



Highlights

- Increase overall visibility into local crime activity
 - Increase public confidence in the capabilities of local law enforcement agencies to protect and serve
 - Assess and mitigate risk in real-time by understanding historical data and crime trends
 - Improve communication with government and other law enforcement agencies to aid in the proper prosecution of criminals
 - Return on Investment in as little as 1 year
 - Confidence that your SPSS Crime Prediction Analytics Solution is implemented with IBM proven practices
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IBM SPSS Crime Prediction Analytics Solution (CPAS) Service

Law enforcement teams are experienced and intuitive. In today's complex environment, combating crime, gangs, and terrorism requires a combination of instinct and the kind of insight that comes from the rigorous analysis of multiple types of data. Facts back decisions, provide arguments and present a clear picture of conditions in time to take action. They help officers without the experience or intuition in a particular area to make the best decisions.

Making decisions and drawing conclusions based on fact builds confidence among staff and with the public. The IBM SPSS Crime Prediction Analytics Solution provides automated analysis, which is complete, methodical, unbiased, and consistently outperforms human experts. This can bring insights not immediately apparent simply because the nature or method of a crime may fly in the face of rationality.

Considerations

Analysis of police agency data provides insight that allows officers and police analysts to track criminal activities, predict the likelihood of incidents, effectively deploy resources, and solve cases faster.

When implementing this solution, some important considerations include:

- Is there a recommended approach to installing and configuring SPSS CPAS?
- How long will the implementation take and what type of disruption will there be in our daily operations?
- How long will it take until we have enough data to predict when and where crime might occur?
- How can the SPSS CPAS Service help in increasing our community presence and public confidence?
- Will we be able to generate unique models for different types of incidents?
- How do I ensure my team is building the experience they need for new requirements in the future?



Overview

The IBM SPSS Crime Prediction Analytics Solution Service combines powerful analytical capabilities with a rich set of integrated data sourced from your established applications. Built on a proven IBM SPSS software platform, the SPSS CPAS provides agencies with the means to make the best use of people and information at hand to monitor, measure, and predict crime and crime trends.

Combating crime and rising gang violence with limited or shrinking resources is becoming more difficult day-by-day. Meeting this challenge is now a matter of working smarter—making sure that every effort counts and no effort is wasted. To work smarter, many policing agencies are making better use of the information they generate and store, both structured (such as crime and criminal data) and unstructured (such as officer case notes). When brought together and made available for analysis, these volumes of data can contribute to an understanding not just of what happened in the past, but (based on patterns) of what is likely to happen in the future.

Using such data as historical crime incidents, behaviors, maps and typology, as well as enabling factors such as weather and trigger events, holidays or paydays for example, police analysts can:

- Identify areas typically frequented by violent criminals
- Match trends in regional or national gang activity with local incidents
- Profile crimes to identify similarities and match the crimes to known offenders

More reliable and widespread information lets law enforcement agencies improve intelligence gathering, investigation, resource planning, case management, operations, and enforcement. With this insight, crime prevention becomes a science.

This comprehensive, end-to-end implementation, includes the installation of IBM SPSS, preparation of the data, integration of your data into the SPSS CPAS Modeler Streams, building and assessing the models, and deploying the solution to your analysts. Training for your resources is also included in the service.

You receive a fully documented and customized SPSS CPAS installation based on your needs. In addition, you receive the full predictive capability of SPSS and the ability to expand your predictive analysis as you see fit. You can supplement your solution by implementing IBM Cognos Business Intelligence (BI) and providing analysis, reports, dashboards and scorecards to mobile resources through the use of IBM Cognos Mobile.

Your agency will have the ability to address the areas most in need of insight with three simple steps:

1. **Capture** – gather and input the data. Law enforcement agencies gather a wide variety of data. The solution accepts both structured and unstructured data.
2. **Predict** – statistics and modeling for crime analysis. Creating an analysis and scoring model to predict the likelihood of incidents requiring police attention will drive confidence in your data and decision-making and bring repeatability to your processes.
3. **Act** – deploy to operations and collaborate. Insight is only useful when those who need it can access it quickly and easily. The unique deployment technologies and methodologies of this service maximize the impact of analytics within your agency.

Key Benefits:

- Force Deployment – proactive deployment based on anticipated activity
- Patrol Officer Preparation – better patrol routing and anticipation of possible illegal activity in their geography
- Signatures – use of patterns to detect temporal hotspots or clusters, anticipate risk, and identify possible repeat offenders

Activities & Deliverables

The IBM SPSS Crime Prediction Analytics Solution Service includes all the phases needed to deliver a working solution with the following activities and deliverables:

Scoping & Kickoff

In order to establish a clear scope of activities specific to your needs, this service begins by discussing with key stakeholders the advanced analytics needs to realize maximum benefit and value with the solution.

With an agreed scope in hand, a kick-off meeting will be conducted to ensure clear communication and agreement on the activities and deliverables for a successful engagement.

Execution

Tasks within this phase of the engagement are broken down into two work streams. In the first, Platform, the IBM SPSS application is installed onto your workstation, tested and confirmed to ensure that it is operating according to IBM proven practices. In the second, Application, the tasks necessary to ensure that your data is integrated into the solution and that the analytical models are operating as required are undertaken. Some of the tasks associated with each of these work streams are as follows:

Platform Work Stream

- Installation and configuration of the IBM SPSS software onto a single workstation
- Perform basic function tests to confirm operability

Application Work Stream

- Collecting and exploring your data and verifying its quality
- Integrating your data into the SPSS CPAS Modeler Stream
- Refining the necessary models and testing the design
- Evaluating the models and making any necessary enhancements
- Deploying the solution to your resources
- Training your resources on SPSS and CPAS

Project Completion

At the completion of the engagement, we will conduct a thorough review and supply you with a *Go Forward Plan* and *Standardized User Guide* that will highlight the selected features, review the activities that occurred, and provide you with recommendations specific to future phases or interfaces of the SPSS Crime Prediction Analytics Solution to maximize your IBM software investment.

Engage Today

The IBM SPSS Crime Prediction Analytics Solution Service provides visibility into information across the agency and gives you a glimpse into where and when crimes are likely to happen. Public safety and security agencies can make better decisions and better allocate and redeploy resources to meet evolving goals. They can assess and mitigate risk in real-time. They can reduce operational and IT costs through user self-service reporting and analysis, which benefits taxpayers. And they can fight crime and increase public safety by making good use of the data they already collect.

This service is available on a Time-and-Material basis. Details are available from your IBM Business Analytics Software Services Sales representative.

About IBM Business Analytics Software Services

As an integral part of Business Analytics software division within IBM Software Group, the Business Analytics Software Services organization provides education and expert services exclusively focused on the Business Analytics product portfolio. Our depth of experience and extensive proven practices help customers maximize their software investment, mitigate risks, raise the quality of their implementations, and build valuable skills. We have provided training, guidance, advice, reviews, assessments, and assistance to thousands of clients around the world helping to ensure their business analytics implementations are optimized to take full advantage of our product capabilities.

About IBM Business Analytics

IBM Business Analytics software delivers actionable insights decision-makers need to achieve better business performance. IBM offers a comprehensive, unified portfolio of business intelligence, predictive and advanced analytics, financial performance and strategy management, governance, risk and compliance and analytic applications.

With IBM software, companies can spot trends, patterns and anomalies, compare “what if” scenarios, predict potential threats and opportunities, identify and manage key business risks and plan, budget and forecast resources. With these deep analytic capabilities our customers around the world can better understand, anticipate and shape business outcomes.

For more information

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Software Group
Route 100
Somers, NY 10589

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