Case Study

Lost Report Application, Delhi

URL - http://www.delhipolice.nic.in/index.html

Delhi police

Date – (01/07/2016)

Name of Authors/Content creators

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### Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>BPR</td>
<td>Business Process Reengineering</td>
</tr>
<tr>
<td>SIM</td>
<td>Subscriber Identification Module</td>
</tr>
<tr>
<td>LR no</td>
<td>Lost Report number</td>
</tr>
<tr>
<td>PAN</td>
<td>Permanent Account Number</td>
</tr>
<tr>
<td>FAQs</td>
<td>Frequent Asked Questions</td>
</tr>
<tr>
<td>CP</td>
<td>Commissioner of Police</td>
</tr>
<tr>
<td>DCP</td>
<td>Deputy Commissioner of Police</td>
</tr>
<tr>
<td>FIR</td>
<td>First Information Report</td>
</tr>
<tr>
<td>IT</td>
<td>Information Technology</td>
</tr>
<tr>
<td>OS</td>
<td>Operating system</td>
</tr>
<tr>
<td>SLAs</td>
<td>Service Level Agreements</td>
</tr>
<tr>
<td>CERT</td>
<td>Computer Emergency Response Team</td>
</tr>
</tbody>
</table>
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1. EXECUTIVE SUMMARY

Delhi Police has been time and again adopting new methodologies to improve their service capabilities to help citizens with quicker and efficient methods of issue resolution. One such area was the improvement in the method of reporting loss of belongings by citizens. Lodging a complaint and getting it resolved was a time taking process which often involved multiple visits to police station and many-a-time the complainant had to face unwarranted harassment. Many would not even go to the police station for fear of facing harassment. General public had no other option than to follow this process for lost ID cards, passports, property papers, mobile SIM card etc. where police report is mandatory for issuance of duplicate papers/SIM.

This case study highlights on the initiative taken by Delhi Police to ease the citizens’ burden of multiple visits and harassment in case of filing report for lost items. The innovative solution is a solid example of how procedural changes can be brought into such system what is by large considered as a very complicated system. Delhi Police has worked with a focus and intent to bring down public inconvenience.

This e-governance initiative, the Lost Report App, launched on 27th Feb, 2014 enables mobile and web based reporting of lost items from any part of the globe without physically visiting the police station. A digitally signed report, Lost Report, is instantaneously sent on the complainant’s mobile phone and e-mail address in the response to the complaint. The ‘LOST REPORT’ bears a unique Lost Report number (LR No) about the information lodged. This LR Number can be used for future search and retrieval of a copy of the report.

The intent of “Citizen Convenience” has often been used to refer about the processes developed for the needs and requirements of citizens who are the end beneficiaries. Other objectives which have been taken into consideration are transparency, improving accessibility, improve relationship and improve police efficiency. Let us delve deeper into the case study to understand if the project justifies these objectives.

2. INTRODUCTION:

Delhi Police has 162 territorial police stations located in an area of around 1483 square kilometer. In 2013, around six lakh complaints of lost items were registered with the Delhi Police. The conventional method of reporting losses was as illustrated in the flowchart:
This process had a lot of disadvantages:

1. Harassment to general public
2. Jurisdiction identification
3. Multiple visits to police station
4. Time wastage for both police and citizen
5. Manual reports

Since lodging a police report about a lost document becomes indispensable where it is a prerequisite for reissue of the lost document e.g. a passport, public has no other option than to bear all the inconveniences associated with the primitive process. Delhi Police realized that current process is not capable to handle such a huge number of lost reports efficiently and hence there was dire need for a technological
upgradation. Therefore, Delhi Police took a historic step of moving entire process to mobile and web platform.

This hassle free solution enables the public to report their items lost in Delhi from any part of the globe on an application called “Delhi Police Lost Report”. This application is compatible with Android 2.2 & above, iPhone 4 & above and Windows 8 & above. This is free of charge for public and can be downloaded as and when needed from Google Play, iOS and Windows Store. User has to follow simple steps of registration and fill in the details in relevant columns and then submit it. As he submits, a digitally signed report is generated electronically and posted to his email id and phone number immediately. This report is a valid proof of lost articles. Also, where police report is required mandatorily for re-issue of certain government documents, this app facilitates generation of lost report quickly. Also, the electronically generated lost report bears a unique number (LR number) which can be used to access or retrieve the report in future.

The process is not only useful to public but also helps Delhi Police as an organization. The new electronic process saves the time as against the manual process that was prevalent earlier. In addition, unsavory communication is avoided, leading to transparency in procedures that helps in improving the image of police in the long run. Each and every step from downloading the application, to registering, to uploading complaint, to receiving the digitally signed report, to authentication of the report, is digital and e-enabled, not requiring any human intervention.

**Process Flowchart on Web Portal:**

Step 1: Click on [http://delhipolice.nic.in/index.html](http://delhipolice.nic.in/index.html)

Step 2: Navigate to ‘Lost & Found’ and click on ‘Register’

Step 3: Fill in the relevant details correctly:
- **Complainant’s Name**: Enter the name of the person who wants to register the Complaint
- **Father’s/Mother’s Name**: Enter the Father’s/Mother’s Name of the Complainant
- **Complainant’s Address**: Enter the Postal Address of the Complainant
- **Complainant’s Mobile Number**: Enter the Complainant’s Mobile Number
- **Complainant’s Email Address**: Enter the E-mail address of the Complainant
- **Place of Loss in Delhi**: Enter the name of the Area/Place/Locality where the article or document was lost
- **Date of Loss**: Enter the Date, Month and Year of Loss
- **Time of Loss**: Enter the time at which the article/document was lost
- **Lost Articles**: Enter the name of lost article
- **Description**: Enter the Description of lost article and add the article. You must add different articles one by one.
- **Any other details**: You can enter any other information you want to enter in this box. The information should not be the same as mentioned above.

- **Enter the Code** as shown in the Box

Step 4: Click on Submit

**Process Flowchart on Application:**

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3. OVERVIEW OF THE PROJECT OWNER

- **Background of the Owner**
  Shri BhimSainBassi, a graduate in commerce from Shri Ram College of Commerce, is currently a Member of the Union Public Service Commission since 31 May 2016. A 1977 batch Indian Police Service officer, Shri Bassi started his career as an Assistant Superintendent of Police in Pondicherry and since then he has served Delhi, Arunachal Pradesh, Chandigarh and Goa in various capacities.

- **Details of his current position/managing unit**
  Shri BhimSainBassi is currently a Member of the Union Public Service Commission since 31 May 2016. He was the Commissioner of Police of Delhi from August 2013 to February 2016. Lost Report Application was launched during his tenure and the entire development was carried out under his overall supervision.

- **His experience on the project**
  Shri BhimSainBassi had played the pivotal role in the successful launch and implementation of Lost Report Application services. This app was launched by Hon’ble Union Home Minister Sh. SushikumarShinde on February 27, 2014 at Talkatora Stadium, New Delhi.

  Shri Bassi was involved from conceptualization of idea, development and then launch of the application. His tweet on 10th December 2015 speaks volume of his involvement and his expectations from the initiative, “Lost Report app, first of its kind in the world, eliminated harassment in getting police report required for seeking duplicate documents.”

  His focus on making the application popular through right channels of communication resulted in huge success of the application. According to a statement released by Delhi Police, since February 28, 2014 when the app was officially launched, more than 5.5 lakh complaints were registered in a very short span of time which showed the level of trust of people over the Delhi Police initiative.

4. PROJECT OVERVIEW / HISTORY OF THE PROJECT

Delhi Police has 162 territorial police stations located in an area of around 1483 square kilometers. It was noticed that in 2013 alone, on an average six lakh people approached Delhi Police complaining about their lost articles.

A complainant, who has lost an article/document, has to approach the local police for registering his complaint. He is not sure which police station he has to go to as quite
often he does not know about the jurisdiction aspect of police functioning. He is also not sure how he will be treated at a police station and how much time he has to spend in getting his complaint registered. The problem for a complainant gets further complicated in case he is in transit when he loses his article/document. Police has its own processes and procedures and asks many question to the complainant to ascertain jurisdiction issues etc. Moreover, owing to heavy pressure of crime related work of more urgent nature, the issue of loss of item gets a lesser priority at police station. It was also observed that earlier when the report of loss was registered in police station manually, a complainant had to spend around 5-10 hours to get his report registered. This is not inclusive of the time a complainant had to spend in locating the relevant police station and reaching there.

Some of the key problems identified in the existing process were:

- Finding jurisdiction of the police station in which item was lost
- Visiting police station for lodging lost report
- Complaint could be made only at Delhi police station by visiting the place in person
- Time wastage at the police station in the process
- Multiple visits to the police station
- Manual record keeping and its retrieval for verification etc.

Hence, there was need to look into the system and develop some solution to remove all the inconveniences caused to general public due to this primitive process. The project commenced under the supervision of Commissioner of Police, Shri BhimSain Bassi and the Lost Report Application was developed in-house with outsourced development team within 3 months, both for web based and mobile version. The application was launched by Hon’ble Union Minister of Home Affairs, Govt. of India and was very well covered in media space.

The difference made through this application has been phenomenal, in terms of saving time of public as well as the department, ease of process, doing away with human intervention, bringing transparency and above all, public satisfaction. 15.84 lakhs of people have used this application till now, is the testimony to the fact that the application has been a huge success. If seen in terms of time saving, millions of man hours have been saved using the application, considering the average time taken in lodging the report manually is 5-10 hours. In term of benefits to the department, it has not only saved the time of police officers but also has helped in better documentation which may further assist in analyzing patterns and mapping of crime.

5. SITUATION IN PROJECT OWNER’s STATE/ DISTRICT

Existing process of reporting losses was manual and had many drawbacks like police station visit, manual reporting, jurisdiction, harassment, etc. and this made it a cumbersome job both for the general public and police to register lost cases. Many lost articles were not even being reported because of the inconveniences that people faced due to the process.

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It is a prerequisite to lodge a police report in case of important documents like passport, PAN Cards, etc. for reissuance. Some of these losses are detected after a certain gap of time and the victim might not remember the exact location and time of loss. Tourists or persons travelling quite often find it very difficult to lodge a report in the police station for getting a new document issued.

To make the process user friendly, Delhi Police launched its innovative e-Governance initiative, the Lost Report App on 27 February, 2014. Any person can now report the loss of anything including any document to Delhi Police using this App from their mobile phone or computer from any part of the globe and obtain a digitally signed police report instantly on his email, without the hassle of visiting a police station, subsequently eliminating the dependency on space/location specific centers (i.e. Police Stations). This report can be used to apply for re-issuance of any lost document and the issuing department can even verify the police report through the app itself.

➢ **Stakeholders:**

Stakeholder Identification and ranking of the same in order of importance as far as the end goal is concerned is key to implementation of any project. It helps in identifying the degree of change of roles and responsibilities for each stakeholder and planning out an effective roadmap.

Key stakeholders of Lost Report application were:

1. Delhi Police
2. Central / State Administration

➢ **Beneficiaries:** The beneficiary of the project is the general public, both residents of Delhi as well as visitors, who can use the Lost Report Application from anywhere in the world for anything lost in Delhi.

➢ **Steps/ action taken at the state/ district level to address the problem:**

Following Steps have been taken at the State level to address the problem:

- Development on an application compatible with Android, iOS and Windows
- Free of cost application easily downloadable from Google Play, iOS and Windows Store
- Loss can be reported from any part of the globe
- Lost Report number generated can be used for accessing or retrieving the report in future
- No physical visit to police station thereby reducing the effort of victim
- No manual report lodging to save the time of both citizen and police
- Proper advertisement for creating awareness among the public
6. MODALITIES OF THE NEW SYSTEM (SOLUTION)

The application developed for reporting lost items aims at reducing the pains that one had to face in the existing process. All inconveniences have been removed through technology from the inputs of BPR and stakeholder consultation. The lost report application is a first of its kind initiative undertaken by any police force in India. Delhi Police is the pioneer in providing this particular service through the use of online multi-channel platforms (web-based, mobile version) for service delivery. It is an excellent example of innovative use of technology for service delivery in an extremely user friendly manner. The mobile app version is an admirable endeavor considering the recent rise in mobile technology and use of smart phone in India. The Lost Report application is dedicated completely to making life easier for the general public of Delhi from any part of globe by letting them lodge lost article complaints online instead of visiting the police station multiple times.

- **Technology Platform used**
  - **Description:** Keeping in mind that the target user of the application shall be common people, it was felt that the interface of the application should be user friendly. At the same time the technology should support security and scalability. PC Solutions chose MS technology stack of Dot Net and S91 Server which helped in achieving the objective of developing a user friendly application.
  - **Interoperability:** The mobile version works with Android 2.2 and above, Windows Phone 8 and above, iPhone 4 and above. The web-based version is accessible through various OS platforms like Windows, Mac, Linux etc., and is system independent.
  - **Security concerns:** The application was developed in-house with proper consideration of security features. The back end infrastructure addresses the security concerns of the software application through periodic updates and patches. The cyber security audit of mobile app and web-based application was got done by CERT empaneled auditor to prevent any kind of security threats like hacking or intrusive attempts.
  - **Service level Agreements (SLAs):** The service level agreement was signed with the outsourced software development team to ensure the compliance with the software development standards and timely completion of the project development. Also, the feedbacks of the internal stakeholders of the system were incorporated during the pilot testing to make it robust and efficient.

- **Measures to ensure the applicability**

  Following measures have been taken into consideration for ensuring the applicability of the application:
  - User friendly interface
No cost burden on the user
Application supported by Android, IoS and Windows platform

Measures to ensure adaptability and scalability

Adaptability:
- The Lost Report Application is available as Mobile App on Android, Windows and IoS platform
- Web based version is available and is accessible through OS Platforms like Windows, Mac, Linux, etc.
- User friendly and intuitive application interface
- Option of lodging complaint on behalf of others

Scalability:
- The Application is platform independent and runs on various Mobile and Desktop Operating Systems
- The servers are already available with the government and run other applications under e-governance initiative
- The Lost Report back-end application can be easily hosted on existing available government IT resources, especially servers
- Low network bandwidth requirement enables the application to be rolled over IT setups having limited server or computational and network capabilities
- “Found Articles/Documents” application is being developed to trace the lost articles/documents.

Measures to ensure replicability
- The application has been developed on a standard architecture
- The technology stack is MS Dot Net which is widely used across board and is industry standard
- At the back-end, the server and bandwidth requirements are basic standard configurations
- At the user end, the web and mobile applications are compatible with all standard and popular operating systems and browsers
- The application is a low-cost, simple architecture application

Restrictions, if any, in replication and or scalability: None

Risk Analysis:
- IT Backend infrastructure, especially database servers need to be augmented to manage the ever increasing user base

Capacity Building model used:
- Guiding citizens through FAQ’s and Advertisement on Delhi Police Website (http://www.delhipolice.nic.in/faqs.html)
- Training to all district police officers on how to operate the application

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Advertisements in cinema halls, Radio channels, posters and pamphlets in exhibition grounds
Sharing the initiative with neighboring states like Uttar Pradesh, Haryana and Rajasthan where it has been appreciated and implemented

7. IMPACT ON THE STAKEHOLDERS/BENEFICIARIES

- **Cost benefit analysis**: Some of the parameters for evaluating cost benefit analysis:

<table>
<thead>
<tr>
<th>Cost Element</th>
<th>Pre Application</th>
<th>Post Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physically Going to Police Station</td>
<td>✓</td>
<td>x</td>
</tr>
<tr>
<td>Waiting at the Police Station</td>
<td>✓</td>
<td>x</td>
</tr>
<tr>
<td>Police registering the loss manually</td>
<td>✓</td>
<td>x</td>
</tr>
<tr>
<td>Stationary</td>
<td>✓</td>
<td>x</td>
</tr>
<tr>
<td>Revisit by Victim</td>
<td>✓</td>
<td>x</td>
</tr>
<tr>
<td>Travel in case of Outstation Victims</td>
<td>✓</td>
<td>x</td>
</tr>
</tbody>
</table>

- **Value delivered (qualitative and quantitative)**

(i) **To organization**
- Ease of process, enabling time saving and transparency in the system; 15.84 lakh users have used the application till now
- Millions of man hours saved
- Better documentation which can be used for analyzing patterns and mapping of crime

(ii) **To citizen**
- Loss can be reported from any part of the world
- Application can be accessed through various interfaces
- 24x7 service
- Facility of online and offline download of report and online submission of forms
- Visit to police station not needed for reporting the loss

8. FUTURE ROADMAP / SUSTAINABILITY

- This application can be replicated by other states as well and then it can be combined as one application for India.
- In future the number of hits for this application will increase.
- Updates about the registered reports can also be made available to the general public.
- As of now number of hits to the site is close to 7 lakh per year but as the application becomes popular, the number of hits will increase. This will put more
load to the backend server. Hence the infrastructure would need to be upgraded in the future.

- Number of visits of the general public to the police station will decrease.
- The lost report application can be integrated with other Smart Policing Apps in future.

9. ANNEXURE(S):

EXHIBIT – 1– Flowchart of activities under the new system:

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Flow Diagram of Lost Report Registration through Mobile

Start

Download Mobile App of Lost Report

Google Play Store  Window's Phone Store  Apple App Store

Fill the requisite information in registration form

Press Register button

Fill the requisite information in input form

Press Submit button

Digitally signed Lost report in PDF format automatically generated

Lost Report is downloaded on local system  Lost Report is emailed to the complainant's email ID

Lost Report received

No

Open Delhi Police website (http://delhipolice.nic.in/)

Click on Retrieve button under Lost Report Head

Enter respective Lost Report no. and email ID

If authentic user

Yes

Click on View Report button

Lost Report is downloaded on local system

Stop

No

Not a valid user

Fill the new email ID to receive the Lost Report

Lost Report is emailed to the complainant's email ID

Yes

Stop

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EXHIBIT – 2 – Benefit Analysis:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Before Initiative</th>
<th>After Initiative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Users</td>
<td>183</td>
<td>183 + Public Domain</td>
</tr>
<tr>
<td>Increase in Revenue</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Volume Growth in transactions</td>
<td>7.2 lakhs</td>
<td>Approx 20 lakhs</td>
</tr>
<tr>
<td>Time taken to process transactions/service delivery</td>
<td>5-10 hrs</td>
<td>Instant</td>
</tr>
<tr>
<td>Charges for the provided services</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>
| Measures undertaken for Capacity Building | Basic Training regarding Registration of NCR | Delhi Police organized
  ✓ Lost Report workshop
  ✓ Advertisement in Newspapers, Cinema Halls
  ✓ Pamphlets in exhibitions |

EXHIBIT -3 – Application Performance Metrics

Cumulative figure of Registration

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EXHIBIT – 4 – Project Team Structure