



KHYBER PAKHTUNKHWA  
**INFORMATION  
TECHNOLOGY BOARD**  
Government of Khyber Pakhtunkhwa



CODE FOR  
PAKISTAN



**THE WORLD BANK**  
IBRD • IDA | WORLD BANK GROUP

**durshal**

Community  
Innovation Lab  
Government of  
Khyber Pakhtunkhwa  
A Project of KPITB

# 2019 IMPACT REPORT

KHYBER PAKHTUNKHWA  
GOVERNMENT INNOVATION FELLOWSHIP PROGRAM





# FOREWORD

It's incredible to see how far the Govt Innovation Fellowship Program has come in 6 years, thanks to engaged partnerships with the KP IT Board and the World Bank, as well as a very strong leadership team at its helm, nearly all of whom have experienced the Fellowship themselves as former Fellows. This program is incredibly dear to my heart since my foray into the world of civic tech started with my own year-long Fellowship experience as a Code for America Fellow. I'm so proud of this team that understood civic innovation and latched on to the promise of partnering technologists and government to re-think and re-implement the way the government meets citizens' needs. As I look back, I can see that the first couple of years of the Fellowship Program were about learning and understanding how government works and what kinds of projects are sustainable and impactful in the long term. More recently, the projects from the last couple of years of the Fellowship Program are delivering real impact and measurable value to citizens: Raabta, a solution our Fellows developed in collaboration with the KP Traffic Police Department, has facilitated 335k users and has saved 3,864 government hours since January 2017. Similarly, the solution developed for the KP Private Schools Regulatory Authority has been used to register 8,203 private schools in 18 months, saving 6,264 government hours. As part of the team's bar of quality and rigor that keeps rising, our rigor in measurement has increased, and I'm very proud of the Fellowship management team and the Fellows for the incredible work they're doing to improve citizens' lives.

**Sheba Najmi**  
**Founder & Executive Director**  
**Code for Pakistan**

The KP Fellowship Program is a unique platform bringing together citizen technologists and Government Departments to innovate in public service delivery. Since 2014, the three-way partnership between the KP IT Board, Code for Pakistan and The World Bank Group has seen 87 talented Fellows collaborate with different Government Departments to create 28 digital solutions. From building open data portals and citizen complaint systems to facilitating religious minorities, addressing sanitation-related issues, and improving traffic congestion, the Fellowship Program has aimed to bridge the citizen-to-government gap and enable the government to meet citizens where they are.

We have seen tremendous growth over the years. From 12 part-time Fellows in the first cycle to 20 full-time Fellows in the third, fourth, and fifth cycle, each cohort has worked towards making the government-to-citizen interaction less cumbersome and more seamless. Beyond building applications and digitizing processes, we have strived to create a culture where the government is increasingly citizen-centered and to foster an environment for citizens and government to work together to create social impact. In the process, we have seen the citizen-to-government relationship transform in meaningful ways.

In 2019, our Fellows partnered with seven departments to improve a range of government services - from building a Public Toilet Finder App to a Live Streaming Portal for the KP Assembly to an AR-based Indoor Hospital Navigation System. We couldn't be prouder of the milestones the Fellows have achieved and the part they have played in making the government more open, transparent, and efficient.

**Anam Zakaria**  
**Head of Fellowships**  
**Code for Pakistan**

A group of people, including men and women in professional attire, are gathered around a large whiteboard in a meeting room. They are looking at the board, which is covered with numerous colorful sticky notes. The scene is dimly lit, with the primary light source being the whiteboard. The text "WHAT IS THE KP GOVERNMENT INNOVATION FELLOWSHIP PROGRAM?" is overlaid in the center of the image, flanked by two horizontal green bars.

WHAT IS THE  
**KP GOVERNMENT INNOVATION  
FELLOWSHIP PROGRAM?**



Increasing Citizen  
Reach



Creating Efficiency in  
Govt. Processes



Empowering  
Government



Increasing Govt.  
Transparency

The Fellowship Program is a 6-month program supported by Code for Pakistan, the KP IT Board, and The World Bank which brings together technologists, government agencies and the public to **adopt user-centric, lean and agile development methodologies** to **solve problems and increase civic engagement** by creating innovative solutions in public services. Since 2014, we have run 5 cycles of the program creating 28 digital solutions for 21 different Government Departments. 87 Fellows have graduated from the program.

This report highlights how the KP Government Innovation Fellowship Program has **impacted the public, improved government efficiency, built capacity and bridged the citizen to government gap.**



# Digital Solutions Developed in 2019

1. Public Toilet Finder App for the Local Government, Elections and Rural Development Department.
2. Open Data Portal for the Performance Management and Reforms Unit (PMRU).
3. Monitoring and Evaluation System for the Chief Secretary Delivery Unit (CSDU).
4. Live Streaming Portal for the KP Provincial Assembly.
5. AR based Indoor Hospital Navigation system for Public and Private Hospitals.
6. E-School Registration Portal for the Private Schools Regulatory Authority (PSRA).
7. E-Governance Initiatives for the Khyber Pakhtunkhwa Information Technology Board (KPITB).





A photograph of a modern office environment. In the foreground, several people are seated at desks with laptops, focused on their work. In the middle ground, a group of men are standing and engaged in a discussion. The background shows more office workers at their desks, some wearing headscarves. The office has a contemporary feel with yellow desks, black metal frames, and various plants. The text 'KEY HIGHLIGHTS' is overlaid in the center in a bold, white, sans-serif font, flanked by two horizontal green bars.

# KEY HIGHLIGHTS



**INCREASING CITIZEN  
REACH**



**353,951**

Citizens facilitated



**3,891**

International Visitors

In 2019, a total of **353,951** citizens interacted with the solutions developed under the Fellowship Program. By interaction we mean either the citizens searched for some information or submitted a query to get information. This translates into **40 users being facilitated each hour**.

**This is the highest number of users in 5  
years of the Fellowship.**



**PKR 10.17**

Citizen facilitation cost

In 2019, for every PKR 10.17 spent on the Fellowship Program one citizen was facilitated in return. This figure does not include the indirect beneficiaries like the government itself or the Fellows.



## **CREATING EFFICIENCY IN GOVT PROCESSES**



**4,176**

Government hours saved

The solutions developed have in total saved over 500\* days worth of work for the Government in 2019.

\*Considering Government work hours as 8 hours/day



**19**

Operational Services

A total of **19** Government processes digitized under the Fellowship Program are continuously being used by both the Government as well as the public. Out of this total, **13** services were digitized in 2019.





**EMPOWERING  
GOVERNMENT**



**158**

Government officials trained

In 2019, a total of 158 government officials were given trainings on different technologies or data oriented concepts that would help them maintain the software solutions being developed for their departments.



## **INCREASING GOVERNMENT TRANSPARENCY**



**1,224**

Government Datasets  
Published

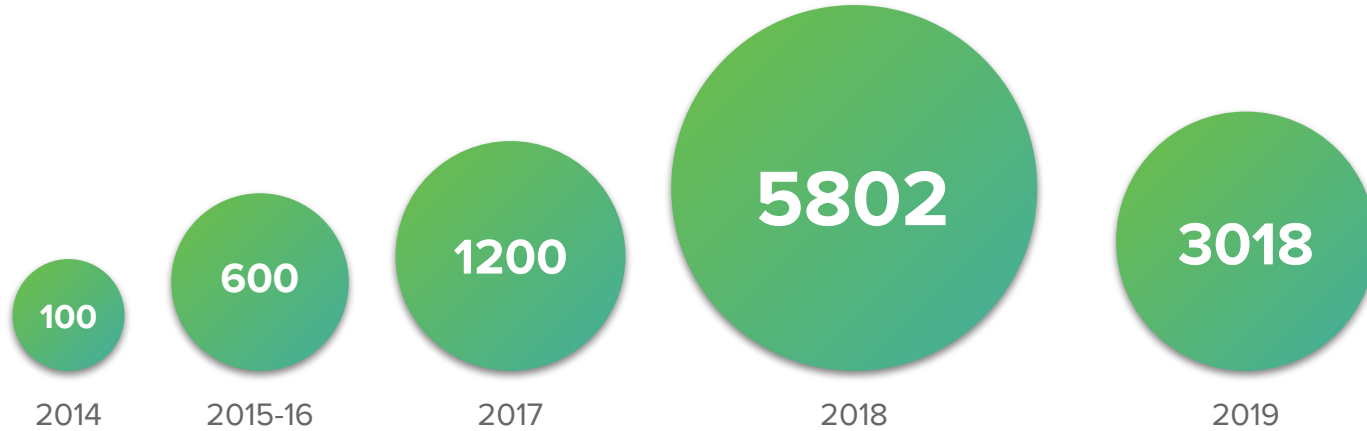
Our Fellows developed an open data platform and trained government officials to publish their public datasets. Over 32 Government Departments participated in the activity and have now started to submit their data on the portal.

- Finance Department
- Provincial Management and Reforms Unit
- Planning and Development Department
- Health Department
- Local Government, Elections and Rural Development Department
- Energy and Power Department
- Elementary and Secondary Education Department
- Agriculture, Livestock and Cooperative Department
- Auqaf, Hajj, Religious and Minority Affairs Department
- Industries, Commerce and Technical Education Department
- Food Department
- Forestry, Environment & Wildlife Department
- Sports, Culture & Tourism Department
- Higher Education, Archives and Libraries Department
- Labour Department
- Inter Provincial Coordination Department
- Transport and Mass Transit Department
- KP Board of Revenue
- Relief, Rehabilitation & Settlement Department
- Home & Tribal Affairs Department
- Excise, Taxation & Narcotics Control Department

Some of the departments in Khyber Pakhtunkhwa who have started publishing their datasets on the KP Open Data Portal.



**GROWTH OVER  
TIME**



Year wise breakdown of the total number of **candidate applications** received to join the KP Fellowship Program.

\* In 2014, the candidates were selected through the Peshawar Civic Tech Hackathon.

\*\* In 2019, the application process was made more stringent resulting in a lower number but higher quality of applications.



Year wise breakdown of the total number of **problem statements** received from the government to be worked on by the Fellows.

\* In 2014, the problem statements were selected through the Peshawar Civic Tech Hackathon

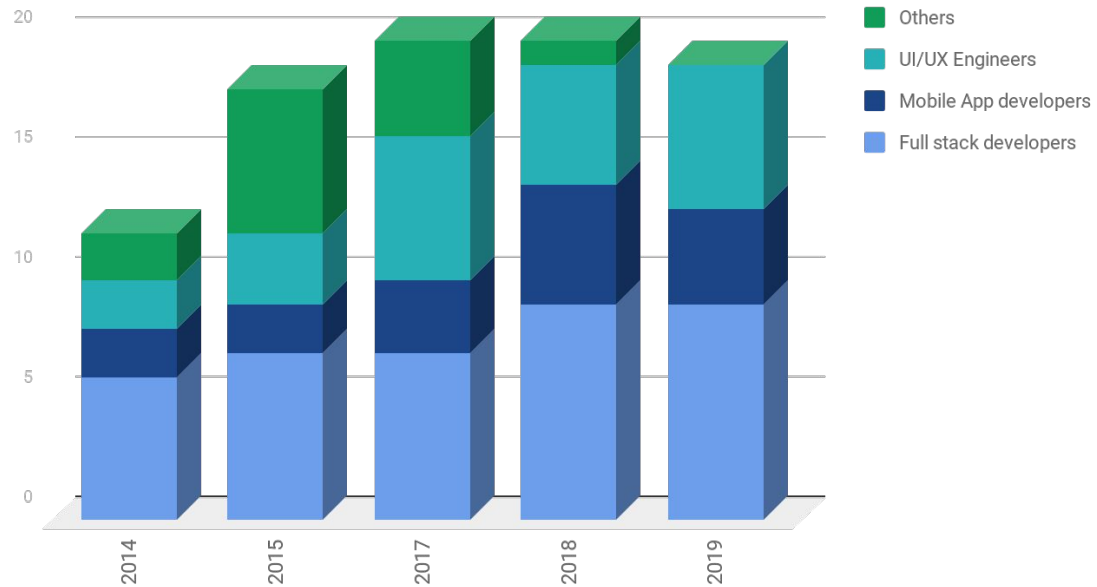




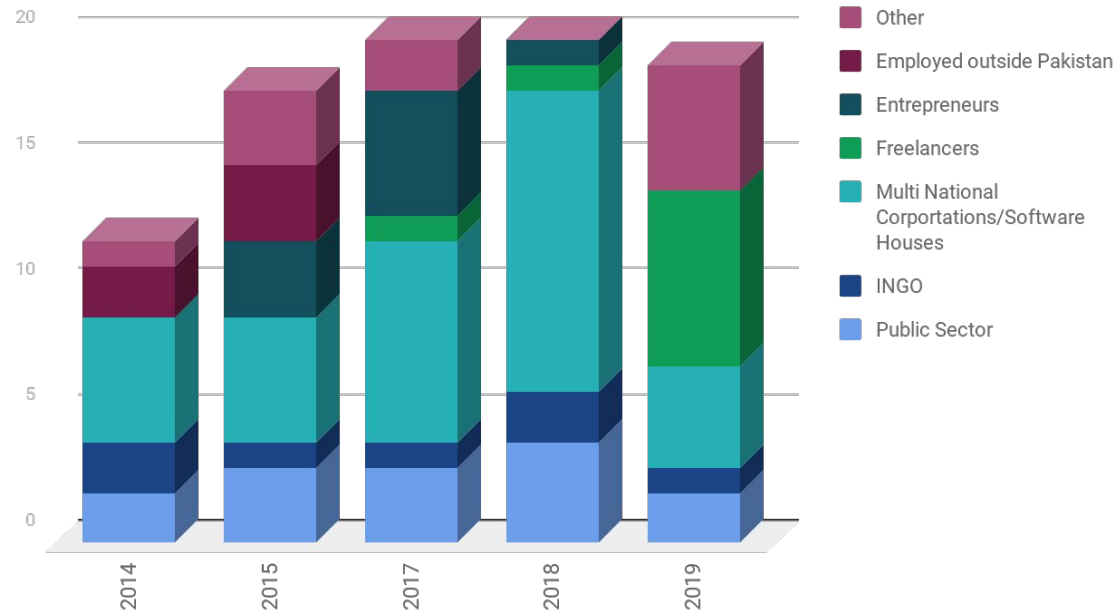
Year wise breakdown of the total number of **digital solutions developed** by the Fellows for the government to facilitate the public.



Year wise breakdown of the total number of **capacity building trainings** conducted for the Fellows. These include technical, non technical and soft skill trainings.



Year wise breakdown of the number of Fellows and their relevant set of technical expertise.



Year wise breakdown of the number of Fellows and their current professional engagement.



Geographic spread of the areas the Fellows hail from.



Methodology

## INDICATOR#1: INCREASING CITIZEN REACH

### Assumptions:

We define processes as Govt process/service e.g. apply for a license, upload dataset and generate reports. We have developed websites, internal software tools, online interfaces for the public therefore we have combined visitors and users who access these services. We collect visitor/user information for all our projects (operational in 2019).

In local Government Departments there are several processes involved in the provision of services to the citizens e.g. collecting personal information through paper based forms, validation/scrutiny of ID papers, issuing receipts or collecting fines. These processes are time consuming, manual and require the physical presence of applicants.

By digitization of government processes we mean how many processes have been automated through digitization. This digitization can be through websites, internal software tools for automation of tasks, or through self-help online interfaces for the public to perform these processes online. In each cycle we measure how many government processes have been automated using digitization.

### Data:

On weekly basis, we collect data from our partner Government Departments and through analytics tools i.e. Google Analytics and Firebase analytics.

Before partnering with a Government Department the team analyzes the number of processes that can be automated through digitization. After the identification of these processes, workflows & user journeys are developed, to determine how the applicants can perform this process online through a self-help process. Then the Fellows develop an interface, module or plugin which can be integrated with the existing IT setup for the Government Department, and the rollout of this online service is ensured so that more citizens can access these services online.

The team measures the impact of the innovation by comparing post adoption data to the baseline data (collected prior to the development of the solution) through metrics such as the number of users facilitated, time saved by the department, and cost savings per citizen by accessing the service, and so forth.

## INDICATOR#2: TIME SAVED

### Assumptions:

We take special care in calculating time related indicators and prefer those projects in which calculating “Time saved” is easily measured and can be justified. In this indicator, we have calculated time saved by the Government in the school registration and renewal process. We designed a formula on the basis of data & estimates provided by the Government Department. In our calculation we keep real time working conditions in consideration as well.

A significant objective of automation through digitization is saving time for the citizens accessing these services. We calculate the time saved by comparing and contrasting the typical human hours it takes for a particular Government Department in the provision of its services to citizens. Case in point in this particular instance is the time saved through the automation of school registrations and renewals processes by developing an E-Registration portal for PSRA.

### Data:

Data collected by the Fellowship M&E team through the Government Departments before the start of each cycle. This data reflects how much time it takes prior to the development of the solution for users to access the service. This baseline data is then compared to the time taken by a user to access a specific service, post deployment, and the difference in time is then calculated.



## INDICATOR#3: CITIZEN GOVERNMENT ENGAGEMENT

### Assumptions

From the applicant we mean people who apply for the Fellowship Program. Problem statement is a request letter from the Government Department for a project in the Fellowship Program. One can see increasing trust of Government Departments with each passing year.

### Data Source

Number of received applications and problem statements.

## INDICATOR#4: UPSKILLING

### Assumptions

This Fellowship Program is not only about developing solutions, we also put in efforts to upgrade Fellows skills by imparting necessary training. We invite outstanding local talent and also arrange online sessions with Code for All teams.

### Data Source

Number of training sessions conducted and the feedback gathered from the Fellows.

## INDICATOR#5: COST PER CITIZEN

### Assumptions

Fellows receive monthly stipends for their services. We have derived a formula by dividing the stipend amount by the number of citizens facilitated in return (as a result of the processes digitized under Fellowship Program).

### Data Source

Monthly bills and weekly analytics gathered from the digital solutions.

## INDICATOR#6: EMPOWERING GOVT

### Assumptions

After successful deployment of projects, we train government staff on how to operate developed solutions, building their capacity.

### Data Source

Number of government officials who participate in these trainings.