software for proper monitoring and evaluation and to observe the timeline for the individual process in complaint handling procedures. The detailed process in CMIS is shown in Figure 9.

3.15 Usefulness and Effectiveness of Functional Process for complaint handling

Usefulness and effectiveness of the functional process was measures by evaluating the performance of the PGRS both at federal and provincial level. The data of 274,769 complaints was collected from CMIS, which contains 234,964 complaints of Federal Ombudsman and 39,805 complaints of Provincial Ombudsman. The impact of the functional process on speedy redressal of complaints is clearly seen in Figure 10 and 11. The redressal of Complaints within sixty days has been increases from 8% (2013) to 93% (2016) at Federal Level and from 56% (2014) to 73% (2016) at Provincial Level. The figures depict the confidence of the Ombudsman institutions on the functional process for complaint handling.

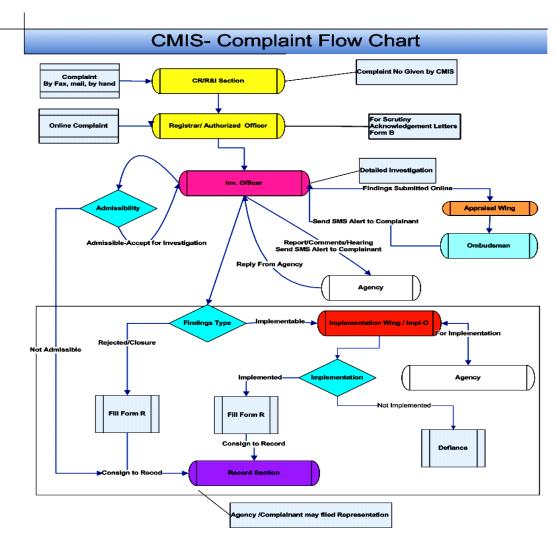


Fig. 9: Functional Complaint Handling Process in CMIS

	Within 60 Days	Within 2-5Months	Within 6-12Months	More than Year	Total
2013	6,488	1,675	11,862	54,723	74,748
	8%	2%	15%	73%	100%
2014	12,022	14,727	30,465	20,105	77,319
	15%	19%	39%	26%	100%
2015	42,150	12,790	485	98	55,523
	75%	23%	0%	0%	100%
2016	25,682	1,635	54	3	27,374
	93%	5%	0%	0%	100%
To tal	<u>86,342</u>	30,827	42,866	74,929	234,964
	36%	13%	18%	31%	100%

Fig. 10: Time Profile of Redressal of Grievances at Federal Level (Source CMIS)

	Within 60 Days	Within 2-5Months	Within 6-12Months	More than Year	Total
2014	4,058	2,991	89	99	7,237
	56%	41%	1%	1%	100%
2015	15,647	6,135	2,187	127	24,096
	64%	25%	9%	0%	100%
2016	6,249	1,570	540	113	8,472
	73%	18%	6%	1%	100%
To tal	<u>25,954</u>	10,696	<u>2,816</u>	<u>339</u>	<u>39,805</u>
	65%	26%	7%	0%	100%

Fig. 11: Time Profile of Redressal of Grievances at Provincial Level (Source CMIS)

The core indicators of Usage of ICT were also measured after the implementation of functional process for complaint handling using web-based software. It improved the indicators significantly and affected overall performance of the sector. The number of the computer users has been increased with respect to number of employees in this sector. The Figure 12 presents the ICT data after implementation of optimized process. The online presence of the institutions has been increase from 8.3%(2012-13) to 41.67%(2016). The proportion of employees using computer has been increased from 49.45% (2012-13) to 78.81% (2016). The all Core ICT indicators are shown in Figure 13

3.16 Obstacles/Problems in Implementation

This change process had the obstacles/ problems like every other change process. Specially, the adverse attitude of the employees, who had the lack of ICT knowledge and fear to expose with transparency provided with the IT systems. Some employees thought they would lose their authority by clearly defined process of complaint handling. The ICT trainings, face-to-face meetings, higher ups' pressure and blessings helped to overcome these hurdles and made this happened with success and glory.

4. Discussion

Worldwide the Ombudsman offices take the complaints from public against governmental agencies . The following general steps are taken to dispose a complaint irrespective the nature of the complaint .

- Receipt of Complaint
- Initial Scrutiny
- Investigation
- Final disposal
- Review
- Representation
- Implementation of Findings
- Defiance of the Ombudsman's Recommendation

The first four steps are common in all Ombudsmen in the world whereas the Review is depended on the specific Ombudsman's Law. Any

aggrieved party which is not satisfied with the decision of the Ombudsman, mav file Representation to appellant. In Pakistan, representation may file to President of Pakistan or relevant Governor of the Province in case of Provincial Ombudsman. The basic Legislation of Ombudsmanship in Pakistan has authorized the Ombudsman to adopt any sort of rules and regulation for redressal of grievances in his/her respective office. So, no separate Legislation is required to modify the procedures of the complaint handling.

The PGR Sector of Pakistan consists of twelve independent Ombudsman both on federal and provincial level to deal with the public complaints against governmental agencies. There were delays in PGRS due to manual complain handling, complex registration process, delayed submission for disposal, unclear process boundaries, limited usage of ICT in complaint handling process and poor monitoring and evaluation system. The optimized workflow process, using ICT, was implemented in Ombudsman offices, which exhibited the good results in the form of speedy disposal of complaints and improved usage of ICT in complaint handling process.

After the implementation of this functional complaint handling process, the disposal of complaints within 60 days has been increased (Federal Ombudsman from 8% (2013) to 93% (2016), Ombudsman Punjab from 56%(2014) to 73%(2016)). It is anticipated that this will increase with the passage of time by practicing the timelines strictly and aggressively monitoring the PGRS.

The PGRS of Pakistan was 92% deficient in before implementation technology usage functional process for complaint handling, which was required ICT intervention for speedy complaint handling, which was later implemented in Federal and Provincial Ombudsman Offices. The deficiency in technology usage was decreased from 92%(2012-13) to 58%(2016) after the implementation of customized software in complaint handling. There are four more Ombudsman institutions, which are in process of implementation of optimized process for complaint handing using ICT. Whenever these institutions will complete the process, automatically it will enhance the usage of ICT in PGRS of Pakistan.

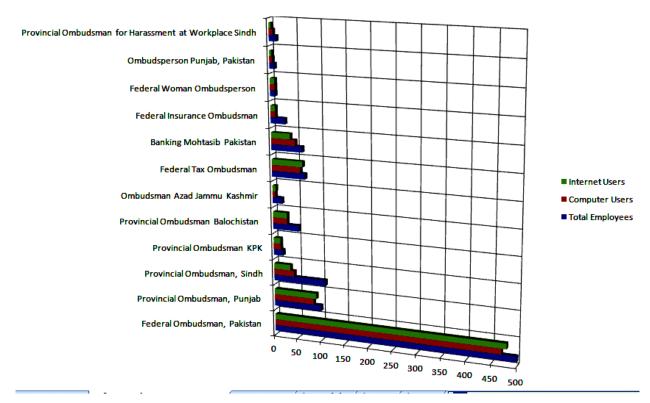


Fig. 12: No of computer users and internet users with respect to Total Employees in PGRS after implementation of Functional Process for complaint handling using ICT

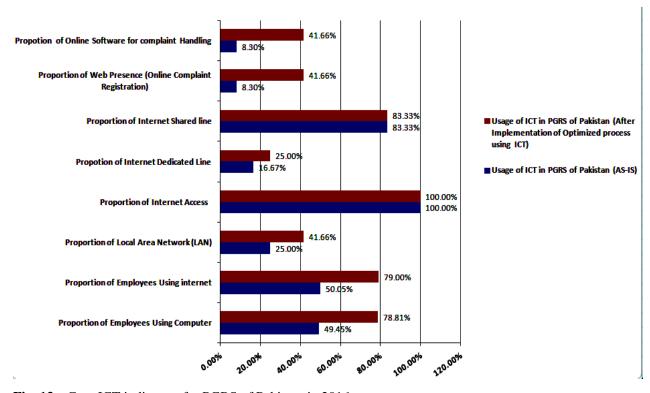


Fig. 13: Core ICT indicators for PGRS of Pakistan in 2016

5. Conclusions

This paper provided the in-depth knowledge of complaint handling with its limitation in PGRS of Pakistan. The complaints were handled manually, which was causing delays in complaint registration and subsequent disposal of complaints. evaluation mechanism monitoring and established. The systemic inefficiencies and process irregularities slowed the progress of the PGRS that caused delay in complaints institution, redressal and disposal. The functional workflow process for public complaint handling was designed and implemented using ICT in PGRS. This functional complaint handling process has increased the redressal of public complaints within 60 days from 8% to 93% at federal level and 56% to 73% at provincial level.

The paper also provided the extent of usage of information computer technology in complaint handling, which was believed to be not enough to meet the requirement of speedy justice and grievance redressal. The usage of computer was just limited to word processing. Only one organization had software for complaints, which means above 92% of PGRS was deficient of technology and now it has been decreased to 58% after the implementation of the customized software. Hence, the performance of the PGRS has been improved with the increased usage of ICT in the sector.

6. Future Work

This exploratory study may be extended to remaining Ombudsman institutions to improve usage of ICT in PGRS to maximum level for speedy disposal of complaints. This study may be extended to define the protocols for Intra public sector collaboration.

7. Limitations

The human efforts and capital involved in complaint resolution are little considered which may affect the performance of the respective sector. The power imbalance within sector may also have the impact on the collaboration which is little considered.

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