

PREVENTIVE POLICING COMPSTAT AND BEYOND



The Haryana Police Journal
Vol.2 | 2019

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Abstract

Police have the stupendous task of enforcing the Law of the land while respecting individual freedom and Civil Liberties. Initially, policing was primarily Preventive- cops patrolling/walking the streets/beats deterring crime by their presence (the 1830s). With the increase in crimes and social disturbances/turbulence, policing entered the phase of Reactive Policing (responding to calls/crime situations in mid-1900s). The introduction of helpline numbers/calling systems reinforced the trend of preventive policing. But the new system also had its own problems in terms of a surge in number of calls, decreasing number of police force and insufficient resources available to the enforcement agencies. To deal with all these challenges police agencies, particularly in bigger cities required much smarter ways/techniques of not only solving crimes but effectively preventing it, maybe by predicting it with the adoption of the latest information technology tools/techniques. The adoption of CompStat by NYPD in the 1990s was one such technological disruption that led to a remarkable reduction in crimes over the next two decades. It became a very successful experiment (not without criticisms, of course) to be adopted by other major police departments in the USA and beyond. Recently, other tools/techniques like predictive policing and big data analysis are also being used for the prevention of crime by the major police agencies all across the globe.

Key Words: Prevention of crime, CompStat, preventive policing, predictive policing

Introduction

A number of technological innovations and their adoption in Policing have taken place since Robert Peel's preventive policing of the 1830s in the UK. There has since been a debate about the adoption of various technologies in Policing work (crime prevention and detection) and its effectiveness all across the world. Initially, policing was primarily Preventive- cops patrolling/walking the streets/beats deterring crime by their presence. They got to know their neighbours and their neighbourhoods. With the increase in Crimes and Social disturbances/turbulence, the policing entered the phase of Reactive Policing (mid 1900's). Instead of a benign presence, designed to prevent crimes, the cops started spending more and more time in their patrol cars, responding to calls. They were also able to cover more area with enhanced frequency in their beats. The introduction of helpline numbers/calling systems reinforced the trend of preventive policing and cops got a 'new toolbox of crime solving technique' (Black, 2016).

But the new system also had its own problems in terms of surge in number of calls,

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decreasing the number of the police force and insufficient resources available to the enforcement agencies. The limited number of manpower was not able to keep up with the demands for their services. To deal with all these challenges police agencies, particularly in bigger cities required much smarter ways/techniques of not only solving crimes but effectively preventing it, maybe by predicting it with the adoption of the latest information technology tools/techniques. Till early 1990s, reactive policing (responding to calls/crime situations) methods dominated the New York Police Department (NYPD) which focused on improving in two areas- responding to calls and investigating major crimes. They neglected the third and important part of policing that is preventing disorder(Black, 2016).

The present paper discusseshow the prevailing crime situation in New York led to the adoption of CompStat- a technological innovation by the Mayor/Commissioner of New York City in the early 1990s. It also elaborates on the implementation (what it takes) process of CompStat and the challenges faced by the police leaders of the New York Police Department (NYPD) in implementing the innovation. Further, the paper critically analyses how theadoption of CompStat led to a major reduction in crimes and improved quality of life indicators for the city of New York. It concludes with the discussion of the future of CompStat and like processes in policing, and recent technological trends like predictive policing and big data analysis in preventive policing.

MOTIVATION

The New York Police Department adopted the CompStat program which is an interplay of technology, communication, and organizational change. The single most important motivation to adopt CompStat was to reduce major crimes and improve the quality of life indicators for the citizens in the city of New York. The prevailing high crime rate was a major concern for the residents of the city in the early 1990s. This issue also played a prominent role in the Mayoral Elections of the City in 1993. Lou Anemone, NYPD's chief of Department in 1994, said that during the early 1990s "there was very bad violent crime and pervasive fear of crime in the community, and this likely contributed to Mayor David Dinkins' loss to Rudy Giuliani in 1993" (CompStat: its origin..., Police Executive Research Forum, 2013, p.3). The new mayor picked up Bill Bratton as the new Commissioner of Police. They made a vision of making the New York city safe, reduce the fear of crime, and improve their quality of life(CompStat: its origin..., Police Executive Research Forum, 2013).

Another important factor that led to the adoption of this program was to enforce accountability amongst the rank and file in the organization. So far, nobody at whatever level was willing to take responsibility for the ongoing high rate of violent/major crime situation in the city and were just responding to the crimes happening thinking that this is inexorable and nothing much can be done about that. Their effectiveness was being measured by their 'response time, arrest statistics and clearance rates' (CompStat: its origin..., Police Executive Research Forum, 2013, p.3). John Timoney, the former NYPD chief of the department said, "the focus of the NYPD in the last 20 years had been reducing police corruption. No one had ever asked, 'how can we reduce crime?' there really was a belief that the police could not do anything about crime, that because we

could not fix the 'root cause', we could not have an impact. But the community wanted the focus on crime, and we changed that" (CompStat: its origin..., Police Executive Research Forum, 2013, p.3-4). This was the prevailing thought/paradigm of their times. However, Bill Bratton rejected this position and said that "he would knock down the standard criminological theories about what caused crime waves, like ducks in a row" (CompStat: its origin..., Police Executive Research Forum, 2013, p.4).

There was no systematic crime statistics available and being used for crime analysis. The crime data was just being collected and fed to the Federal Bureau of Investigation (FBI). Whatever data was made available/being compiled was available only with a time lag of three to six months. Six months old data was of little use to the police executives and because it does not tell you anything about the recent crime trends- when and where the crime is happening. They also 'cannot be used to develop strategies and tactics that will have an immediate impact on crime' (Vincent: CompStat Management in NYPD, p.105). This was another reason to introduce CompStat what Bratton described as 'a new data driven system to track crime statistics and have police respond to those statistics' (CompStat: its origin..., Police Executive Research Forum, 2013, P.3).

ADOPTION

In Policing, most police executives and managers are guided by the traditional and established models of policing i.e. Professional Model and the Community Policing Model. They generally continue to operate within these narrow management methods which didn't encourage innovation. They don't strive 'to stretch the potential boundaries of performance' and remain satisfied 'at best with incremental improvements' (Vincent: CompStat Management in NYPD, p.107). But the new commissioner did not believe in old and traditional approaches of policing and wanted to stretch the potential boundaries of performance. He wanted an effective solution for a large number of major crimes and the all-pervasive fear of crime in New York City. As a transformational leader, he introduced CompStat which was an innovative solution for crime reduction and improving quality of life indicators. It was not adopted/dropped from any other outside agency and rather evolved within the organization overtime. It was an outcome of regular and intense analysis of crime patterns and trying out innovative methods to control crime based on the feedback/learning from the experiences and the practices of various field commanders.

It is not that there was no use of information technology in Policing before CompStat was adopted by the New York City Police Department. Several technological innovations like Crime Mapping (hot spots), Criminal History Data Systems Enhancement, Watchlist of Potential Violent Offenders, Risk Assessment, Threat Assessment, Monitoring Individual Transactions and Communications (on cell phone and over internet) were available and being used by various Police Departments in their day to day policing(Byrne and Marx, 2011-3). The major difference between these innovations and the CompStat was that all of the above-mentioned technological interventions were being used to detect/solve the crime and not for the prediction and prevention of crime. There was also no systematic analysis of crime patterns and the deployment of resources to break these patterns.

No major funds were involved in the adoption of this technological innovation. The New York Police Department 'started with a computer from Radio Shack and the name CompStat was born'. The name is short for 'Computer Statistics' or 'Comparative Statistics' (CompStat: its origin..., Police Executive Research Forum, 2013, p.4). This system allowed police to track crime incidents as soon as they occur. All the information related to the crime, the victim, the date and time of the incident was collected to spot the emerging trends. It was displayed by Computer generated maps to figure out where and when the crime is occurring citywide. Using the high tech "pin- mapping" approach, police used to quickly identify the trouble spots and target resources to fight crime strategically (Vincent: CompStat Management in NYPD, p. 103). So, the adoption of CompStat by the New York Police department was a paradigm shift (changed the focus of NYPD) from reactive policing to preventive policing by predicting crimes.

IMPLEMENTATION

The CompStat is said to be modelled on the 'Broken Windows Theory' given by James Q Wilson and George L. Kelling (1982), whereby minor crimes (quality-of-life crimes) would be addressed in order to reduce major crimes. However, overtime, its use evolved into a system whereby productivity was measured, and individuals were held accountable for spikes in crimes in their areas of Jurisdiction. The CompStat was introduced with simple data collection, and mapping and analysis of crime trends, and with time, this process/technique evolved into a robust Strategic Planning to effectively reduce crime and improve the quality of life of citizens of New York City. NYPD's initial approach was 'to map crime statistics along with other indicators of problems, such as the location of crime victims and gun arrests, etc.' (CompStat:its origin..., Police Executive Research Forum, 2013, p.4). The CompStat process introduced comparison and analysis of crime trends/statistics along with the transformation of organization structure and strategic management. There was no ready-made solution to be replicated to achieve the desired objectives of crime prevention and quality of life improvement. The CompStat evolved during the process of its implementation. It was "designed as an innovation essentially to fix what Bratton felt was a dysfunctional organization...CompStat was developed as a management tool, specific to NYPD, in an attempt to bring down crime" (Eterno and Silverman, 2005, p.220). The four 'Core Components' developed by NYPD Deputy Commissioner Jack Maple became the foundation of the CompStat. These four generally recognized 'Core Components of CompStat' are: a) Timely and accurate information or intelligence b) Rapid deployment of resources c) Effective tactics; and d) Relentless follow-up.

CompStat is a dynamic approach to crime reduction, quality of life improvements and personnel and resource management. It is, misunderstood, oftentimes as 'a management tool, portrayed as a high-pressure meeting between executives and middle managers, and as a system for sharing important management information'. It actually involves all these. (Vincent: CompStat Management in NYPD, p.103). An effective CompStat program is much more than holding meetings. Other than crime prevention, it became an effective tool for the measurement of the performance of field officers. The precinct commanders had to present the comparative crime situation in their jurisdiction over the last week/month. This made it easier for senior executives to

evaluate officers' performance and take decisions regarding putting high achievers on key positions and shifting/kicking out the laggards. This process is not a solution in itself but a tool for 'strategic problem solving'. Through deliberations and discussions in the regular crime meetings, the officers used to find innovative solutions for the crime problems in the city.

This tool also provided all the 76 precinct commanders more flexibility in terms of deploying the available resources, using innovative techniques for crime prevention and achieving other departmental goals. In the meetings, officers from different geographical areas were selectively invited to discuss their problems and efforts/successful methods of controlling crime. Each one of the precinct commanders were made to discuss their specific crime problems and the efforts being made/methods adopted to solve the problem. During the analysis of crime trends and deliberations of successful strategies to reduce crime, the officers would come out with a strategic plan for the specific problem areas to effectively control major crimes there. The precinct commanders used to be accompanied by 'patrol officers, detectives staff supervisors, narcotics and vice squad commander, and ranking personnel from every operational and investigative unit' from their areas of jurisdiction to attend these weekly meetings and share crime related information. Their presence ensured better cooperation and effective coordination amongst different wings of the police department to get quick and better results. Overtime, the CompStat process became a very successful strategy not only to reduce major crimes substantially but also as a performance measurement tool available to the senior police executives.

The successful implementation of CompStat required transformation in NYPD's organizational structure, culture, and mindset, and these factors along with many others posed major challenges to the police managers/senior executives. The first and foremost challenge came from within the Organization. There was a need for organizational transformation to achieve the desired results. Explaining the organizational transformation in terms of James Q. Wilson's (1977) three styles of policing, before CompStat, NYPD was mainly 'service oriented' – 'Police will take all requests seriously but are less likely to make an arrest or summons the perpetrators' (Eterno and Silverman, 2005, p.222) and 'reactive' (responding to emergency calls). To transform NYPD from service to 'legalistic- where police make many arrests and summonses' and more aggressive policing, was a challenge to the police leaders. "This was a drastic change for the NYPD: from 'service and the beat cop' to 'crime and commanding officers' (Eterno and Silverman, 2005, p. 222).

The Precincts commanders were made to attend the crime meetings held by the officers much senior in rank to them and explain/defend the crime scenario, and the steps are taken to combat crime in their respective areas of jurisdiction. This threw another organizational challenge and rather a cultural shock mainly to the subordinate officers who were used to the typical hierarchical and rigid bureaucratic setup and communicating within their respective chains of command.

CompStat was an absolutely new method of policing, supervising and fixing accountability of field level officers by directly holding them responsible for the outcomes of their

efforts of crime prevention. Communication within and outside of organization (to all the stakeholders) about the efforts being made to reduce crime and the processes involved in CompStat posed another important challenge for the effective implementation of this innovation. Middle level managers and the ranks and files were also required to be convinced about the importance of freely sharing information/intelligence and the new methods and strategies being adopted for combating crime by the Precinct commanders and mid-level managers. This was particularly relevant to an organization ‘where isolation and turf protection and the hoarding of information previously reigned’ (Vincent: CompStat Management in NYPD, p.103).

Coordination and cooperation with other agencies of Government - especially the criminal justice system also posed an important challenge in the successful implementation of CompStat. Police agencies regularly interact with prosecutors, courts, corrections, and probation and parole officers, and all these agencies are very much interdependent in their day to day work. Any breakdown in communication between these agencies may lead to serious dysfunction of the criminal justice system and miscarriage of justice to the victims of crime. Political leadership (Both Mayors - Giuliani, and Bloomberg themselves) came to their rescue and used their influence to ensure better coordination among various agencies of the criminal justice system which helped New York Police achieve ‘impressive’ results.

CRITICAL ANALYSIS

This system has been studied, discussed and adopted for more than two decades now. Many prominent criminal justice academicians and police leaders (Kelling, 1995; Kelling and Coles, 1996; Silverman 1998, 1999) are convinced that the ‘CompStat based innovative and problem-solving processes’ are responsible for New York city’s falling crime rates (Vincent: CompStat Management in NYPD). The CompStat by NYPD has also been one of the most discussed topics of contemporary law enforcement agencies and the criminal justice field. This is clear by a large number of Police executives and academicians who have visited the NYPD to study its innovative management methods and problem-solving activities. The radically new and thoroughly dynamic police management process known as CompStat achieved tremendous success in unprecedented crime reduction and improving the quality of life of citizens of New York City. Although difficult to quantify, the quality of life indicators also improved substantially and there has been a ‘positive change in the sense of safety and civility throughout the city’

Major Felony Crime in New York City, 1993 to 2003 By Number and Percentage (NYPD Data)					
Crime	1993	1997	%Change v.1993	2003	%Change v.1993
Murder	1,927	767	-60.2	598	-68.9
Rape	3,225	2,782	-13.7	1,875	-41.8
Robbery	85,892	44,335	-48.3	25,919	-68.8
Felony Assault	41,121	30,259	-26.4	18,774	-54.3
Burglary	100,936	54,866	-45.6	29,215	-71.0
Grand Larceny	85,737	55,686	-35.0	46,877	-45.3
Motor Vehicle Theft	111,662	51,312	-54.0	23,139	-79.2
TOTAL	430,460	240,008	-44.24	146,397	-65.99

(Vincent: CompStat Management in NYPD, p.101). Major indicators of Quality of life improvement are less graffiti on walls, fewer hooligans with loud “Boom-box radios”, a smaller number of panhandlers and “squeeze pests”. This also includes a decreasing number of arrests for narcotics offences (Vincent: CompStat Management in NYPD, p. 102).

Comparative Crime figures of the New York Police Department suggest a substantial reduction in absolute crime numbers and rate of felony (a crime involving violence and more serious than a misdemeanor) crimes in the city. It declined at an unprecedented rate since the introduction of CompStat in 1994 (particularly during the initial 10-15 years) and New York remains to be the safest large city in the United States. After the adoption of CompStat in 1994, the overall level of crime in New York city - both in terms of the actual number of crimes and the rate of crime reached its lowest point since 1963. Although there has also been crime reduction in other cities/states of the USA during this period of time, the decrease in New York City was not only the highest amongst states but it contributed substantially to reduce the average national crime rate. A total number of reported crimes for 7 major categories declined from 430,460 to 146,397 i.e. by 65.99% in 10 years from 1993 to 2003.

See table below: (Source: CompStat Management in NYPD By Vincent E Henry (Dr), P. 114 --Resource Material Series No.68).

The CompStat received the Innovations in American Government Award in 1996 for being an effective and successful management tool. It was one out of five recipients (total 1500 entries) of this award conferred jointly by the Ford Foundation and Harvard University's John F. Kennedy School of Government.

However, the CompStat process has been questioned and criticized for many reasons. First and foremost, the relationship between CompStat and crime decline per se has been debated by many scholars (Eck & Maguire, 2000; Karmen, 2000; Rosenfeld, Fornango&Baumer, 2005; Silverman, 1999, 2001 as cited in Eterno and Silverman, 2005). The CompStat process raised concerns about the ‘due process’ of law being followed while enforcing crime prevention measures as civilian complaints against police for allegedly illegal searches increased by 135% in the first two years...illegal vehicle searches jumped by 108%...and allegations of illegal apartment searches shot up 179% (Eterno and Silverman, 2005). There were also allegations of abuse of authority by the officers and alienating the minority community by indiscriminate excesses on them. Another problem with CompStat is its centrally controlled and inflexible management style which alienated not only members of the community and but also its own officers. The leadership practiced the ‘top-down order transmission’ and ‘bottom-up reporting’ approach which represses innovation and creativity among the lower ranks. This practice further led to the rigidity in the approach of field officers while dealing with members of the public ‘resulting in increased isolation and hostility between police and community’ (Eterno and Silverman, 2005, p. 223). CompStat also seems to have intended to introduce ‘a traditional bureaucratic model of command and control’ (Weisburd et al.,2003, p. 448). CompStat has been perceived as ‘a legalistic-style number game combined with leadership by fear’(Eterno and Silverman, 2005, p.223).

CompStat hit the motivation level of field commanders and officers on the street. The field level officers were humiliated in the presence of their colleagues and branded/berated for their failure to control crime. Their only worry was 'to get by the next CompStat meeting' scheduled to discuss/review their work. Moreover, the senior executives used to take credit for the good work of their field commanders. The field commanders were supposed to bring down crime immediately or forgo their promotion. Members of the force were working in an atmosphere of uncertainty and competition. The precinct commanders also felt threatened in the meetings being directly exposed/answerable to the highest rank officials in the organization/hierarchy and the mid-level felt ignored/redundant. There was a cultural shock to many who had to give explanations for their work in front of media persons and the common people from the community as both these stakeholders were also sometimes invited to attend CompStat meetings. Thus, CompStat failed to motivate the vast majority of officers (Eterno and Silverman, 2005).

This method propagated the 'legalized way of policing' which needed aggressive policing to achieve results/push the crime rates down. Some of the officers were doing so at the cost of violating the basic human and legal rights of the citizens. The 'increase in illegal behaviour by street officers also seems to be the by-product of CompStat' which was later controlled by introducing technologies like body cameras for street officers etc. (Eterno and Silverman, 2005, p.225). There was also a 'turf war' among the field officers who did not want to share vital information related to crime and criminals in the meetings fearing to lose their professional advantage. There was lesser emphasis on community policing- an established practice that seemed to be effective/working well for many areas in New York City. There has also been an even lesser emphasis on skill enhancement and the morale of the workforce(Weisburdet al.,2004). The centralization and over-emphasis on crime numbers led to the lack of empathy among the field officer. They would not aggressively seek victims of rape, domestic violence, and child abuse, etc. as it would add to the crime numbers in their jurisdiction to their disfavour. There have also been allegations of manipulating/fudging of crime data to keep the crime figures low.

CONCLUSION: Compstat And Future Policing

The CompStat has received a lot of attention from media, academics and senior executive heads of Police. The CompStat has not only been studied extensively but replicated/adopted by many other State/City police departments of the USA. It has proved to be a very successful technological adoption by NYPD giving them remarkable results. Its success in NYPD has led to the adoption of CompStat or like programs all across the USA by police agencies. CompStat has now become an integral part of policing all across the US and many other parts of the world. This process has mainly been adopted by relatively larger police departments who have the 'expressed desire to reduce serious crimes and increase management control over field-operations'(Weisburd et al., 2004, p.15). It is likely to continue evolving with more policing innovations and technological advances. Advancements in information and computer technology will further enable police agencies to quickly and accurately identify crime problems and deploy their available resources more efficiently. Shrinking public sector budgets also requires more efficient policing which can be achieved through the adoption of CompStat like processes and/or other

advanced technological innovations. These processes shall also help to ensure that ‘police resources are closely monitored and used efficiently’. CompStat has been a critical effort to achieve greater responsibility and accountability. It helped pushed the accountability down to the first line of supervisors and officers. It has also become an important tool in the hands of senior police hierarchy to measure the performance of their personnel/field commanders. The CompStat has also been accepted and adopted by many law enforcement and non-law enforcement agencies e.g. Municipal Corporations (CompStat: its origin..., Police Executive Research Forum, 2013).

Despite its adoption by many police agencies, a word of caution about its emulation is required. This should not be done mindlessly as there are several criticisms of NYPD’s CompStat process. First of all, the relationship between the CompStat and major crime reduction as such has been debated by many scholars (see critical analysis above). There have been a number of other serious criticisms of the process of CompStat e.g. concerns regarding following the due process of law, violation of civil liberties and rights, the empathy of officers, data manipulation/fudging, ignoring the established methods of policing and the like which are serious in nature having far-reaching implications. These criticisms need to be duly considered before deciding on the adoption of CompStat and the like programs by any police agency. There are certainly consequences of simply emulating and adopting any technological innovation (Mimetic Isomorphism). Before adopting CompStat we “need to learn and embrace the lessons of CompStat, but modify it so that we focus on problem-solving, services and, most importantly, protecting the freedoms and rights that are part of the democratic society we so deeply cherish” (Eterno and Silverman, p.229).

CompStat is said to be the forerunner of predictive policing. The recent techniques being used for crime prediction (to prevent crime) are ‘predictive policing’ and ‘big data analysis’. These are said to be the future of policing. “Predictive policing used to be the future,” said William Bratton, “and now it is the present”. The predictive policing seeks not just to fight crime, but to anticipate and prevent it. It uses cutting edge technologies and big-data to identify high risk areas. The aim is not to make arrests but to deter crime before it occurs (Black, 2016). The predictive policing ‘tries to harness the power of information, geospatial technologies and evidence-based intervention models to reduce crime and improve public safety’ (Definition by National Institute of Justice, US). Whereas, the big data analysis is the complex process of examining large and varied data collected from different sources to uncover information including hidden patterns, trends, unknown correlations that help organizations make informed decisions.

Since the adoption of CompStat by NYPD, the above two techniques are also being used by NYPD in some form or the other, at least on a trial basis if not fully co-opted with their ongoing program. “We are testing both PredPol and a new system, HunchLab,” Bratton explains. “we have not committed to either. In the meantime, we have developed our own predictive model that we are field-testing against the other two.” (Black, 2016).

So far as the adoption of preventive policing methods by developing countries like India is concerned, who are facing similar challenges of high crime rates and low quality of life indicators but in a different setting along with lot of strain on resources available, it can give police agencies a

big boost not only in terms of effective crime prevention but also saving a large number of scarce resources. Some State police departments like Delhi Police have already started using the predictive policing methods/technologies (CAMPS- Crime Mapping, Analytics, and Predictive Systems) with encouraging results. It is high time now for other police agencies too in India to start using predictive policing (in some form or the other) to deal with the crime epidemics by adopting the ‘future technologies of policing’ to fulfil the aspirations of its people.



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