Robotic process automation

Improving the data handling of digital crime reports submitted to the Metropolitan Police Service through an online data management system.

First published 14 June 2024

Updated

19 June 2025

Key details

Does it work?	Promising
Focus	Organisational
Topic	Digital
Organisation	Metropolitan Police Service
Contact	Christopher Gooch
Email address	christopher.gooch@met.police.uk
Region	London
Partners	Police
Stage of practice	The practice is implemented.
Start date	November 2018
Scale of initiative	Local

Key details

Aim

The aims of robotics process automation (RPA) in reporting crime through the single online home (SOH) portal are to:

- speed up the transposition of the data into the contact handling system
- free up operator time to review the contact more effectively
- improve data accuracy of the transposition
- effectively triage and manage the forms and associated workload
- track the activity on the forms and extract data to improve both force agent and victim experience further

Intended outcome

The intended outcomes of RPA are to:

- provide a faster and more accurate receipt of crime reports via the SOH with the aim of saving on average 90 seconds per form with 100% accuracy of the data transposition
- improve contact centre operator satisfaction through employee surveys
- improve compliance of key performance indicators (KPIs) classifying 85% of all crime allegations received within 24 hours of receipt
- ensure the management of police information (MOPI) is compliant for command and control records
- track and audit the activity of forms submitted through a performance monitoring dashboard

Description

Single online home (SOH)

The SOH originated as an internal Metropolitan Police Service (MPS) internet replacement project in March 2018, before being developed into a national web offering that is delivered across 41 UK forces by the National Police Chiefs' Council (NPCC) digital public contact programme and the Home Office.

The SOH website provides an online form for the public to report and make contact about different types of incidents and issues, including reporting crime. A crime report is completed by a member of the public and then is transferred to the force via email. The form is in the body of the email and attached as a PDF file (with some other information including how the form was submitted available via a txt file).

Receiving operators then access the form and transfer the information into the relevant force system. In the MPS this equates to around 2,000 forms a day. With the creation of a national SOH, there was a requirement to build a database to deliver forms to all forces. This prompted the development of the secure forms portal (SFP) in 2018, which the force uses to directly service form submissions.

Benefits of the SOH

- Effective triage: the use of the risk questions in the form to automatically flag forms that relate to vulnerable individuals and to bring the form to the top of the queue.
- Effective supervision: supervisors can see and review the whole queue to enable them to review the risk-flagged transactions and those that come in through the Contact Us route. Although generally given a key performance indicator (KPI) of a 48-hour resolution time, this may include more risky issues that require escalation.
- Effective allocation of work: the operators do not see the whole queue to avoid cherry-picking forms. They just click a 'Get Work' button and the next-highest priority form in the queue is delivered and allocated to them.
- Performance monitoring: the SFP date and time stamps every action that takes place associated with the form submission, which then creates data points which can be used in performance monitoring.
- Facilitates further developments: the SFP also facilitates the use of RPA to directly complete the data transposition content of the emailed form into the contact handling system.

The data from the form must then be copied into the MPS contact handling system (CHS) to ensure it can be recorded in line with National Crime Recording Standards (NCRS) and actioned appropriately by the robotic licenses.

Robotic licences

MPS identified a need to enhance SOH by applying a RPA to support the process of crime reporting data. Ten robotic licences were purchased out of the IT budget, equating to £4,250 per licence per year and managed by an overseeing system called Orchestrator at a cost of £19,500. The process for transcribing the crime report form into the contact handling system was developed by Accenture and cost approximately £3,000 for two weeks work.

The design of the robotic automation process costs between £40,000 – £90,000 dependent on the complexity of the robotic solution. Delivery of the process can cost £100,000 – £390,000 with an 8 to 24 week delivery schedule dependent on the complexity of the robotic solution. After delivery, a service wrap agreement is put in place, which manages any service fault issues, alongside monthly reviews relating service support and testing taking place every three weeks (once approved via our change acceptance board (CAB) where the robots are updated if required). Maintaining the robots is managed by the head of digital contact, the RPA and Digital Data and Technology (DDaT) teams.

Delivery of the robotic process automation (RPA)

The RPA solution went live in November 2018. The crime forms are allocated to the robots and once the data has been transferred to the contact handling system it is retrieved by an operator for review. The operator determines if it is a crime, checks for risk, identifies the offence and amends the national incident category list code(s) (NICL) and makes the decision to deploy resources or create a crime report for classification by our telephone and digital investigation unit (TDIU). Alternatively, if the operator determines it is not a crime, a record of the rationale and the actions taken are recorded.

Around 20% of all crime reports received by the MPS now come in via the SOH website route and the work now covered by the robots in transferring this data is estimated to be the equivalent of six full time equivalent posts. With a success rate of over 98%, this frees up significant capacity for the operators to review the contacts and determine appropriate actions required. In instances where the robotics process automation fails or is unavailable, the operators retrieve the online crime report

and complete the data transposition manually.

For forces that do not have direct integration between SOH and their contact management system(s), the use of RPA can speed up the process of transferring details from online reports, leading to improved triage outcomes as the focus is on reviewing incidents, improved data accuracy with reduction in human error, and improved efficiency which benefits both the organisation and victims.

Evaluation

An assessment of a year's worth of data of demand handled by robots against demand handled manually was presented as part of the business justification paper (BJP) for investment in the orchestra solution, and additional licences to deal with growing volumes of submissions.

The MPS originally implemented RPA as a hardware solution with five licences, before moving to a virtual solution with ten licences, and has determined that the robot takes on average 90 seconds less per crime report to transfer the data to CHS.

Overall impact

Over the last 12 months the robotic automation process has handled 305,509 online crime reports. This amounts to a saving of more than 7,638 hours per year and thus is a significant contributor to ensuring all online crime reports are processed within one hour of submission and the crime is classified within 24 hours of receipt.

While there were some initial concerns raised from staff about the reduction of staff required to service online crime reporting, this was not the intention and the staff have embraced the use of RPA. Staff feedback revealed a reduction in completing onerous tasks, freeing up their workload to focus on assessing risk, providing a better service to members of the public.

Learning

The SOH has provided the force with the audit function to track and effectively triage the queue of contacts which has led to the development of performance monitoring and highlighting where the system can be furthered improved. SFP due to its age is now considered an outdated product that could benefit from further enhancements. However, it remains an effective interim solution.

For forces to develop a similar product there is the possibility that iHUB could introduce this functionality in the future as an alternative approach to integrating with force systems. The RPA is made easier because the MPS uses the SFP to handle SOH form submissions.

The force intends to move from legacy systems and directly integrate the SOH iHUB form data direct into our force management system for crime (CONNECT) which will negate the need for RPA and the SFP and the force's CHS that currently sits in the middle of the current process and we estimate to provide further improvements in data quality and efficiency.

Challenges

- breakdowns occur usually because a change has been made to the SOH forms that the robots' programming has not accounted for
- alternative online management systems may be required if a force only has access to the email
 with the attached crime report, allowing the robot to access the form data to enable effective data
 transposition

Copyright

The copyright in this shared practice example is not owned or managed by the College of Policing and is therefore not available for re-use under the terms of the Non-Commercial College Licence. You will need to seek permission from the copyright owner to reproduce their works.

Legal disclaimer

Disclaimer: The views, information or opinions expressed in this shared practice example are the author's own and do not necessarily reflect the official policy or views of the College of Policing or the organisations involved.

Tags

Force control rooms