MapInfo Crime Profiler is Pitney Bowes Business Insight's dedicated solution for Crime Analysts. It provides a single package of capabilities for applying common operations and a toolkit to enable investigative or research-based analysis. Along with core functions such as hotspot analysis, it includes highly visual and interactive charting and graphing capabilities including sophisticated time-based analysis. Crime analysis is a law enforcement function that involves systematic analysis for identifying and analyzing patterns and trends in crime and disorder. MapInfo Crime Profiler enables information on patterns to be analyzed which can help law enforcement agencies deploy resources in a more effective manner, and assist detectives in identifying and apprehending suspects. MapInfo Crime Profiler also plays a role in the identification of crime problems, monitoring and evaluating operations and formulating crime prevention strategies. The offering is a new module for Pitney Bowes Business Insight's, MapInfo Professional®. MapInfo Crime Profiler integrates itself in the main menu bar of MapInfo Professional and provides the user with a range of useful crime analysis tools. It enables interactive analysis, allowing the user to conduct complex crime analysis from within MapInfo Professional. This direct connection allows faster visualization with added simplicity through its dynamic functionality.

MapInfo Crime Profiler Capabilities

- Easy to use and interactive hotspot map creation (instantly see how different settings change the representation of the data)
- Maps, charts and graphs, including specific charts for time based analysis. These different views of your data are linked, allowing you to perform real-time “what if” analysis on your data.
- Capabilities you need to select and work with subsets of specific crime data, by series, type, time, locale or other characteristics.
- Proximity analysis of crimes to known offenders or risk factors and other spatial analysis capabilities.
- Mapping functionality that allows you to work with map data in a wide variety of formats and types. This includes aerial photography, street maps, demographics, segmentation maps and more. If you have data coming through from partnerships or other external sources, MapInfo Crime Profiler is likely to be able to make use of it.
- The ability to define force boundaries such as beats and patrol areas. This can be done in a number of ways and can incorporate crime data, statistical data or other factors in the process.
- Ability to provide maps, charts, graphs and reports as a printout or in a variety of other formats for sharing with all levels of the organization.
Figure 1: Identifying crime hotspots is an important step in strategic resource and activity planning. It can be used to determine changing trends and identify areas of specific concern. MapInfo Crime Profiler includes a fully interactive hotspot and volume data analysis tool. When creating a hotspot map, an interactive preview of the result is presented. This helps analysts to learn and use the system more quickly and save time overall in producing hotspot maps. This screen illustrates the full interactive configuration of the hotspot process.

Figure 2: The question “what settings should I use” is answered by the interactive preview that enables the analyst to see how various settings impact the resulting hotspot map, before it is generated. Once the process has been refined it can be saved as a scenario for re-use or sharing with colleagues. A range of algorithms is available for crime, demographic and geographic analysis. The results can then be applied to any map to provide an immediate view of the clustering of crime incidents, offender locations, resources or other factors. This screen shows a hotspot examining the density of all incidents.
Figure 3: MapInfo Crime Profiler helps address the “what if” question by providing a real-time interactive analytics environment. This environment is seamlessly linked to the map so the effect of spatial queries and relationships can be seen in an analytical context. The screen (above) shows incidents by time, category, day of week and geographical area. The map, graph and time series charts are all linked together allowing the crime analysts to select data in any one view and see this reflected in the other views. This is extremely powerful for finding trends and patterns.

Figure 4: The analytics automatically calculate summary statistics based on your selections, providing an intuitive investigation tool. Once you have analyzed the statistics, the results can then be selected on the map, maintaining the two-way link between the map and the analytics. This screen shows the summary statistics of a selection of incidents within multiple wards.
Conclusion

MapInfo Crime Profiler in addition to creating hotspot maps, enables many different layers of area based data (e.g. population, schools, deprivation, housing, train stations) to be analyzed through the use of the analytics. Through pattern analysis with other local data, helping to effectively understand the crime distribution and explore the mechanisms, dynamics and generators to criminal activity. The analysis of persistent crime problems has been used by many law enforcement agencies to help identify, target and prioritize suitable areas for crime prevention initiatives. These extend to identifying crime hotspots for targeting, deploying and allocating suitable crime reduction responses. MapInfo Crime Profiler significantly improves the ability of crime analysts and researchers to understand crime patterns, which will assist management and performance reporting by providing consistency of output and information sharing to improve decision making.

About Pitney Bowes Business Insight

Pitney Bowes Business Insight (PBBI) provides a unique combination of location intelligence software (including the well known MapInfo Professional solution), data quality, and communication intelligence software, and data and services that enable organizations to make more informed decisions about customers, competition and market expansion. With the industry’s most comprehensive set of solutions for maximizing the value of customer data, PBBI provides the tools required to more effectively locate, connect and communicate with customers and citizens in today’s global markets. Leading organizations rely on PBBI solutions to increase the accuracy and effectiveness of their analysis and information delivery resulting in improved organization performance.

VISIT WWW.PBINSIGHT.COM AND WWW.PB.COM FOR MORE INFORMATION.